

B a n k o f A l b a n i a

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# MONETARY POLICY STRATEGIES FOR SMALL ECONOMIES

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Editor **ARDIAN FULLANI**

Bank of Albania

MONETARY POLICY  
STRATEGIES FOR SMALL  
ECONOMIES

Editor

**ARDIAN FULLANI**



## FOREWORD

*The book you are holding in your hands contains a series of presentations made by distinguished national and international experts in the 7th Annual Conference of the Bank of Albania titled “Monetary Policy Strategies for Small Economies”, held in Tirana on 6-7 December 2007.*

*I avail myself of this opportunity to express my appreciation to all the Conference speakers for accepting the Bank of Albania’s invitation to provide their outstanding scientific contribution to finalizing the 3-year project and analyzing all the preconditions required for the successful implementation of the inflation targeting regime in Albania. The speakers’ analyses, recommendations and conclusions provided in the Conference will assist the Bank of Albania’s future endeavours and work.*

*The views and conclusions expressed in this volume are those of the authors and should not be attributed to the Bank of Albania or to any institution with which the authors are affiliated.*

*I also wish to thank the staff members of the Bank of Albania for their contribution to finalizing this project.*

*Ardian Fullani  
Governor*



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## **THE CONTRIBUTORS**

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*Governor, Bank of Albania*

Mr. Ardian Fullani was sworn in on October 28th, 2004 as Governor and Chairman of the Supervisory Council of the Bank of Albania. Before his appointment as Governor,

Mr. Fullani was General Manager of the Italian-Albanian Bank (2000- 2004), and Deputy General Manager (1997-2000).

He has extensive experience and in-depth knowledge of the banking sector in Albania and abroad. He started working at the State Bank of Albania in 1985, and since 1987, he served as Deputy Director of Foreign Department. With the establishment of the Bank of Albania in 1992, he was appointed Deputy Governor and Director of Foreign Department. He has also worked in the capacity of the President of the Albanian Association of Banks, Chairman of the Institute of Banking Studies and Assistance, as well as Commissioner of the Albanian Securities Commission.

On June 7th, 2007, Mr. Fullani was awarded by Mr. Giorgio Napolitano, President of the Republic of Italy, the title “Commendatore dell’Ordine della Stella della Solidarietà Italiana / Commander of the Star of the Italian Solidarity”.

Mr. Fullani was born on January 15th, 1955 in Tirana, Albania. He holds two degrees, in Finance and Law, from the University of Tirana.

### **Peter GRASMANN**

*Head of Unit, DG, ECFIN, European Commission*

Peter Grasmann was born in Stuttgart, Germany. He studied economics, law and statistics at Munich University and University of California at Berkeley. Previously he worked as assistant professor in the Economics Department of Munich University and the California Institute of Technology and later in commercial (Bayerische Hypotheken und Vereinsbank) and investment (Merrill Lynch) banking as analyst and consultant. In the European Commission he first worked on financial integration and capital movements, later on the economic situation and forecasting for the EU economy. Since 2001 he has been working on the economies of candidate countries. He

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Giorgio Gomel is currently Head of the International Economic Analysis and Relations Department at the Bank of Italy, in Rome.

He holds a degree from the University of Torino, Italy and a M. Phil. from Columbia University in New York. He has taught or lectured in a number of US and Italian Universities. He has been for many years Economist and then Director in the Research Department of the Bank of Italy. In the mid 80s he was Advisor to the Italian Executive Director at the IMF. He has been a member of several committees and groups, both at European and international level, including the Monetary Committee of the EU, the OECD Working Party no. 3, the International Relations Committee of the ESCB, and the Deputies of the Group of 20. He has published essays in academic journals on international economic policy coordination, sovereign financial crises, external debt and country-risk, international migrations, and the economies of the Mediterranean.

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Marko Škreb holds the position of Chief Economist and Strategist at Privredna Banka Zagreb, a new position in the bank. He graduated with a B.Sc. degree in Economics and later received his Ph.D. degree in Economics, both from the University of Zagreb.

He previously worked for the IMF as consultant at central banks in Bosnia & Herzegovina and Albania. While working for the International Monetary Fund, and also the World Bank, he was involved in a number of projects in various countries. He spent a year working at the Independent Evaluation Office of the IMF in Washington DC. Before that, Dr. Škreb was working at the Croatian central bank, first as Research and Statistics Director and later on as

Governor of the Croatian National Bank (from 1996 to 2000). At the same time, he was Governor for the IMF and held different positions within Croatia. Prior to 1996, he was teaching macroeconomics at the University of Zagreb as an assistant lecturer and later as associate professor.

In 1997 he was awarded the Central European Annual Awards for Excellence - Best Central Bank Governor and by Euromoney Publications - Best Eastern European Banker. In 2000 he delivered the Jacques de Larosiere EBRD Annual Lecture in Riga, Latvia.

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Theodoros Papaspyrou is currently Special Adviser at the Bank of Greece (since January 2003). He is also a Member of the ECB International Relations Committee (since November 2006). For many years, he has worked for the European Commission, firstly at Eurostat, Luxembourg (1981-1989) and afterwards at DG Economic and Financial Affairs, Brussels (1989-2002). Previously, he worked at Economic Research Department of the Bank of Greece (1976-1980). He holds a degree from the University of London (London School of Economics) and another from the University of Athens. He has published numerous articles and working papers, such as “Economic Policy in EMU: Community Framework and National Strategies: focus on Greece”, Hellenic Observatory, European Institute, LSE, July 2007; “EMU strategies for new Member States: the role of Exchange Rate Mechanism II”, Bank of Greece, Economic Bulletin, No 23, July 2004; “EMU strategies: Lessons from past experience in view of EU enlargement”, Bank of Greece, Working Paper No. 11, March 2004.

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Fabrizio Coricelli is currently Director of Policy Studies at the European Bank for Reconstruction and Development, London. He is also Research Fellow at the Centre for Economic Policy Research (CEPR) in London and member of the Advisory Council of CASE, Poland. He is Professor of Economics, on leave from the University of Siena, Italy. He holds a Ph.D. in Economics from the University

of Pennsylvania, Philadelphia. He has been Economic Adviser at the European Commission in 2001-2002 in Brussels, senior economist at the World Bank (1989-1993) and economist at the International Monetary Fund (1987-1989), in Washington D.C. Since 1989, he has worked extensively on formerly planned economies and Central-Eastern European countries, focusing on the development of financial markets.

### **Stephan BARISITZ**

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Stephan Barisitz is Senior Economist in the Foreign Research Division of the Oesterreichische Nationalbank since 1998. He finished his doctoral studies on Government Investment Incentive Policies in Canada - A Public Finance and Public Choice Analysis, at Carleton University of Ottawa in 1986. Dr. Barisitz has previously worked as an economist in noticeable research institutes such as the Vienna Institute for Comparative Economic Studies, the Austrian Institute for East and South East European Studies, the Russia-CIS-Bulgaria-Desk of the Economics Department of OECD, Paris and he was also economic editor of many publications of International Business Research Marktforschungsges.m.b.H., Vienna, and the "Österreichische Osthefte". His fields of specialization are Russia, CIS, South-Eastern Europe, monetary policy and banking systems.

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Dubravko Mihaljek, Ph.D., is Senior Economist in Monetary and Economic Department of the Bank for International Settlements in Basel, Switzerland, which he joined in 1999. In his current position, he analyses macroeconomic and financial market developments in Asia and Central and Eastern Europe, and organises working parties and other central bank meetings on monetary policy in these regions. While at the BIS he also worked on macroeconomic monitoring of the G3 economies (2005–2007) and emerging market countries (1999–2004). From 1990 to 1999 he worked at the IMF in Washington D.C., as Senior Economist in Asian, European and Fiscal Affairs Departments. He started his career at the Economics Institute in

Zagreb as Assistant Research Fellow from 1982 to 1989.

He studied economics at the University of Pittsburgh (Ph.D., 1990); University of Minnesota (MA, 1986); and Zagreb University (Dipl oec, 1981). He has published empirical and policy oriented papers on a broad range of issues, including recently on credit growth and housing markets in Central and Eastern Europe; the Balassa-Samuelson effect; banking industry, bond markets, fiscal and exchange rate issues in emerging market countries; and health care financing in Croatia.

### **Michel SVETCHINE**

*Managing Director, Central Banking Authority of Kosovo*

Michel Svetchine has been Managing Director of the Banking and Payments Authority of Kosovo (1 January 2005) and then of the Central Banking Authority of Kosovo on 1 September 2006. He holds a Bachelor's degree in Law, Master's degree in Economics and Finance (from the Institute of Political Science of Paris).

Mr. Svetchine began his career in Banque de France in 1977. From 1988 to 1992, he was seconded to the "Commission des Opérations de Bourse" (French SEC and CFTC) as Deputy Director of the Enforcement Department. From 1992 to 1994, he conducted on-site reviews in commercial banks as Head of Mission at the French Commission Bancaire. He has also performed technical assistance missions on financial issues in emerging countries on behalf of the World Bank, the EU, and the French Ministry of Finance. Appointed Deputy Director of the On-site Supervision Department of the Commission Bancaire (1994), he became its Director in 1995 and was promoted «Inspecteur Général of Banque de France» as of January 2001. Director of seminars at the Ecole Nationale de la Magistrature in Paris from 1992 to 2002, he has also delivered courses or lectures at Institut de Techniques Bancaire and International conferences. Since 2002, he is in charge of lessons at University of Paris V, in a Master's degree in Banking and Finance.

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Yusuf Soner Baskaya works as an economist at the Research and

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Aneta Krstevska is Director of the Research Department of the National Bank of the Republic of Macedonia. She graduated from the Faculty of Economics in Skopje in 1996. On the same faculty, she obtained a Master's degree in 2001 on monetary economics and in March 2007 she got her Ph.D. degree. She has working experience of around ten years in the Central Bank. Currently, she is a member of the Monetary Policy Committee and she is involved in designing monetary policy and monitoring its implementation, macroeconomic policy coordination, coordinating work on the official reports of the National Bank of the Republic of Macedonia, analyses of the developments in the banking and financial system, macroeconomic projections, econometric modelling and EU integration process. Ms. Krstevska has attended many courses and seminars abroad as well as many international conferences in the field of macroeconomics, finance and banking and she has worked on many research projects and published a couple of working papers.

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Gramoz Kolasi has been working at the Bank of Albania for quite a long time. He received his Bachelor's degree in 1987 from the Faculty of Economics, University of Tirana. After several years of working experience in a foreign trade public enterprise, in 1991 he

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Bledar Hoda is a senior economist at the Monetary Policy Department of the Bank of Albania and is involved in evaluating monetary conditions and impact of monetary indicators on inflation. As a member of a small team, he provides assessment of monetary program and evaluates its consistency with the operational as well as intermediate targets of the monetary policy strategy. His contribution is extended to ITTF work (Inflation Targeting Task Force) - a team to lead the efforts for improving the monetary policy framework of the Bank of Albania during 2006-2007. He joined the Bank of Albania in 2003. Prior to joining the central bank, Mr. Hoda worked in an analyst position in Corporate Credit Department at the National Commercial Bank in Tirana.

Mr. Hoda completed his two-year Master's degree on Economic Studies (EES) from Tirana University (in collaboration with Bamberg University). He received his Bachelor's degree from Faculty of Economics and Administrative Sciences at Bođaziçi University in Istanbul. His studies back in 2000 focused on investment and financial management, while during his Master's degree he focused on macroeconomics.

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Altin Tanku received his Bachelor's degree in Finance from the University of Tirana in 1993. Later he received his Master's and Ph.D. degrees in Economics from University of Wisconsin Milwaukee. Research interest covers empirical studies in monetary and international economics. He has worked for the central Bank of Albania in the Monetary Policy and Research Department in the position of Head of the Balance of Payments Division and later as Senior Economist. Mr. Tanku rejoined the Bank of Albania in mid-2006. Currently, Mr. Tanku is Director of the Research Department. He acts as a member of Monetary Policy Implementation and Foreign Exchange Reserves Investment Committees. Mr. Tanku is also an affiliated professor of Economics at New York University of Tirana, Business and Economics Department.

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Marian Gjermeni received its Bachelor in Finance from Tirana University in 1986. Recently he received the Master of Science in European Economics from Tirana University in collaboration with Bamberg University. He started to work as Chief accounting for Trade Enterprise and joined the Bank of Albania from its creation in 1992. During this period he started to work as chief for Reserve Management unit and latter he continues to work as Director of Foreign Relation Department. He served as Board Member at Securities Commission for 8 years, too. Currently, Mr. Gjermeni is Director of Monetary Operations Department. Except this position he keep and other position as Head of Pension Fund Committee at Bank of Albania, member of Monetary Policy Implementations, Foreign Exchange Reserve Management, Technology and Information Strategy Committees.

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Zoltan M. Jakab has a Phd. from Central European University (CEU). Currently he is principal economist at the Hungarian Central Bank (Magyar Nemzeti Bank). His principal interest is open economy macroeconomic modelling, macroeconomic forecasting and monetary policy advising.

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Vasilika Kota is an economist working at the Research Department, Bank of Albania, since September 2005. During her work at the central bank she has been engaged in various forums,

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David Vavra is currently IMF monetary policy advisor to the National Bank of Serbia, helping to implement an Inflation Targeting (IT) regime. Besides, he is also assisting Ukraine with building IT compatible conditions and National Bank of Croatia with developing a DGE model with the financial sector. In the past several years, Mr.

Vavra provided extensive assistance to a number of central banks around the world in the areas of transition to flexible exchange rates and IT, and macroeconomic modelling and forecasting. Previously, Mr. Vavra was Director of the Macroeconomic Modelling and Forecasting Division at the Czech National Bank and played a key role in implementing the forecasting and analysis system supporting monetary policy decisions there.

Mr. Vavra holds a Ph.D. in Economics from CERGE-EI and his research interests lie in macroeconomic modelling, economic growth and development. Mr. Vavra has frequently collaborated on research projects assessing long-term growth prospects of CEE countries, including the evaluations of the EU Structural Funds and Pre-Accession Economic Programs.

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Diana Shtylla graduated in 2000 from the American University in Bulgaria with a Bachelor's degree in Business Administration and minors in Applied Economics and Mathematics. She completed her Master's degree in Economics for Business Analysis at Staffordshire University, UK in 2007. Ms. Shtylla has been working at the Bank of Albania since 2000. She has worked as a specialist at the Research Department and was for a year Head of the Balance of Payments and Surveys Division at the Statistics Department.

At present, she is Head of the Economic Analyses Division at the Monetary Policy Department. Ms. Shtylla has worked on a project on capital account liberalization in Albania. She is involved in the

modelling and forecasting process at the Bank of Albania and is in charge of the monetary policy reports prepared by the Monetary Policy Department. Ms. Shtylla is Head of the Secretariat of the Committee for the Implementation of Monetary Policy and currently is in charge of the monetary policy report summary and the minutes of the meeting.

### **Hilda SHIJAKU**

*Financial Stability Department, Bank of Albania*

Hilda Shijaku holds a Bachelor's degree, and is a Ph.D. student in Economics at the University of Staffordshire, UK. In addition, she has received diplomas in Research Methods from the University of Staffordshire, UK, and in Applied Econometrics at the Bank of Albania.

Ms. Shijaku joined the Bank of Albania in 2001, working as a specialist in monetary and financial statistics for 3 years. She was appointed as Head of the Financial Statistics Division in 2004 and recently she has been appointed as Head of Assessment of Macroeconomic Risk Division at the Financial Stability Department. Ms. Shijaku's fields of expertise and interest are macroeconomics, statistics, monetary and financial statistics, and time series econometrics.

### **Kerstin MITLID**

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Kerstin Mitlid is Adviser to the Governors and editor of the Riksbank's Economic Review. Earlier, she has been responsible for the Riksbank's financial analyses in the Monetary and Exchange Rate Policy Department. During the second half of the 90s, she was also involved in the preparations for eventuality of EMU membership. For some years, Ms. Mitlid was responsible for the Riksbank's short term forecasts.

## OPENING SPEECH

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*Ardian Fullani\**

*Dear ladies and gentlemen,*

It is a great pleasure to open the proceedings of the 7th Conference of the Bank of Albania. On behalf of the institution and myself I take this opportunity to welcome all participants. I am confident that the following two days will instigate debate and discussion on key central bank issues.

This year's main topic will focus on the classical function of a central bank: "monetary policy". Institutional framework, decision making process, monetary transmission efficiency and other issues related with financial markets, macroeconomic and financial stability will make interesting topics of discussions from our esteemed speakers.

I am confident that our panellists are well-known senior experts; therefore, on behalf of the institution I would like to thank them heartily for accepting to share with us their views and findings.

Given that the proceedings of the Conference will extensively cover theoretical models and countries' experiences as well, I would like to briefly present the evolution of our central bank during the last three years.

To our pleasure the enhancement of analytical and modelling capacities of the Albanian institutions has been widely recognized, yielding a greater ownership in our medium run economic and financial development programs.

Since the beginning of transition most of these programs have been designed and implemented under the setup of IMF conditional support programs. Even the current policy setup is designed under such program. We currently believe this is the final one which gets IMF financial support, implying that our economy is matured and that Albania is on the right track. After many hardships of transition, the Albanian authorities should have full ownership in the medium-term development programs of our country. This is the reason why the Bank of Albania has quite for long been engaged in a comprehensive process of scrutinizing and choosing the best options.

The year which is coming to an end marked another important chapter in this context. In contrast to the previous two years, the Bank of Albania has further deepened its cautious research of all aspects characterizing the present and future of monetary policy.

It has been quite for a long time that the central bank has publicly announced its efforts in assessing objectively and professionally the future of the Bank of Albania monetary policy. These were not sporadic efforts but part of a process which initiated three years ago with the only objective of finding the answers to the following questions:

Should we move to another monetary policy regime? What regime would be the most appropriate one?

I believe you share the same opinion with me that finding the answers to the aforementioned questions is not an easy thing. This is not a plain mechanical action.

In the last three years the Bank of Albania has been involved in an intensive process of assessment, analysis and conclusions for the future of monetary policy. And we have not been alone throughout this process.

Together with other Albanian institutions – first and foremost with fiscal authorities, different European and regional central banks, other international financial institutions and academia, we have tried to identify the most suitable monetary policy regime to be adopted.

During the last three years, we have been tossing ideas and scrupulously studying the details of a fully fledged inflation targeting regime. Based on the current features and expected developments of the financial markets, we believe the inflation targeting regime provides the best policy choice for the future.

A relatively long history of low inflation, constant soundness of the macroeconomic situation, stable and sound banking system, free floating exchange rate, a suitable institutional framework, fiscal consolidation are important factors that have convinced us on the potential success of inflation targeting regime. However, we are aware that there is still a lot to be done in this context, in particular as far as monetary transmission mechanism and financial market efficiency are concerned.

Furthermore, under a relatively rapid and considerable development of the Albanian economy, we are sure that the advantages a complete and independent monetary policy framework provides are larger in size than the disadvantages. Therefore, the currency board has not been considered a possible option for the future.

On the other hand, the current operational targets (quantitative limits on net assets of the Bank of Albania and the banking system), or the so-called performance criteria, which are part of today's decision-making, might not be able to preserve their binding power after the expiration of the conditional agreement with the IMF in 2008. These intermediate objectives may be replaced by a concrete and transparent objective such as the inflation rate, which provides a more direct communication of monetary policy decisions in economy in order to achieve the main target of the Bank of Albania. Consequently, summarizing what has been previously said we have identified the inflation targeting regime as our best choice versus currency board and monetary targeting. Another argument which supports our choice is that various internationally recognized experts

have compared the current setup of monetary policy to an implicit inflation targeting framework.

Furthermore, we believe this regime will provide a better platform for harmonizing the monetary policy with the fiscal one, implying that the fiscal authority will seriously commit to support the proposed setup.

To this purpose, we invite the Albanian Government to reach a consensus on the key objectives of both policies, monetary and fiscal, adopting the convergence criteria as a strategic goal.

Success in this endeavour requires of Albania, among other things, not only continuing the path of sound macro policies but even strengthening them further. This means a monetary policy focused on maintaining price stability and a prudent fiscal policy which will ensure that Albania's deficits and debt ratios are sustainable and at low levels to increase the attractiveness to international investors. Put differently, pursuing a monetary policy focused on price stability and a prudent fiscal policy, will no doubt reduce Albania's risk premium. The benefit of this achievement will be felt throughout the economy.

To support my idea I have to tell you fresh news. Yesterday Albania succeeded to sell internationally a seven-year fixed rate bond in Lek. This was not a result of a toss of coin, but a reflection of international confidence in the Albanian economy and its macro policies. This confidence should increase in 2008, 2009 and beyond.

Regardless of the monetary policy regime it is to be said that the chances for this setup to be successful are greater under a developed financial market, which understands properly the monetary policy signals and transmits them adequately to the economy. Monetary policy efficiency implies the financial market efficiency.

This issue has been part of my earlier discussions; however I would like to highlight that only recently we have taken concrete steps, which will improve certain financial market segments.

We have currently tried to adopt a set of measures which will facilitate the reformation process of the financial market by further deepening it. In more concrete terms, the Government securities market and the interbank market have been most particularly under our special focus.

After several consultations with all actors in place we decided to come up with a package of initiatives and priorities during 2008 whose purpose is to establish incentives and minimize risks in the Albanian financial market:

- Broadening and deepening the base of participants in the Government securities market

Starting from January 2008 we will increase the investors' base, eligible to directly invest in the auctions of Government bonds. We believe it will increase the competition while so-far this was a privilege enjoyed by the banking system.

- Reducing the interbank market risk

So far, the banking system has applied limits on the amounts it can lend in the interbank market. Therefore, we are working on introducing a new law on repurchase agreements, which will enable the risk-free conduct of repurchase agreements among commercial banks.

- Establishing the delivery versus payment system

In order to minimize the payment settlement risk and facilitate the intermediation in all types of transactions involving collateralized loans, repurchase agreements and outright purchase and sale of Government papers, we are working to put into practice the principle of delivery versus payment system.

- Enhancing the interbank market efficiency

In collaboration with the Ministry of Finance we have agreed on less frequent Government treasury bills auctions. Moreover, the

size to be issued in each auction schedule will increase. This less frequent auction schedule will increase the number of transactions in the interbank market for the period in-between the two auctions as banks will try to reduce the costs of liquidity. On the other hand it will limit the opportunity of banks to be liquid based on distributing their treasury bills investment and consequently, they will seek other market options such as the interbank market.

- Introducing the prime rate

Being convinced that the monetary policy may be efficient through transparency, the Bank of Albania aims to introduce in the first half of 2008 the “prime rate” to the set of orientation rates used by commercial banks.

Regardless of the measures to be adopted I would like to say that other financial market segments need to come along with us in this challenge. I have to say that the financial intermediation role of other financial institutions is weak and it has no substantial influence on the intermediation and reallocation of financial funds in economy. I think today’s reality provides a lot of room for making the capital market reactive. According to our estimates, the number of major companies certified by well-known international auditors is ever-increasingly becoming larger.

Further to my speech I would like to focus on another priority of the Bank of Albania, that of financial stability. It holds true that macroeconomic stability is crucial and precedes all other important economic and financial developments. Without macroeconomic stability there is neither growth, nor foreign investment or reallocation; consequently there is no development.

However, macroeconomic stability without financial stability would be a utopia; it would be like a non-standing bridge. This is the reason why we have been paying special attention to financial stability throughout 2007. The recent developments in the sub-prime mortgage loans must serve as an excellent reminder of the never ending surprises which from time to time cause a lot of turmoil for the financial market stability. Moreover, this episode once more

highlights the necessity for more harmony between monetary policy and financial stability. I want to make clear that by financial stability I do not assume only the absence of a financial crisis. First and foremost it implies a functional and efficient financial system in its intermediation role.

I personally believe that too tight regulations truly minimize all the risks, but on the other hand they might not always be conducive to sustained growth.

Therefore, the real challenge we are facing is to find an optimal balance between deregulation, which promotes market forces and financial innovations, and negative consequences of possible market failures and financial crises.

Obviously, this optimal balance is hard to be actualized in the daily practice. Therefore, more empirical studies need to be made, which I believe is one of the main priorities of the newly established Financial Stability Department.

However, I would like to underline that as a supervisory authority we have been very prudent during the present year, considering among others the rapid growth of credit portfolio in the last 2-3 years. I take this opportunity to inform the banking system and the public at large that starting from January 2008 the Credit Registry will begin to operate.

Special attention has been paid to strengthening banking supervision, in particular to that part which relates to the governance of commercial banks. Moreover, we have required more transparency from the banking system and a more accountable relationship with the public. The continuous improvement of human capacities involved in internal control and risk management has for a long time been a concern for the Bank of Albania. With reference to the latter I would like to underscore that we have already identified three greatest risks whose presence would have severe consequences on the financial stability. I have to say that this group of risks characterizes the whole region; consequently there is a lot of room for cooperation in this context.

## 1 – Credit risk

Credit risk directly relates to the boom of credit to economy in the last years. Although the statistics indicate that the share of non-performing loans is low, prudence is required. We all do know that the rating and re-rating methods may be a tool in the hands of banks to keep the reality away from the truth. The entrance of big international foreign groups puts upward pressure on the other banking operators' attempt to compete for borrowers, which may often deteriorate the credit portfolio quality. Moreover, let us not forget that the companies' balance sheets lack transparency which makes another issue for this matter. To conclude, I would like to say that the current developments in the real estates market may have a potentially negative impact. A considerable rise in prices when real estates account for about 80 per cent of the collateral may have a negative impact, in case there is a sudden fall of prices in the fixed assets market.

## 2 – Exchange rate risk

As of November 2007 outstanding credit is shared by 70 per cent in foreign currency credit and 30 per cent in the local currency. It is my impression that the figures are similar to the whole region. Extending credit in foreign currency to borrowers with income in national currency means that a sudden depreciation of exchange rate could threaten their capacity to repay.

## 3 – Contagion risk resulting from the presence of big banking groups throughout the region

Currently we are all witnesses of a large-scale penetration of some big international banking groups throughout our region. This development has obviously been welcomed as it has provided a better and more efficient allocation of free assets in economy. However, I believe that more prudence is required in this context. A disturbing issue for the parent bank or a concern of one of its branches in the region may cause turbulences for the fact that these banking groups have large market shares. Moreover, host-host supervision-related concerns have not been covered by the Basle standards, making the whole situation even more complex.

In conclusion, I would like to highlight that our work has been guided by a simple but progressive philosophy which has aimed at:

- Establishing sound and operating structures;
- Concluding and improving the legal and regulatory base; and
- Absorbing qualified and professional human capacities to cope with the future challenges.

I express my belief that the Bank of Albania is fully capable to have the full ownership of designing and implementing the monetary policy.

*Dear participants,*

I tried to give a short overview of our work in the last years. I am sure that the speakers' presentations and discussions in this conference will help us to better understand certain issues and provide the answer to several questions. I truly believe all the participants will be active by bringing and focusing on new aspects, different experience and alternative perspectives to our viewpoints.

I wish you good proceedings.



## SUSTAINABLE POLICY MIX IN THE CANDIDATE AND POTENTIAL CANDIDATE COUNTRIES

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*Peter Grasmann\**

*Mr. Governor, Ladies and Gentlemen,*

Thank you for the invitation to this distinguished conference. I am happy to share my views on the policy options in the Western Balkan countries, in the light of their integration into the European Union.

The European Union has been and remains an active partner for the countries in the region. And the EU recognises the progress made by the current candidate and potential candidate countries. Close and extensive cooperation has resulted in several political agreements indicating the countries' significant progress towards EU membership.

The commitment of national authorities towards EU integration has motivated reforms which are necessary for building democratic states and functioning market economies. The countries' clear policies on EU accession have also raised awareness in the region, stabilised economies and fostered international credibility.

We are acutely aware of the importance of economic and political stability for the development in the region. Recent economic trends have been promising, reflected in relatively strong economic growth

and significant decrease of inflation. Public finance management is improving and financial systems are developing. The policy choices of national authorities have enabled a good start for restructuring. Now the policies need to focus on securing and advancing the current progress.

## 1. THE ROLE OF MONETARY POLICY

Let me start briefly with the role monetary policy plays in both achieving and maintaining macroeconomic stability.

We have witnessed impressive success in disinflation in all the countries in the region, achieved under various exchange rate regimes. This progress is crucial as stabilising prices is one of the key conditions to restore public confidence in economy and state structures. While achieving more moderate price rises, the choices of monetary strategies of the authorities have been very heterogeneous across the countries. Current exchange rate regimes in the region range from independent floating to the use of the euro as legal tender.

Against the backdrop of turmoil and uncertainty in the region in the 1990s, choosing a peg against the euro was very much the result of acknowledging the economic actors' preferences. So far, the euro is legal tender in Montenegro and Kosovo, and a currency board arrangement with the peg to the euro is in place in Bosnia and Herzegovina. Croatia and the Former Yugoslav Republic of Macedonia have a tightly managed float against the Euro.

Choosing the euro as nominal external anchor also corresponded to the wide-spread use of the Euro in the economy. While the trade openness of the countries is relatively low, especially regarding exports, the use of the Euro as trade invoicing currency is dominant in the countries with fixed peg. The use of the Euro as financial currency is also significant in these countries, partly reflecting the process of financial deepening and integration between the region and the Euro area. Largely depending on the exchange rate regime of the country, today, the share of euro-denominated deposits ranges from 20% to close to 100% in the

Western Balkans. Loans denominated in Euro exceed 40% of total loans in all the countries. This is also driven by increasing financial integration, with banks from the Euro area becoming more active in the region. The Euro as the external nominal anchor has been an important instrument in economic stabilisation and growth in these countries.

Albania and Serbia have chosen to make use of the advantages of active monetary policy instruments. Albania and Serbia have chosen floating regimes, with different degrees of management and some form of inflation targeting. This far the results in terms of achieving price stability look promising. Effective monetary policy requires a responsive monetary transmission mechanism which needs constant development -especially in the economies going through a deep restructuring process.

The EU accession criteria do not prefer any monetary policy strategies over others. Countries can enter the EU and, subsequently, ERM II with various regimes as long as these are not fixed pegs with a currency other than the EU as an anchor or amount to unilateral euroisation. International experience shows, and the EU legislation states, that a sustainable monetary system needs an independent, credible, accountable and transparent central bank. The main criterion for choosing the monetary policy strategy should be the most conducive choice for achieving price stability.

## 2. THE IMPORTANCE OF POLICY CONSISTENCY

The development of a country is obviously affected by all the policies implemented. The consistency of such policies therefore needs to be ensured. Any monetary policy target or price stability can only be maintained if fiscal and structural policies are supportive to this approach. In particular other policies should not undermine the credibility of monetary policy and should not overburden it by pursuing conflicting goals. For development to be sustainable, the mix of fiscal, structural and monetary policies needs to be consistent and appropriate.

Fiscal policy is the main short-term macroeconomic tool for countries with high external imbalances and domestic demand led economy. Monetary policy loses its effectiveness if the supportive macroeconomic framework is weak and inconsistent. Loose or procyclical fiscal stimuli can endanger macroeconomic stability. Additionally, high and rising public debt may indicate unsustainable fiscal policy and increase vulnerability of the economy. Furthermore, fiscal policy has to be flexible, able to react to changes in the economic environment. Medium-term fiscal planning is a guideline that has to be adjusted according to economic shocks, it cannot be observed as a source of rigidities of public finances. In order to be able to cope with unexpected (negative) developments, the government, like every other economic agent, needs to build buffers during less tense periods. Also in the countries with active monetary policy, monetary policy cannot be over-exploited to be the only policy containing inflation.

Fiscal expansion tends to accelerate both domestic and import demand, thus undermining macroeconomic stability. Domestic demand in transition economies is often dominated by private consumption and investment in non-export oriented sectors that may endanger long-term sustainability. In parallel, the structure of imports might also indicate a shift towards non-export sector oriented goods – a process that should not be amplified by extensive government expenditure. Public finance should focus on expenditure control and effective revenue collection. Public sector wages should avoid putting pressure on private sector wages and should reflect the goals of fiscal sustainability and improving the efficiency and quality of the public sector. These goals are not contradicting. They require however very often a more systematic revision of the overall pay and incentive grid in the public sector. Indexation of wages and pensions has to be limited in order to avoid additional pressures on prices. In parallel, revenue collection has to be improved, including the collection of government services fees, in order to achieve a balanced budget.

In order to enhance competitiveness, restructuring must be accelerated in the field of structural policies. In transition economies, restructuring and reforming of the corporate sector remains an

important challenge for building a sustainable market economy. Privatisation needs to be carried out in the case of public enterprises that could be run more efficiently in private ownership. If necessary, loss-generating companies need to be liquidated.

For longer term growth, an attractive business environment remains the main challenge for transition and catching-up economies. Acknowledging the current progress, the business climate still needs major improvements. Investment incentives are currently discouraged by poor infrastructure (including energy supply in Albania), complicated tax systems or high taxes along with the mismatch between actual and necessary labour skills. In parallel, the rule of law needs to be strengthened as well as the proper functioning of markets. Creating a favourable business environment is crucial for sustainable economic development, including the increase in domestic and foreign investment, resulting in higher employment. Currently, the low business activity is also reflected in the high current account deficit as exports lag far behind import demand. In the catching-up stage of development, external imbalances will be inevitable, but the policies need to provide a basis for moving towards a more sustainable economic structure.

### 3. THE ROLE OF THE EU

The European Union supports the process of transition, catching up and approximation to the EU for all candidate and potential candidate countries. We have the invaluable experience of the accession process of the current new Member States: most of them have recently gone through a restructuring process similar to the one in Western Balkan countries. We believe we can help the authorities of the Western Balkan countries to build up well-functioning democratic states and market economies.

The Stabilisation and Association Process offers a proven framework of guidelines for regulatory and institutional reforms as well as technical and financial assistance. The European Union has shaped its recommendations and requirements based on the *acquis communautaire*, the regulatory and institutional model implemented

in the EU. The Copenhagen criteria of political, economic and legislative policies have proven to be strong, operational and robust guidelines for the restructuring of economies.

The partnership between the EU and Western Balkan countries has been successful and a major element for stabilisation and reforms. Today, several countries have already signed Stabilisation and Association Agreements with the EU; the others are close to concluding the negotiations. With the close cooperation with international financial institutions, especially the IMF and the World Bank, the European Union will remain an active partner in the reconstruction process of the Western Balkan economies. It is in the interest of all parties that the region becomes globally competitive and an equal partner for mature market economies.

Regarding economic cooperation with the countries of the region, we are aware that the EU might have to play a further enhanced role in providing an external anchor for economic policy. We have started to extend the pre-accession economic and fiscal surveillance also to the potential candidate countries. Pre-Accession Economic Programmes (PEPs) of candidate countries and Economic and Fiscal Programmes (EFPs) of potential candidate countries should help the authorities to get used to the European standards of sustainable planning of public finances. The regular exercise with the feedback from the European Commission can be seen as providing an external anchor, helping to establish national economic planning capacity and consistent policies. Economic programmes are also one of the main sources for the economic criteria chapter of the Progress Reports. The latter serves as the basis for the assessment of the countries' progress under the European Partnership framework.

European Partnerships containing short- and medium-term priorities have been introduced as a means of realising the European perspective within Western Balkan countries. National authorities are invited to develop specific plans with timetables and measures in order to meet the priorities. The progress in implementing the priorities is monitored regularly to identify timely possible weaknesses and to make necessary adjustments in the reform plans. The priorities of European Partnerships also form the basis for

financial assistance, provided under relevant financial instruments. Recently, the Instrument for Pre-Accession Assistance (IPA) has been established, consolidating the framework of financing various projects. It should allow for some progress within both the efficiency and rationality of our project assistance.

#### 4. REFORMING THE EUROPEAN UNION

The role of the EU as an external anchor for the region requires that the Union remains itself strong and dynamic. The European Union is a union of successful economies. But it is equally under constant and manifold pressure to adjust, not least due to the major challenges of globalisation, the strong performance of Asian emerging markets, and the ageing of its societies. Hence, the European Union must focus carefully on improving its economic competitiveness and on increasing its productivity.

Much emphasis has been put on labour market reforms in the European Union. Almost all Member States have revised their regulations on temporary contracts or part-time work, labour taxation or active labour market. The importance of the reforms is reflected in the adoption of the Lisbon Agenda at EU level. The implementation of the Lisbon Agenda (the Strategy for Growth and Jobs) is followed closely at Community level, in order to achieve the European economies' ambitious targets of high competitiveness. Successful reforms have supported increase in employment and strengthened labour productivity growth in the European Union. Challenges still remain: labour market rigidities can be reduced further, especially by adjusting employment protection, favouring labour mobility and attracting inactive people to employment. Wage growth has to be consistent with the increase in productivity to remain competitive.

In parallel, product market reforms have focused on fair competition and stimulating innovation. The most efficient resource allocation can take place only in the case of equal opportunities of market participants; distortions of public interventions need to be minimised. Opening up markets and accompanying an increasing number of producers have increased the importance of innovations.

How to remain (globally) competitive, while there are large economies with much lower labour costs in Asia? The European Union Member States consider innovation to be the driving force for economic growth. Extensive investments have been made in the field of education and research: i.e. by upgrading the quality of general education and creating centres for talented specialists. Knowledge-based economy has become the most favoured development path in Member States.

Another important reform area is the Single Market or the European Internal Market, a concept introduced already some decades ago. Aimed at removing barriers for trade and investments between the EU Member States, the Single Market concept has been the basis for the respective community level policies. While trade and investment volumes have increased strongly between Member States, integration could be extended much further. Special attention is currently given to the services market and financial market integration reforms. By diminishing barriers at national borders we can increase competition, reduce monopolistic behaviour and achieve lower price pressures. At country level, network services such as energy or telecommunication, tend to be provided only by few companies. Limited or non-existing competition in these markets generally constrains efficiency as well as (quality) innovations. Allowing free entrance of foreign (and domestic) companies to the markets could increase competition in quality, prices as well as in product range.

All these market reforms have to be supported by macroeconomic stability. Monetary, fiscal and structural policies have to be consistent in order to contain price pressures. The introduction of the euro has eliminated exchange rate volatility risks inside the euro area. Conservative monetary policy ensures moderate average price increase. While cross-country price differences cannot be addressed by monetary policy in the Euro area, other policies have to be sufficiently flexible. The EU Member States closely coordinate their fiscal policies; a regular reporting system to the Community Institutions has been established. The revised budgetary framework of the EU, the excessive deficit procedure and the Stability and Growth Pact, is conducive to sustainable public finances in the EU and the euro area and to the goal of improving the quality of public

finance in order to support the broader goals of the Lisbon agenda. In addition, the Community Institutions strongly encourage Member States to build larger buffers during upswing of economic cycle. While coping with economic cyclicality, the governments of Member States additionally have to prepare for the significant demographic change and aging of populations. Public finances require structural reforms in order to ensure pension payments in the coming years, as the relative number of taxpayers (compared to retired people) is decreasing.

We could therefore say that the European Union is also in transition. Adjustment of policies in response to the changing global or domestic environment is relevant for all countries.

## 5. CONCLUSION

To conclude, allow me to underline the following few ideas:

1. The European Union welcomes the progress candidate and potential candidate countries have made in stabilising and restructuring their economies. Now the progress not only has to be made irreversible but it needs to be advanced even further.
2. Current achievements cannot be taken for granted; macroeconomic stability has to be ensured on a daily basis. Consistent stability and growth oriented policy mix with an emphasis on coordination of monetary, fiscal and structural policies remains a challenge for all countries. Currently the structural reforms have become the most crucial step towards further development. Restructuring the corporate sector and creating an attractive business environment need to be accelerated.
3. The EU offers its expertise in building up democratic states and well-functioning market economies to the national authorities. Stabilisation and association process gives a clear framework for the reforms and their implementation. Dependent on their progress in meeting the EU's political and economic criteria, all candidate and potential candidate countries have the potential

to become full members of the European Union.

4. Reforming and adjusting policies concerns all countries, not only the transforming or catching-up economies. Member States of the European Union are currently reforming their product and labour markets in order to remain competitive in the process of globalisation. At the same time, the consistency of fiscal policies with the monetary policy is closely monitored to ensure overall macroeconomic stability.

Thank you once again for inviting me to participate in the Bank of Albania's annual conference and thank you very much for your attention.

\*Peter Grasmann, DG ECFIN, European Commission.

The views expressed in this speech are exclusively those of the speaker and not necessarily those of the European Commission.

# NEIGHBOURING COUNTRIES: HOW TO DRIVE IN THE FAST LANE?

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*Giorgio Gomel* \*

## INTRODUCTION

Central and Eastern Europe is currently one of the fastest-growing areas in the world. By virtue of actual or prospective membership of the European Union and of EMU all countries in this area attracted large capital inflows, which took advantage of the high rate of return on capital, high levels of human capital and the catching-up process. However, signals of overheating have started to raise concern about sustainability, especially for those countries with fixed or strictly pegged exchange rate regimes.

I shall distinguish between Fixers (Latvia, Estonia, Lithuania, Bulgaria, Croatia and Bosnia) and Floaters (Poland, Czech Republic, Hungary, Slovak Republic, Macedonia, Serbia and Albania). This classification, although not always suitable for rather differentiated economies, can provide some insights into recent developments and help devise appropriate policies to sustain the growth process.

While the “speed limits” to potential growth and capital inflows are largely unknown<sup>1</sup>, the consequences of a sudden downturn of these economies would be very painful within the area. To ensure “safe driving in the fast lane”, policymakers ought to reduce vulnerabilities thus providing a safety margin against sudden shifts in market sentiment.

An equally important, yet often-overlooked, aspect is that in the medium term it will entail a fundamental reorientation of the economies involved. Protracted current account imbalances will have to change course, and resources will need to shift to productive investments, particularly in the tradable sector; else, an abrupt correction or a painful period of slow growth may follow. In this regard, flexible factor markets and strong financial systems will be most important.

## CURRENT MACROECONOMIC DEVELOPMENTS

Growth in Central and Eastern Europe has continued too briskly in 2006 and 2007, especially in the Baltic States. The main contribution to GDP growth came from domestic demand, supported by rising disposable incomes and abundant credit. Among Floaters, a contribution came also from net exports, thanks to a strong rebound of economic activity in Western Europe.

Buoyant domestic demand, rising oil and food prices, increases in administered prices and, in many countries, tightening labour markets contributed to a surge in inflation in 2006.

Thanks to their good economic performance, these countries were less affected than other emerging markets by the recent financial turbulence, triggered by US sub-prime market crisis. Bond spreads widened in all emerging markets since early August but more so in Asia and Latin America than in Europe; currency movements were also less pronounced. Finally, equity market losses were much more limited than in other EMEs (except Hungary, Poland and Romania).

Not all countries are taking advantage of their robust growth to improve their fiscal positions. Over the last few years, they have used rapid GDP growth to increase public spending substantially, rather than establish a better public-private balance in the economy and continue with the structural reform agenda. In 2006, only Bulgaria and Estonia tightened their fiscal stance significantly<sup>2</sup>.

However, when Floaters' and Fixers' fiscal positions are compared, the latter show consistently lower fiscal deficits and government

debt (see Table 1). Moreover, whereas deficit and debt ratios in the flexible exchange rate countries remained almost unchanged over time, figures for the fixed exchange rate countries have been improving<sup>3</sup>.

## CAUSES OF CONCERN AND CHALLENGES

There is growing concern that the rapid growth of domestic demand, not matched by the expansion of productive capacity, is forcing some economies in the area, especially those with pegged exchange rates, on an unsustainable path. Signs that these economies are overheating are visible in the sharp increase in inflation rates over the last couple of years and in widening current account deficits.

Although sustained by expectations of good economic prospects and rising incomes, the buoyancy of domestic demand is also the result of exceptionally fast growth of credit to the private sector. In part, the latter stems from a structural deepening of these countries' financial systems. Bank intermediation in several countries is still below the levels consistent with their stage of economic development and the structural characteristics of domestic banking sectors. In addition, the privatization of the banking sector and the entry of foreign banks into the domestic markets have led to an increase in the supply of credit, facilitating access to foreign funding, which occurs mainly via parent banks. Also, the expansion of loans has been driven by increased competition and the subsequent reduction of margins. On the other hand, especially in countries with fixed exchange rates, the rapid expansion of credit may have partly been driven by expansionary monetary conditions. Although it is difficult to establish to what extent the current pace of growth of credit reflects an equilibrium process, the brisk pace recorded by mortgage loans has fuelled a sharp increase in house price.

In 2006 current account deficits widened in all countries and are estimated to further worsen this year. Countries with fixed exchange rates, but also Romania and Serbia, recorded double-digit deficits and experienced the most significant worsening. In addition, while the deficits of countries with floating exchange rates were largely

financed by FDI, this was not the case for Fixers, where the bulk of the financial account was made of loans and other banking system operations (see table 2, col. 4).

On the domestic side, signs of growing imbalances are observable in the widespread increase of inflation rates. To some extent, higher inflation rates in transition economies may be considered as an equilibrium phenomenon, associated with the process of real convergence. Owing to the Balassa-Samuelson effect, higher productivity growth in the tradable relative to the nontradable sector should lead to a real appreciation of currencies. Such real appreciation may be accomplished either by nominal appreciation or by higher inflation relative to trade partners if nominal exchange rate flexibility is limited. However, the relevance of this effect should not be overestimated. Rather, in several countries in the region inflationary pressures have mounted in the last couple of years because of excess demand growth, output above potential, and tightening labour markets. This is true especially of countries with pegged exchange rates. While up to 2004, inflation in these countries was considerably lower than in floating-rate ones, since then the situation has reversed: strong exchange rate appreciation in the latter stemming from solid fundamentals and capital inflows helped to relieve price pressures via cheaper imports; in addition, as is the case of Poland and Czech Republic, monetary policy could be used independently to curb inflation. Overall, meeting the inflation criterion set by the Maastricht Treaty remains a major policy challenge for the region, but more so for exchange rate fixers.

Among the causes of hikes in inflation are the tightening conditions of labour markets. Although employment increased with strong economic growth and greater responsiveness of labour supply, during the last 2-3 years most of these countries experienced a fundamental shift from a shortage of jobs to shortages of skills and workers. Just after EU accession, migration from Poland, Slovakia, and the Baltic states and, more recently, Romania and Bulgaria helped lower unemployment, but is now causing labour shortages especially in such fast-expanding sectors as construction and financial intermediation. These conditions are pushing up real wages which are now growing faster than labour productivity.

The booming demand is outpacing supply expansion and all the economies are running into capacity constraints, despite high domestic investment and FDI inflows. As shown in table 3, growth over potential is stronger in Fixers, although they record a higher level of fixed investment than the Floaters (except for Bosnia & Herzegovina) and on average a higher FDI stock as a percentage of GDP.

Overcoming supply constraints is a major medium-term challenge that may help Central and Eastern Europe benefit from integration with EU and enhance growth prospects. FDIs are important in generating extra capacity for exports, particularly in manufacturing. While some new EU members show a high concentration of FDIs in the capital-intensive car and electrical machinery industries (Hungary, Poland and the Czech Republic), services (real estate, financial intermediation, trade) have received the bulk of FDIs inflows in Fixers. The sectoral composition of FDIs in the two groups of countries can be partially explained by the different exchange rate regimes. Fixing the exchange rate forces tradable-good producers to stem price increases as they are subject to the law of one price. As nontradable-good producers face no international competition, the price of nontradables relative to tradables increases. This effect can be amplified by large capital inflows, which raise final demand, which in turn raises the price of nontradables relative to tradables. The end result can be a ‘disproportionate’ increase in investment in nontradable sectors.

## POLICY OPTIONS

Let me now turn to some tentative recommendations concerning economic policies.

On the structural front, one thinks obviously of labour market policies aiming at reducing mismatches that presently push up wages and labour costs; similarly, of policies aimed at improving the accumulation of human capital to overcome skill mismatches. Appropriate measures should also be adopted to prevent wages from increasing beyond productivity improvements and to ensure that the

wage formation mechanisms, in both the private and public sector, are better designed to anchor inflationary expectations.

Investment is also important for potential growth. Increasing the capital stock helps to enhance productivity through innovation and the adoption of new technologies. Policies should thus make further effort to improve the attractiveness of the domestic business environment in order to promote a steady accumulation of productive capital, including FDI.

In the shorter term, important policy challenges are related to the management of domestic demand, especially by countries with pegged exchange rate regimes. In fact, large volumes of portfolio funds, attracted by high interest rates, rosy prospects and a sense of stability stemming from fixed exchange rates, have flown into those countries and helped fuel credit and consumption growth<sup>4</sup>. In addition, fixed regimes are often accompanied by an excess lowering of perceived exchange rate risk; this in turn brings about an increase in the demand for foreign currency denominated loans, thus giving rise to a currency mismatch that may pose serious risks for the banking system. As shown in Table 2, in countries that anchor their currency to the euro, the proportion of loans to the private sector that are denominated in a foreign currency is extremely high, both in absolute terms and compared to countries which adopt more flexible exchange rate regimes. The issue of currency mismatch is an important one, to which I will return again below.

Many emerging countries experimented with rigid exchange rate regimes over the last decades, but in the aftermath of crises a consensus has emerged that the only fixed regime that is fully credible is one in which the national authority gives up the domestic currency, and adopts a third currency, unilaterally or within a monetary union. Even an extreme arrangement such as the currency board is best viewed as a temporary arrangement that must satisfy a number of conditions some of which, in many cases, may sound rather restrictive<sup>5</sup>.

A point that may be especially critical at the current juncture is the one concerning the exit strategy; the lack of a plausible date for euro

adoption, together with the growing imbalances and the associated difficulties in meeting the convergence criteria may become a threat in particular to the currency boards, but more generally to all exchange rate pegs in the region. Signs that the markets are becoming increasingly uncomfortable have shown up earlier this year in Latvia, where the exchange rate has been forced close to the lower end of the symmetric 1 per cent band around the central parity, and the 1-year forward premium has since risen from below 1 per cent to almost 8 per cent. The 1-year forward premium has also risen, although to a lesser extent, on the Estonian krona; the premium averaged 0.13 per cent between the end of March 2004, when data availability starts, and mid June of this year, and has since risen to 0.51 per cent.

Recent history including the ERM crisis in the early 90s has taught us that any peg that is not irrevocable may be threatened by the markets and that a country's vulnerability is greatly increased once it enters a grey area in which fundamentals are neither too bad nor too good. The banking system has often played a critical role in channelling funds from abroad through the expansion of domestic credit and in becoming itself a source of vulnerability when the abundance of cheap funds induces a lowering of credit standards and fuels currency mismatches. A relevant question in this respect is: Are these vulnerabilities present in CEE, and to what extent is it exposed to the risk of a currency and financial crisis?

What should policy makers do in those circumstances is a difficult issue.

It has been suggested that countries should move to a more flexible exchange rate regime, in order to cool their economies off and redirect the objective of their policy towards the stability of prices. Is this a feasible option? What are the risks of such a move? The exit must be engineered at benign times, in particular when capital flows are abundant and the external conditions favourable, and domestic fundamentals, especially the fiscal situation, are sound. This is, for instance, the IMF's view.<sup>6</sup> The exit is more likely to be successful if it is arranged at times of strength, when appreciation forces dominate and the credibility of domestic economic policies is not affected. At the current juncture capital flows into CEE countries

are certainly abundant, but would they be sustained if the peg was abandoned? The above mentioned difficulties recorded by the Latvian at last February, and the persistent higher forward premium on the Latvian and Estonian exchange rates *vis-à-vis* the euro suggest that it is depreciation forces which may eventually dominate, not appreciation. Add to this the fact that a substantial fraction of loans to the private sector are denominated in foreign currency. Under such circumstances, a move towards more flexibility might occur in a disorderly way, with the possibility of exchange rate overshooting and a full blown financial crisis.

Even abstracting from these risks, one should not overstate the advantages of monetary policy independence. Not yet fully developed credit, deposit and loan markets, in addition to the presence of a sizeable share of loans denominated in a third currency, raise doubts about the effectiveness of the monetary transmission mechanism in these countries. Analysis carried out at the Bank of Italy shows that a contractionary monetary policy shock has weaker effects on inflation and activity in the Czech Republic, Hungary and Poland as compared to Germany, Italy and France. This difference may be ascribed to less financial deepening.<sup>7</sup> Since Baltic countries and Bulgaria are certainly closer to the former group in term of financial depth, the effects of a monetary policy tightening should be relatively contained; therefore, in order to bring about a significant deceleration of activity and prices unrealistic interest rate increases would be required.

With monetary policy unavailable, fiscal policy becomes the only effective way to slow down domestic demand. As far as its effectiveness is concerned, there is little doubt that fiscal restraint is a valid instrument. There is evidence that in Southern European countries, including Italy, at different times in the 1980s and early 90s, fiscal discipline has limited the negative impact of large capital inflows on labour costs and, thus, competitiveness<sup>8</sup>. So far, consolidation efforts are not sufficiently ambitious in some of the CEE countries. Hence, there is room for fiscal policy to stem overheating pressures. On the other hand, Fixers, except for Croatia, are running sizeable budget surpluses and it may be politically difficult to motivate the imposition of stricter budgets, also because funds are needed to finance restructuring and investment projects, aimed at overcoming

capacity constraints. However, fiscal measures can play a key role in alleviating inflationary pressures in the housing and mortgage market. In many countries, fiscal incentives appear to be distorting the housing market through tax deductibility schemes and capital gains taxes. Hence efforts to eliminate distortionary incentives are likely to have a major impact in reducing overheating.

Finally, it is crucial that the authorities make every effort to keep their banking and financial systems resilient. While curbing domestic credit growth may be important to rein in domestic demand, it is possibly even more important to prevent growing microeconomic imbalances that may threaten the stability of banking systems. The currency denomination of domestic loans appears a critical issue, especially if one considers the possibility of a depreciation of the exchange rate; hence there may be scope for measures aimed at limiting the building up of currency mismatches. More generally, since the expansion of domestic credit is feeding a boom in real estate prices, it is crucial to closely monitor the banking system exposure to that market. The risk of a correction in housing markets could materialize dramatically in the event of a switch to a more flexible regime followed by currency depreciation, with downward pressure on house prices eventually stemming from both lower demand and increasing defaults by financially strained debtors.

## CONCLUSIONS

Central and Eastern European countries have entered a difficult phase in which ensuring sustainable growth, while pursuing structural reforms aimed at loosening existing supply constraints, requires slowing down domestic demand. This is especially critical for Fixers, where imbalances have grown larger and policy options are more limited. While switching to a more flexible exchange rate regime could restore their monetary policy autonomy, one should carefully weigh the risks that this option currently entails and the associated benefits, given the uncertainties surrounding the effectiveness of the monetary transmission mechanism in those economies. Although their budgetary and debt position is sound and budgetary restraint may prove politically difficult to carry out, it probably remains the

main option. This could certainly be reinforced by measures acting on the tax benefit system, public sector wages, and the composition of government expenditure towards more productive uses. Fiscal restraint is also a primary goal for Floaters, which are experiencing smaller external imbalances but have less prudent budgetary positions.

Table 1 Main economic indicators in 2006

Countries	Real GDP growth	Inflation	General government balance (1)	FDI inflows (1)	Current account (1)
Fixers	8.0	5.3	1.3	8.9	-13.5
Bulgaria	6.1	7.4	3.3	17.2	-15.8
Estonia	11.2	4.5	3.8	10.1	-14.8
Latvia	11.9	6.6	0.4	8.1	-21.1
Lithuania	7.5	3.8	-0.3	6.1	-10.8
Croatia	4.8	3.2	-2.2	7.9	-7.6
Bosnia & Herzegovina	6.2	6.1	2.9	3.7	-10.7
Floaters	5.8	4.9	-2.9	7.3	-6.3
Poland	6.1	3.6	-3.9	4.3	-2.9
Czech Republic	6.4	2.1	-2.9	4.2	-4.2
Romania	7.7	6.6	-1.9	9.3	-10.4
Slovakia	8.3	4.3	-3.4	7.6	-7.8
Hungary	3.9	4.0	-9.2	6.3	-5.6
Albania	5.0	2.4	-3.2	3.6	-7.5
Serbia	5.7	12.7	1.6	17.4	-11.5
FYR Macedonia	3.0	3.2	-0.6	5.7	-0.4
Memo:					
Slovenia:	5.7	2.5	-1.4	1.0	-2.5

Source: Eurostat, European Commission, IMF  
 (1) As a percentage of GDP.

Table 2 Domestic and foreign financing in 2006

Countries	Credit to the private sector		Real interest rates (3)	Banking capital: net flows (1)	External debt (1)
	Percentage change	In foreign currency (2)			
Fixers	36.7	66.9	-1.5	12.5	82.8
Bulgaria	23.6	45.1	-3.7	3.8	73.6
Estonia	34.0	78.1	-1.3	21.3	96.6
Latvia	61.1	74.4	-2.2	22.4	117.9
Lithuania	55.2	55.6	-0.7	11.2	63.5
Croatia	23.0	77.2	1.3	8.9	89.6

Bosnia & Herzegovina	23.3	71.0	-2.4	7.1	55.5
Floaters	30.5	39.9	1.7	2.1	50.8
Poland	20.5	27.3	0.6	1.7	49.3
Czech Republic	19.4	10.3	0.2	-0.1	40.9
Romania	55.0	46.9	1.5	7.0	42.4
Slovakia	21.9	19.6	0.0	-7.5	58.9
Hungary	24.8	51.9	3.2	1.1	92.2
Albania	57.2	71.9	3.1	2.5	18.7
Serbia	17.4	73.1	0.8	12.9	61.3
FYR Macedonia	27.7	51.1	3.2	-0.9	42.5
Memo:					
Slovenia:	26.6	57.4	1.1	5.4	76.5

Source: Eurostat, European Commission, IMF

(1) As a percentage of GDP.

(2) Foreign currency and indexed loans as a percentage of total.

(3) Three-month interest rates adjusted for CPI inflation.

Table 3 Output gap, unit labour costs and FDI stock

Countries	Output gap (1)		Unit labour costs (2)		Inward FDI (3)
	2005	2006	2005	2006	2006
Fixers	0.3	1.1	0.0	0.8	53.7
Bulgaria	0.5	0.1	-1.3	-3.4	65.8
Estonia	0.2	2.0	-3.4	1.7	77.2
Latvia	0.0	1.8	4.6	2.7	37.5
Lithuania	1.9	2.4	0.2	2.1	36.7
Croatia (4)	0.0	0.5	....	....	63.5
Bosnia & Herzegovina (5)	-0.6	0.0	....	....	41.7
Floaters	-1.2	0.2	-1.0	-1.9	41.6
Poland	-0.4	0.5	-2.3	-2.7	30.6
Czech Republic	-0.8	-0.1	-0.4	0.1	54.8
Romania	0.2	2.1	0.5		33.6
Slovakia	-2.2	0.9	-1.8	-0.9	55.0
Hungary	-2.8	-2.1	0.8	-3.9	73.0
Albania	....	....	....	....	14.6

Serbia (6)	....	0.0	....	....	32.0
FYR Macedonia	....	....	-2.5	....	39.0
Memo:					
Slovenia:	....	....	-0.3	-1.0	20.0

Source: Eurostat, European Commission, World Investment Report 2007

(1) As a percentage of potential GDP.

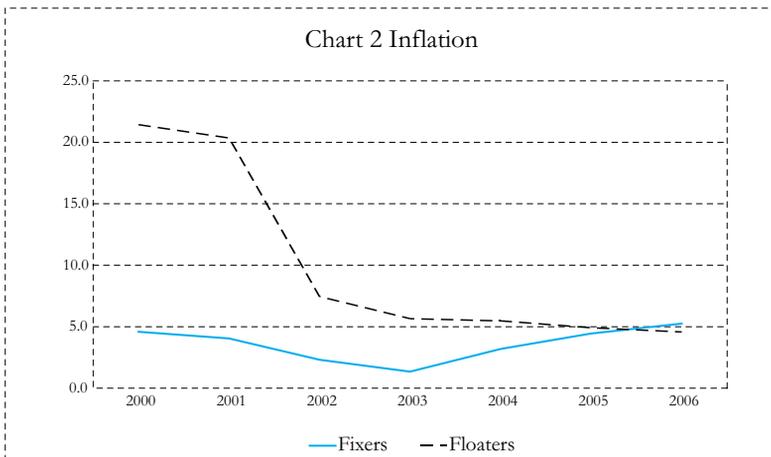
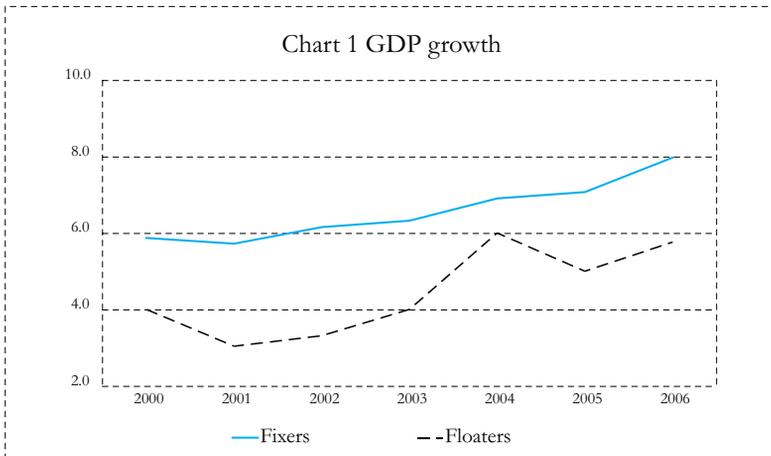
(2) Percentage changes.

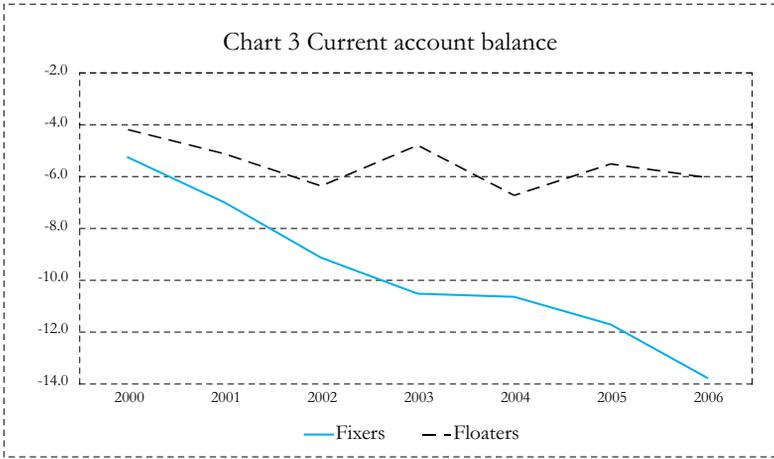
(3) Three-month interest rates adjusted for CPI inflation.

(4) As a percentage of GDP.

(5) IMF.

(6) Our estimation based on Serbian Central Bank data.





## ENDNOTES

\* Giorgio Gomel, Head of International Economic Analysis and Relations Department, Bank of Italy. I am indebted to E. Cocozza, A. Finicelli, and P. Piseli for a first draft and useful discussions.

<sup>1</sup> Rudolf B. and P. Schellekens (2007), "Finance and Convergence: What's Ahead For Emerging Europe", IMF Working Paper N. 07/244.

<sup>2</sup> However, in 2007, some governments (Hungary, Estonia, Poland, Slovakia and Latvia) have shown a renewed determination to address overheating pressures.

<sup>3</sup> The better outcomes in fixed exchange rate countries reflect mainly more prudent discretionary fiscal policies. However, more recently they are also related to strong revenue increases in the light of buoyant economic growth and, to some extent, to revenue windfalls associated with the boom in housing and other asset markets.

<sup>4</sup> In recent years the strong expansion of credit in Central and Eastern Europe has been directed to a large extent to the financing of sizeable real estate booms, with house price increases of between 60 and 180 per cent between 2004 and 2006.

<sup>5</sup> First, an exit must be planned not too distant in the future. Second, there must be no foreseeable need for intervention by a lender of last resort, as domestic credit expansion by the monetary authority is ruled out; this implies that the banking system (and the financial system more generally) must be (super) solvent and strong. Third, the regime must be accompanied by a sound budgetary framework. Fourth, the peg must be defined with respect to the major trade partners, appropriately weighted on the basis of their relative importance in trade.

<sup>6</sup> Eichengreen B. et al (1998), "Exit strategies: policy options for countries seeking exchange rate flexibility", IMF Occasional Paper N. 168

<sup>7</sup> Anzuini, A. and Levy, A. (2007), "Monetary policy shocks in the new EU members: a VAR approach", Applied Economics Vol. 39, pg. 1147-1162.

<sup>8</sup> Begg et al. (2002) "Sustainable regimes of capital movements in accession countries", CEPR Policy Paper No. 10, Dec.



## EUROZONE AND NEIGHBOURING COUNTRIES, WHAT TO EXPECT? COMMENTS ON THREE PRESENTATIONS

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*Marko Škreb\**

First of all, I am very pleased to be able to participate at the 7th BoA Conference. Furthermore I am delighted to be able to comment on the topic of Eurozone and neighbouring countries. As the Berlin Wall collapsed by the end of the XX century, I personally am sure that the drive to join EU and Euro is without any doubt the single most important factor shaping economic and political landscape of countries in the region in the beginning of the XXI century (probably at least for the first couple of decades). Some would argue that the transition of this part of the world after 1989 is the biggest economic transformation in the overall history in such a short period of time. Regardless of whether this qualification is correct or not, whatever relates to EU and the Euro is something all of us should be focused on very much. Due to time constraints, I will give my comments/discussion on papers in order of their appearance. I decided to make two comments per paper and give a brief conclusion of what I read out of those papers.

### I. PETER GRASMANN: “SUSTAINABLE POLICY MIX IN THE COUNTRIES ORIENTED TO THE EU ACCESSION”

The main messages, the way I understood it from Mr. Grasmann’s paper is first, there is progress in joining EU, but reforms need to

be speeded up. Second, macro stability is important but structural reforms are the “name of the game” for further progress and third, it is not only countries willing to join EU that need reforms, but member states as well. My two comments on his presentation are:

1. Sound monetary policy is a necessary but not sufficient condition for successfully joining the EU and Euro. This is a central bank conference and its title is: Monetary policy strategies for small economies. Monetary policy is important, however less and less so. Today’s prevalent wisdom is that price stability is a necessary but far from sufficient condition for successful transformation of a country. In a way, it is a victim of its own success. With the broad consensus that its main goal should be to keep and maintain price stability, there is little to disagree. The bottom line for success is coordination with fiscal policy and of course structural reforms. And reforms need to be swift, deep and de facto permanent. The process does not end with EU entry (or Euro for that matter). EU/Euro membership in our countries should not be viewed as a wedding (one time event) but a lifelong, hopefully, happy marriage. If reforms bring welfare gains, why then are they slow, piecemeal or postponed? This leads me to my comment on obstacles to reform, which I think are grossly undermined not only in countries concerned but especially in EU.
2. As a broad spectrum of reforms is needed, and they are slow, the first step is to talk explicitly about obstacles to reforms and take a more modern approach to “selling” reforms. I would argue, like Grasmann, that old Europe, new EU and candidate/potential candidate countries are not reforming fast enough. For example, new members, those that entered more than two years ago stopped making badly needed reforms as well. Even the candidates and potential candidates are not moving fast enough. We need to understand that it is not only about joining EU, but about surviving in a global game.

I will elaborate only on three of them, which I consider important from my own experience. They are: a) denial syndrome b) rent-seeking behaviour, and c) lack of broad political support for reforms due to insufficient information (bad PR).

- a) Denial syndrome. Both politicians and population are often in denial. Pension systems in most of EU countries, health care and a lot of other social transfers are not sustainable due to demographics etc. But we all tend to postpone tough solutions, but problems will not go away. The first and necessary step for resolving any problem is to understand that you have a problem.
- b) “Rent-seekers” and their resistance to change. Every economic policy measure will leave someone worse off. And nobody wants to be worse off in the future. But if one resists change that should happen, this can be interpreted as a rent seeking. And if private returns on predation are larger than private returns on production, this will send “wrong” incentives to people and society will not develop in the desired direction. Therefore, we have to make every effort to “get the incentives right”. This is not an easy exercise. In all European countries vested interests have emerged (from different sources) and it is understandable that every socio-economic group will fight either to preserve their status quo or try to “grab” even more. The problem is especially exacerbated if the prevailing mentality in a society as a whole is the “take it” and not “make it” philosophy. People on average resist change. When referring to transition, I have called this the Newtonian Law of Transition, namely: “Every action creates a reaction.” This resistance to reform (changes) is probably “time-dependent” and positively correlated with the time spent in transition. In the early stages reforms are more general (macroeconomic stabilization) and there is much more support for them. Every change has its own fatigue. So we used to speak about “transition fatigue”, now it is “enlargement fatigue” in EU, in general people are subject to “reform fatigue”.
- c) Lack of public support for policies due to inadequate information and PR. Ultimately sound economics is sound politics as well. But the problem is that economic measures may take time to bear fruit, and costs of reforms are immediate. In other words reforms usually have costs in the short run and the benefits are (sometimes) distant. And elections are in between. Another problem is that costs are often concentrated in relatively small groups of people and are high for them, while

benefits are broadly dispersed in a large population. So, those that are worse off tend to be loud and lobby against it strongly (strong incentives). And those that benefit are not even aware of those benefits at all.

A nice example is globalization. A recent and excellent study from European Commission on Globalization (Economic paper No. 254) has made several very relevant points. One is (p. 9) that exploiting opportunities of globalization could bring benefits of Euro 2000 to every EU citizen annually, for decades. I wonder how many EU citizens know this.

New economic policy (reform) is like a new product. It is the responsibility of the producer - the policymakers - to overcome the information asymmetry and inform the consumers - the population - of the benefits of this product (pension system reform, or benefits of globalization) and sell it successfully. If policy makers want to be successful they should be much more “customer-oriented” and educate the public about the benefits of their main products. Otherwise, they risk a weak demand for their services. Without clearly explaining the goals of reforms to the people, policymakers put at risk the necessary support for changes.

## II. BORIS VUČIĆ: RAPID CREDIT GROWTH AND CURRENCY MISMATCHES: WHAT ARE THE RISKS AND ARE THERE ANY CURES?

1. The need to quantify and talk about more details about risks and possible scenarios in the system. It is a fact, well documented that our countries are highly euroized. This brings some benefits, but new risks as well. And we need to be aware of them. Boris in his presentation elaborates on this in a lot of details. I was very pleased to see the stress test results of the Croatian banking system. Actually I was surprised with, as Boris calls it, neutrality of the capital adequacy CAD to either appreciation or depreciation of the currency. Then Boris continues with the currency induced credit risk or CICR. My comment or wish is that we should know how big the problem is. I would like to know if there are any stress tests of the private

sector and what losses can we expect there. It is quite fancy in the last couple of years to talk about CICR but I think it is time that we or at least central banks move from theoretical or hypothetical discussions into quantifying probabilities. Think of the meteorite metaphor. We refer to households that are non-hedged. But with unobserved euroization, the problem at least for households could be less than we think. If one has cash at home or receives remittances directly from his family abroad, in Euro, the person is at least partly hedged and probably would not risk losing his home. My suggestion is that we should all devote much more time in doing stress tests of the private sector, quantify probabilities and work out in more details adequate measure.

2. The need to take explicitly into account regulatory failure and address net benefit approach to reforms/regulation. It is true that central banks have different objective function than commercial banks. It is true that commercial banks and financial markets are subject to market failures (especially information asymmetries), but the second point I would like to stress is something I tried to explore at the last Euromoney conference. My comment is that we have to factor in regulatory failure as well as market failure. Not every market failure needs to be regulated and not every regulation has a net benefit. The bottom line is that risk taking is normal. Without risks there would be no progress, no financial intermediation.

Being worried is fine, trying to minimize risks as well, but as mentioned earlier, a simple market failure is not enough to “defend” a regulation or to optimize a financial system and have full benefits of it. I am arguing that we need a more balanced approach.

At the end of his presentation Boris gives some results of CNB measures to curb rising risk (short term debt is decreasing, share of gross external debt to GDP is stabilized): there is no doubt that CNB had to intervene, it is its legal duty, but my question is, to which I do not expect an answer: At what price/costs is that achieved? Is the set of measures presently in place optimal? I do not have the answer, but I would like to try to initiate the process of delivering optimal regulation. Can central banks alone deliver it? First, it is

almost impossible to be up to speed with new developments and second, authorities cannot fully grasp consequences of regulation for the industry (regulatory failure). In other words, regulation, unlike many other goods and services, is not supplied via the market, but by legally given power from elected politicians (i.e. from principal) to regulator (agent in this model). Suboptimal regulation can be costly and those costs are ultimately always born by final consumers. Therefore, a well structured dialogue between the public and private sector on financial modernization is not only warranted but is becoming a necessity by attempting to overcome (some of) information asymmetry in the regulatory process.

In spite that this dialogue is very much needed, the ultimate responsibility for regulation always lies with the regulatory and supervisory authorities as usually the law empowers them with this function and they should be held accountable if there is any problem with regulation.

### III. GIORGIO GOMEL: NEIGHBOURING COUNTRIES. HOW TO DRIVE IN THE FAST LANE?

#### 1. Can our countries really afford to float?

In the countries we are referring to, the difference between fixers and floaters may be less than meets the eye. To put in a different context, I am not sure that countries in the region can have truly independent monetary policies. Why?

First, Boris explained the level of euroization in our countries. My first argument is that due to euroization small economies simply cannot afford large fluctuations in the exchange rate.

Appreciation is happening, but typically central banks try to resist them (Croatia, Serbia, etc.).

Depreciation is something no central banks like due to the simple fact that in the present economic structure, depreciation would very rapidly translate into rising prices.

A couple of years ago Calvo and Reinhard called this “fear of floating”. And I would argue that yes, central banks are afraid. A free floating exchange rate increases foreign exchange volatility. This may cause serious problems, especially in emerging economies. These economies have a financial sector with one or more of following conditions, like high liability euroization, financial fragility and strong balance sheet effects. Small economies may face big shocks and they are not really willing to absorb those shocks via the exchange rate alone. “Benign neglect” is something small countries in the region can ill afford.

If indeed we agree that floaters are afraid or their degrees of freedom are limited, this brings us to another problem. The problem is called: impossible trinity.

2. Factor in the “impossible trinity” and slowly abandon monetary policy which for our countries is on its way to oblivion. Impossible trinity means that a country with an open capital account cannot at the same time control its exchange rate and have independent monetary policy. And as most of the countries we refer to are small, with open (or mostly open) capital account, and if we add to this “fear of floating” they probably have to understand that their monetary independence is very limited, to say the least.

Some countries have problems understanding this, especially when it comes to limiting credit growth (which is the other side of the monetary aggregates balance sheet). I do not have a solution, but my message here is to understand the limited use of monetary policy. All this is not contradictory to the main message by Gomel, which is consistent with Grasmann and Boris. It all brings me to my last point and I actually propose that a possible answer to the question for this panel on what to expect is:

- more structural reforms,
- more focus on disciplined fiscal policy, i.e. less fiscal deficits, and
- more pressure on speeding up reforms.

I add to it my fourth point, which could be implicitly seen in the three presentations:

- less reliance on monetary policy in the future with its ultimate disappearance (due to high degree of euroization and fear of floating, than ERM II and ultimately death of independent monetary policy for an individual country: the Euro)

Finally, my last message on what to expect in the marriage after the wedding (and sobering up) is a paraphrase of an old saying by Winston Churchill from 1942:

“Becoming a member of EU and Eurozone is not the end of reforms. It is not even the beginning of the end of reforms. But it is, perhaps, the end of the beginning of serious reforms in a globalized world.”

Thank you very much for your attention.

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# MONETARY POLICY STRATEGIES: SOME EVIDENCE FROM EU MEMBER STATES IN THE DRIVE TO EMU

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*Theodoros Papaspyrou\**

## 1. INTRODUCTION

The purpose of this note is to analyse the main elements of the monetary strategy followed by EU member states in their drive to EMU and draw lessons for new member states and candidate countries in forming their convergence and monetary strategies. The note starts by reviewing briefly international trends in monetary policy strategy as they influence the choice of monetary and exchange rate regimes by individual countries.

Key findings of this exercise is that, first, monetary policy strategy in the drive to EMU should be examined as part of a broader convergence strategy comprising stabilization and reform effort, second, a number of monetary frameworks may be compatible with this convergence effort and, third, more important than the formal monetary framework is the design and implementation of sound and coherent policies.

## 2. INTERNATIONAL ASPECTS

A trend towards internal monetary policy targets, such as inflation target regimes, has been established in the past fifteen, or so, years,

with a parallel shift away from external targets. Some analysts have even called inflation targeting the “new gold standard” for central banks.<sup>1</sup> This trend may be seen as an “apparent paradox” in the era of globalization: as the degree of globalization increases one would intuitively expect that the role of indicators having an international character, e.g. the exchange rate, would rise.

This shift to internal monetary policy targets can be attributed to both analytical and institutional factors.

On the analytical level, international mobility of capital and financial integration led to massive capital flows and, also, to sudden reversals of such flows, rendering problematic the reliance on the exchange rate as monetary policy anchor. International financial market crises, notably the Asian financial and currency crisis of 1997, strengthened the tendency towards more internally-oriented monetary policy frameworks. Also, capital mobility combined with financial innovation had been at the source of the diminishing popularity of monetary aggregates as intermediate targets for monetary policy. Indeed, in periods of rapid financial market developments and financial innovation, demand for money becomes unstable and the link between monetary policy and the economy is weakened.

Institutional factors, such as the trend towards independent central banks having as principal, or exclusive, objective price stability contributed importantly to the popularity of inflation target regimes. It could have been possible, of course, to combine central bank independence with money supply or the exchange rate as intermediate targets. However, the adoption of inflation targeting by newly independent central banks is considered as conveying a clearer message of commitment to price stability compared to the exchange rate or money supply targets. Experience so far with inflation target regimes has been positive in terms of ensuring price stability in countries having adopted such frameworks.

While the academic debate continues on the appropriate monetary policy strategy, central bankers cannot wait for the final conclusion as they have to ensure monetary stability in practice. In some respects monetary policy may have even moved ahead of theory,

as it was argued by someone who has served, with distinction, both disciplines.<sup>2</sup>

### 3. MONETARY POLICY STRATEGIES IN THE DRIVE TO EMU

Monetary policy strategies in EU countries in the 1990s, notably after the EMS crisis and the adoption of the Maastricht Treaty<sup>3</sup>, should be seen as part of convergence strategies for euro area membership. The 1992-93 EMS crisis made evident that exchange rate parities and fluctuation bands must be supported by sound economic and monetary policies and appropriate policy-mix.

The adoption of the Maastricht Treaty provided a clear objective (monetary union), a way to reach it (meet convergence criteria) and a deadline for the project to start (by 1997, or 1999 at the latest). These major events affected the formation of policies and the pace of their implementation. Monetary policy strategy as part of a convergence strategy implies, in practice, that the policy-mix and the contribution of monetary, fiscal, incomes and structural policies are important elements for macroeconomic stabilization and convergence.

Monetary policy strategies of member states in the 1990s were not uniform, although the exchange rate was a key component of monetary policy frameworks, notably in smaller economies. In particular:<sup>4</sup>

- There were both, cases of countries based on an exchange rate anchor (for example, the Netherlands, Belgium, Austria) and those following inflation targeting (e.g. Finland and Spain)<sup>5</sup> among member states who succeeded to join EMU in 1999 and in 2001.
- The Netherlands had adopted a policy of peg to the DM, while in Belgium monetary policy was designed to keep the Belgian franc close to the DM to which it was finally pegged in June 1990.
- In Greece, a “hard drachma” policy had been adopted under which the exchange rate was used as a nominal anchor. Once

a drastic decline in inflation rate was obtained the drachma joined ERM at an exchange rate implying a depreciation of 12.3%. A package of supportive fiscal and structural measures accompanied drachma's entry to the ERM.

- Non ERM/ERM II members (UK, Sweden) have opted for inflation targeting.
- An interesting case is Denmark, a member state having an opt out clause from monetary union but who has been member of the ERM/ERM II.

#### 4. GREECE: SOME LESSONS FROM ITS CONVERGENCE AND MONETARY STRATEGY<sup>6</sup>

An essential element of the strategy towards EMU pursued by Greece, within its convergence programme, was its comprehensive character. The respect of the exchange rate stability criterion was not pursued in isolation, but as one component of a coherent approach incorporating targets for the government balance and debt, the inflation rate and the interest rate (The main elements of the Greek monetary strategy are presented in the annex). Macroeconomic, monetary and financial policies were supported by structural reforms in the labour, goods and capital markets. However, the implementation of policies and reforms was not always satisfactory and adaptations proved necessary in several cases, in particular through the strengthening of adjustment measures in order to keep the convergence momentum.

The convergence effort of Greece was of particular interest because it was the first successful attempt by a member state to join the euro area after the first wave of the 11 founding members. Such a single effort involved increased difficulties to manage the convergence operation, both because the “distance” Greece had to cover in order to comply with the convergence criteria was significantly greater than was the case for most of the other member states but, also, because in the case of the eleven member states of the first wave the risks involved in their convergence operation were “pooled” within the joint effort<sup>7</sup>.

In the following paragraphs are summarized some lessons that can be drawn from Greece's successful convergence and monetary strategy to join the euro area from 1 January 2001:

(i) The *right setting of priorities* in achieving nominal convergence, taking into account the situation regarding the convergence criteria, available policy instruments to achieve the goals set, and the time horizon for the planned convergence. For example, in 1995, when a new thrust was given by Greece to the convergence effort, it was decided that a disinflation of the economy was central to the convergence effort. Inflation was high, at around 11% in 1994, and its steady fall conditioned the progress to meeting the rest of the convergence criteria, notably the exchange rate stability criterion and the government deficit criterion, given the high government debt ratio and, therefore, the high interest payments. The "hard drachma policy" was at the centre of the disinflation operation and inflation fell from the double digit figure in 1994 to euro qualification levels of 1999.

(ii) A *safety margin* was maintained when reducing interest rates in order to keep the yield of drachma denominated assets attractive to domestic and international investors and ensure orderly convergence to euro area interest rates. Such a prudent policy proved appropriate in considerably limiting disruptive capital flows and avoiding reversals in the capital mobility liberalisation process. Such reversals, whenever they occurred elsewhere in the world, proved very damaging for the credibility of economic policies.

(iii) The liberalization of capital movements was implemented in parallel with the strengthening of the *financial system*, through reforms and adaptations of the legislative and regulatory framework to Community legislation and by improving the supervision of banking and capital markets.

(iv) There was no significant uncovered *foreign currency exposure* of the corporate sector or the household sector, even though borrowing in foreign currency increased significantly, as foreign currency borrowing was covered, to a large extent, through "natural hedging" i.e. by receipts in foreign currency, mainly by companies engaged in tourist, shipping and other export-oriented activities.

(v) A crucial aspect of the convergence effort of Greece was the fact that *economic activity remained relatively high* enabling the authorities to maintain the “hard drachma” policy and high interest rates to support such a policy, without serious adverse effects on the economy. This development was mainly the result of the credibility of policies, which made possible declines in nominal and real interest rates (despite occasional rises in short-term rates) and the maintenance of a stable economic environment and positive prospects. Also, important was the contribution of Community funds to real GDP growth.

(vi) The credibility of the convergence objective and the determination for euro membership was reflected in *wage moderation* in the private sector,<sup>8</sup> a phenomenon noted also in other EU countries in their drive to EMU. This development can be attributed to the desire of social partners to preserve competitiveness and employment in the European monetary union, realizing that the devaluation option would not be available anymore.

(vii) It should be noted that the Greek drachma entered the ERM once *substantial progress had been achieved* towards nominal convergence. Entry into the ERM was effected at a central rate involving a 12.3% devaluation of the drachma against the ECU, a development that enabled recuperation of competitiveness losses due to the hard drachma policy. Furthermore, Greece agreed that the stabilization and structural reform efforts had to be strengthened in order to contain the inflationary impact of the devaluation and complete the remaining distance to meeting the convergence criteria.<sup>9</sup> Indeed, entry of the drachma to the ERM, in March 1998, was accompanied by a programme agreed with the Greek government including reinforcement of the adjustment effort in public finances as well as structural reforms in order to improve the performance of the economy.

(viii) The *broad political support* for the EMU project was important. The support of the large majority of the Greek political parties and public opinion was an important positive factor in stabilizing expectations and deterring speculation in difficult times. It should be noted in this respect that in the past, sharply diverging views of main political parties on the EMU project was a destabilizing factor for the

currency in some Member States. In general, strong political support for the project -based on the broad support of public opinion- has proved decisive in avoiding speculative attacks or in fending off such attacks when they occurred.

## 5. MONETARY STRATEGIES IN NEW MEMBER STATES: KEY CHALLENGES

The choice of the appropriate monetary and exchange rate strategy is an important issue, as it would influence the outcome of the whole effort for meeting the Maastricht convergence criteria, notably those referring to price and exchange rate stability. Such a choice would determine, in particular, the timing of ERM II entry, as participation in the mechanism implies specific obligations regarding exchange rates. As a consequence, monetary and exchange rate strategies should be determined jointly, taking account of economic conditions and prospects, and the time-length of planned convergence effort.

Different traditions and economic structures have led new member states to adopt different monetary policy frameworks, such as exchange-rate based regimes (including currency boards) and inflation targeting ones. New member states have already made significant progress towards both nominal and real convergence: three new member states, which relied basically on an exchange rate anchor, have successfully joined (Slovenia) or are about to join (Cyprus, Malta) the euro area.

Although a theoretical discussion about optimal monetary policy regimes and strategies has an obvious intellectual appeal, it may be more useful to focus our attention on the conditions under which existing monetary regimes in new member states could support their effort for monetary stability and convergence.

In the case of exchange-rate-based monetary strategies, the main issue is the sustainability of the chosen strategy and, therefore, the effort is normally focused on strengthening the elements which support such a strategy. In the case of the inflation targeting systems the key question is under what conditions such systems can

incorporate ERM II obligations about exchange rate stability within the predetermined bands while preserving the core objective of the system to ensure price stability.

In the following paragraphs, monetary strategies based on inflation targeting and currency board frameworks will be examined, as they represent monetary and exchange rate systems followed by most new member states (with the exception of the three members states who have already obtained accession to the euro area).

### Inflation targeting

Can inflation target regimes be, *in practice*, compatible with ERM II rules?<sup>10</sup> The answer is yes! The main reasons are the following:

- Analytical studies suggest that inflation target regimes, which are effective in reducing inflation and maintaining price stability, lead to reduced exchange rate variability.<sup>11</sup>
- Research has shown that inflation target regimes associated with independence of central banks (one of the requirements for euro membership) lead also to lower exchange rate variability than in the absence of such independence.
- We have seen above that in the 1990s, members with monetary framework based on inflation targeting succeeded in meeting convergence criteria and join the euro area.<sup>12</sup>
- The dichotomy between inflation targeting and exchange rate targeting may not be that sharp in practice, as there is a strong pass-through from nominal exchange rates to domestic inflation in small open economies.<sup>13</sup>

The above seem to attenuate concerns about possible incompatibilities between inflation targeting (and other non-exchange-rate-based monetary regimes) and exchange rate stability requirements. However, member states concerned should design with care their monetary and exchange rate policies with a view to avoiding inconsistent situations and strategies. It should be noted in this respect that the fact that certain monetary regimes have served well the monetary policy objectives in a number of member states does not necessarily imply that this would be the case in the future,

taking also account of exchange rate stability requirements. In other words, although compatibility may exist as mentioned above, adaptations to the policy framework may be necessary in order to ensure a smooth drive to EMU.

Experience shows that the main risk for inflation targeters-free floaters, is postponement of necessary adjustment, notably fiscal adjustment, and reform in the absence of ERM II discipline. Therefore, it is important that member states concerned express a strong commitment to adjustment and reform, combined with specific plans, including time schedule, to join ERM II and the euro area. This would give clear signals to all stakeholders, including financial markets, with positive effects on expectations and market attitude. In this context, ERM II should be seen as a precious ally in the drive to EMU, provided sound policies and strong commitment are present.

#### Currency board regimes

It is well known that currency board regimes have, often, been very effective in achieving rapid disinflation, but require careful management in more normal times. A rigorous analysis of the situation and policy options is essential. The following elements are considered as relevant in evaluating the situation and available policy options:

- In case of sizeable current account deficits, as is the case currently in new member states following currency board regimes, or fixed exchange rate regimes more generally, a rigorous analysis of the competitiveness situation and the sustainability of the currency board regimes are necessary. This should enable an assessment about the nature of external imbalances. If, for example, current account deficits are due mainly to excess internal demand and not due to lost competitiveness the situation could be dealt with by appropriate policies. In case an important loss of competitiveness is the source of the imbalances then more profound measures are necessary and an adjustment of the exchange rate may not be excluded. However, this last option must be considered with extreme caution.

- Even in the case of lost competitiveness, the abandonment of the currency board regime or fixed exchange rate system should be the last resort. One should recall that exchange rate adjustments never suffice by themselves to remedy the situation but accompanying measures are always necessary. Therefore, every effort must be made to take the measures which are anyway necessary. The interested parties should remember that abandonment of a given monetary and exchange rate regime has also systemic consequences that may not be easy to anticipate and deal with.
- It should be clear that countries having adopted fixed exchange rates, notably currency board regimes, or similar monetary frameworks, must be more “virtuous” than the rest! Indeed, inability to use certain monetary policy instruments, under these regimes, imply a need for an even more rigorous implementation of all other policy instruments such as fiscal, wage and structural policies.
- Such a “virtuous” attitude should not, however, be perceived as being spent in vain. It would represent a good investment for a successful convergence effort and -ultimately- participation in the euro area.
- It is important to note that no policy instrument should be neglected in the effort to remedy the situation and restore a competitive situation on the basis that its contribution might be small or uncertain.<sup>14</sup> The mobilization of all available instruments is essential as it conveys the message about the commitment and determination of the authorities to achieve the objectives set.

## 6. CONCLUDING REMARKS

It emerges from the analysis in this note that monetary policy strategy in the drive to EMU should be seen as part of a broader convergence strategy comprising macroeconomic stabilization and structural reforms. A number of monetary frameworks may be

compatible with this convergence effort including exchange-rate-based and inflation target regimes. A careful examination of facts seem to suggest that it is rather sound and sustainable policies, within a credible EU institutional and policy framework, the main determinants of the successful convergence process and less the specific monetary policy framework. Therefore, countries concerned should design with care their monetary and exchange rate policies, within the broader convergence effort, with a view to avoiding inconsistent situations and strategies. In this context, an optimal use of all available policy instruments must be used in each case. Strong commitments to adjustment and reform and to the objective of EMU are essential elements for meeting convergence criteria, stabilizing expectations and averting speculative attacks.

## ANNEX

### GREECE: MONETARY FRAMEWORK AS PART OF CONVERGENCE STRATEGY<sup>15</sup>

Although Greece had made some progress towards economic stabilization and reform since 1990, there still remained a long way to go in achieving nominal convergence and in improving economic performance. A significant tightening of monetary policy has taken place in 1994 as part of a re-orientation of economic and monetary policies specified in the revised convergence programme of Greece, 1994-99.

To focus expectations, in the beginning of 1995, the Bank of Greece adopted a “hard drachma policy” under which the exchange rate was used as a nominal anchor and announced, for the first time, a specific exchange rate target. The Bank announced that the main objective of monetary policy would be to contribute to a further deceleration of inflation, while at the same time supporting the anticipated growth in economic activity. To attain this goal the Bank set two intermediate targets (i) to limit the year-on-year depreciation of the drachma against the ECU to 3 percent, a rate that would not fully offset inflation differential between Greece and its EU partners, and (ii) to contain monetary expansion, as measured by the growth rate of M3, to 7-9 per cent. The Bank aimed to reduce inflation to 8 percent in 1995, from 10.8 per cent in 1994. To this end the exchange rate target was assigned pre-eminence. The Bank also monitored the evolution of supplementary indicators, including M4 and total domestic credit. In the event, M3 rose by 10.3 per cent in 1995, but the exchange rate target and the supplementary indicators were attained. Inflation, at 8.9 per cent, was somewhat above the Bank’s objective.

Similar objectives were set for 1996 and 1997. Thus, during the first three years of the hard-drachma policy, inflation was more than halved. Indicative of the stance of monetary policy and of the large, but declining (as a per cent of GDP), fiscal deficits in the three years through 1997, nominal and real interest rates remained at very high levels. Correspondingly the real effective exchange rate (measured on

the basis of relative ULC) appreciated by about 17 per cent, which may have reduced competitiveness. Although inflation fell sharply, real growth accelerated. Real GDP growth averaged about 2.8 per cent during 1995-97 compared with 1 per cent during 1991-94.

No specific inflation target was set for 1998 in view of the lags with which monetary policy affects inflation and of the uncertain impact of the devaluation of the drachma, at the entry into the ERM, on inflation. Instead the Bank stated that it would seek to achieve price stability by end-1999. Its intermediate target would be to maintain a stable exchange rate defined as an average annual exchange rate within 2.5 per cent of the central rate. In striking a balance between the objectives of disinflation and exchange rate stability, the Bank clearly affirmed that priority in policy implementation would be given to achieving the inflation target and, consequently, the drachma could appreciate to a point outside the narrow margins of fluctuation.

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## ENDNOTES

\* Theodoros Papaspyrou, Special Adviser, Bank of Greece.

<sup>1</sup> See e.g. T.Veloso, R. Meuer and S. Da Silva (2007). However, other economists argue that inflation targeting has yet to be recession tested.

<sup>2</sup> See M.King, "Monetary policy: practice ahead of theory", Mais Lecture, 2005.

<sup>3</sup> The Maastricht Treaty was signed on 7 February 1992 and entered into force on 1 November 1993.

<sup>4</sup> Germany's monetary strategy is not mentioned explicitly in the country examples because of the special position of the DM, which became the anchor currency of the EMS. It is noted in this respect that Bundesbank's monetary strategy was one of monetary targeting (it is argued, however, that Bundesbank indirectly targeted inflation, using money growth as a quantitative indicator to aid in the calibration of its policy – see B.Bernanke "A perspective on inflation targeting", Annual Washington Policy Conference, March 25, 2003).

<sup>5</sup> Finland and Spain adopted inflation targeting in 1993 and 1995 respectively.

<sup>6</sup> This section draws on T. Papaspyrou: "EMU strategies: Lessons from past experience in view of EU enlargement", Working Paper no 11, March 2004, Bank of Greece.

<sup>7</sup> There were, indeed, no notable cases of speculative attacks against currencies of the eleven countries during the crucial two-year period before adopting the euro on 1.1.1999. This can be attributed to both progress achieved in meeting the convergence criteria in a sustainable way and the high political commitment to the EMU project, a situation that deterred speculators from attacking the currencies of the countries of the first wave.

<sup>8</sup> Wage developments in the private sector were also influenced by wage moderation in the public sector, as incomes policy served as an example for wage agreements in the private sector.

<sup>9</sup> The devaluation was subsequently partly reversed, as the drachma strengthened in the foreign exchange markets.

<sup>10</sup> The focus is on the situation in practice, because de jure inflation target regimes are compatible with ERM II rules, provided they are not associated with free floating exchange rates (see ECB's document: "Policy position of the Governing Council of the ECB on exchange rate issues relating to the Acceding Countries", made public on 18.12.2003. This position seems to be the same as those of the Commission and the Ecofin Council on this specific issue).

<sup>11</sup> See Kuttner and Posen (2001).

<sup>12</sup> See Genberg (2004).

<sup>13</sup> See Coricelli (2003).

<sup>14</sup> For example, it is argued sometimes that intervention in the foreign exchange markets may not be effective or that prudential measures cannot cope with excess credit expansion etc. Although this may be partly true for each individual measure, it is not necessarily true if their joint effect is taken into account. Moreover, they could provide the necessary time for a more profound adaptation of the policy-mix. Finally, as it is mentioned in the main text, they convey the right policy message to the market about the intentions and commitment of policymakers to move towards a certain direction.

<sup>15</sup> This section draws on Garganas N. and Tavlas G. (2001).



# EXCHANGE RATE POLICY IN SOUTH-EASTERN EUROPE: DOES IT MATTER?

*Fabrizio Coricelli, Peter Sanfey, Marko Atanasovskiy\**

## I. INTRODUCTION

South-Eastern Europe (SEE) provides an interesting laboratory for analysis of exchange rate regimes and their effects on the real economy. One can find in this region the full spectrum of regimes, ranging from unilateral euroisation in Montenegro, through to currency boards in Bosnia and Herzegovina and Bulgaria, a hard peg in FYR Macedonia, and then different degrees of floating in Albania, Croatia, Romania and Serbia (see Table 1).

*Table 1 De facto classification of exchange rate regimes and monetary policy frameworks in SEE*

Country	Exchange rate regime	Monetary policy framework
Albania	Loosely managed float	Informal inflation targeting via money growth targeting
Bosnia	Currency board	Exchange rate fixed to euro
Croatia	Tightly managed float	Close management of exchange rate with the euro
FYR Macedonia	De facto peg to Euro	Nominal exchange rate anchor with the euro
Montenegro	Unilateral Euro adoption	Euro is sole legal tender
Serbia	Loosely managed float	Inflation targeting framework
Bulgaria	Currency board with Euro peg	Exchange rate fixed to euro
Romania	Loosely managed float	Inflation targeting framework

Source: IMF.

The obvious question is whether the choice of regime affects the evolution of the real economy; a related question is whether one type of regime is “better” than another. The answers have potentially important implications for the conduct of monetary and exchange rate policy, especially as each country moves towards the ultimate goal of membership of the eurozone.

In this paper, we argue three main points. First, there is little or no evidence from macroeconomic data that would support the superiority of one regime over another, although there is some evidence that hard pegs facilitate low inflation and low fiscal deficits. This suggests that there are other, more fundamental, determinants of performance. Among such determinants the development of the financial sector plays a major role.

Second, the choice of exchange rate regime does affect the ease of responding to market turbulence, of the type witnessed in global markets over the past six months. In the event of a severe tightening of foreign lending conditions to the country – the so-called phenomenon of “sudden stop” – it would be hard to avoid a targeting of the exchange rate, as a large devaluation would have severe adverse effects on the real economy and on the financial sector. This means that countries adopting flexible regimes in normal times have to use those favourable periods to build safeguards, in particular a sufficient level of foreign exchange reserves, against stormy times. This is of course even more important for countries adopting hard pegs.

Third, exchange rate policy matters when countries come closer to euro adoption. In particular, countries that adopted hard pegs in the early stage of transition may find such a straitjacket increasingly inappropriate as the economy grows and the financial sector becomes more sophisticated.

The structure of the paper is as follows. In section II we provide an overview of the choice of exchange rate regime and the monetary policy constraints in South-Eastern Europe are examined. Section III contains an exploration of the link between macroeconomic performance and the choice of exchange rate regimes. In section IV

we investigate the policy mix and tools used by central banks that are needed for a successful economic performance, and conclude in section V with a discussion of the key longer-term issues.

## II. BACKGROUND

The choice of exchange rate regime in SEE reflects the starting point of each country in transition. The currency boards of Bosnia and Herzegovina and Bulgaria were introduced as a response to crises and a way of providing a decisive break with the past. FYR Macedonia also went very publicly for a hard peg as a response to the financial crises of the early 1990s. In all three cases there were sufficient reserves to give credibility to the announced policy, and all three countries now have a track record of stability extending over more than 10 years. In the case of Albania and Serbia, there were insufficient reserves at the start of transition to allow a hard peg, so a floating policy was seen as the only realistic alternative. Croatia and Romania had a little more flexibility but opted anyway for a floating regime, with strong management elements in the case of Croatia. Montenegro came up with the most innovative solution – first adopting the DM as parallel currency to the Yugoslav dinar in 1999 and then, a year later, declaring the DM to be the sole legal tender (replaced by the euro in 2002), even though Montenegro was still formally part of the Federal Republic of Yugoslavia. Although there are solid economic arguments for such a drastic step, the motivation was clearly political, as part of the process of distancing Montenegro from its sister republic, Serbia.<sup>1</sup>

For those countries that peg their currencies, the exchange rate anchor is the key driver of monetary policy, although other instruments such as reserve requirements and credit constraints also play an important role. The floating countries in the region have mostly adopted some kind of inflation targeting approach. Usually this implies a target “band” for inflation, but without much in the way of sanctions (other than possible loss of credibility) if the target is not achieved. Some central banks, such as the National Bank of Serbia, explicitly distinguish between “headline” and “core” inflation, but this distinction is not well understood by the general public.

The conduct of monetary policy is heavily constrained throughout the region by a number of factors. First, all economies are heavily euroised; the exchange rate vis-à-vis the euro is watched closely and is highly visible, because the euro is the main reference currency for major transactions. The extent of euroisation is also illustrated by the share of foreign currency deposits to the total (see Chart 1). This shows that the share in 2006 ranged from 37 per cent in Albania to around 70 per cent in Serbia. Foreign currency loans are also important, although there is much greater cross-country variation than for deposits, ranging from around 10 per cent in 2006 in Croatia and BH to 70 per cent in Albania (see Chart 2). However, these figures can be misleading because many domestic currency loans are in fact linked to the exchange rate and therefore expose borrowers to exchange rate risk.

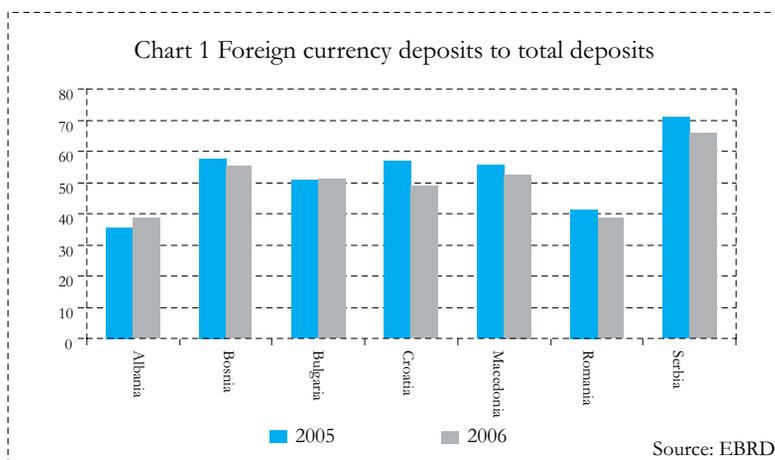
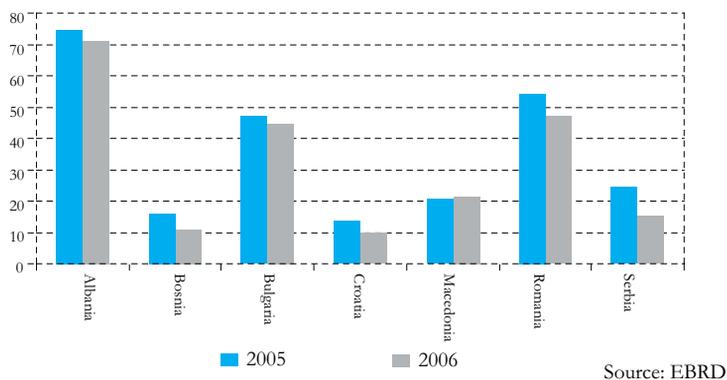
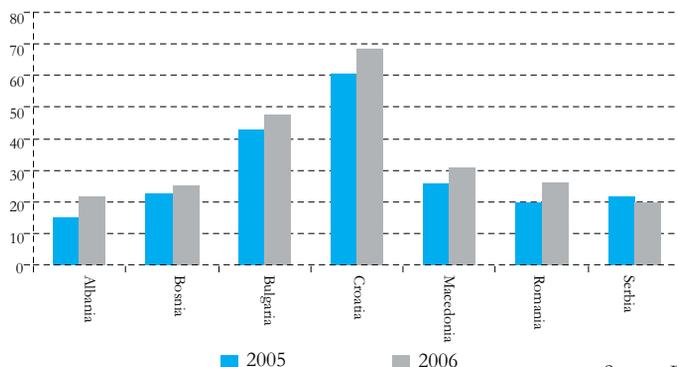


Chart 2 Foreign currency loans to total loans



A second factor that adversely affects the capacity of monetary policy makers to influence the economy is the relatively low degree of financial intermediation. In all countries, the financial sector, and especially the banking sector, has been transformed over the past 10-15 years. Nevertheless, the degree of financial intermediation, as measured by the ratio of domestic credit to GDP, is still low compared to other countries of similar income ranges (see Chart 3), especially in countries like Albania and Serbia, where it was around 20 per cent of GDP in 2006. However, it continued to grow quickly in all countries in 2007. This combination of fast growth and potential for further growth creates major problems for monetary policy makers – how to control the rapid growth in credit while at the same time allowing financial intermediaries to do their job in efficiently channelling credit to the economy.

Chart 3 Domestic credit to GDP



Source: EBRD

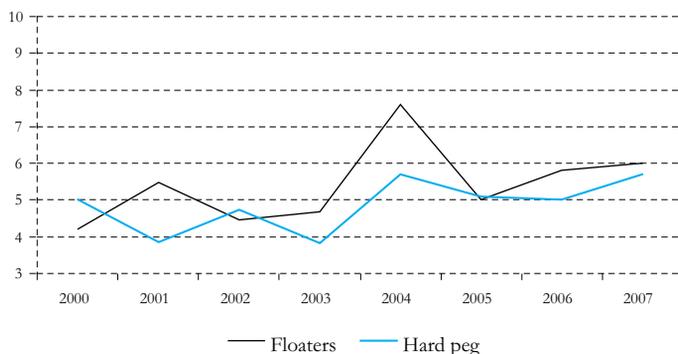
### III. CROSS-COUNTRY PATTERNS IN MACROECONOMIC VARIABLES

South-Eastern Europe has been a success story in economic terms since the start of the present decade. The year 2004 was a high point, with an average of seven per cent growth, but the past two years have come close with growth of 6.4 and 6.1 per cent respectively. All of this has been combined with, in most cases, low inflation, fiscal prudence and steadily increasing inflows of foreign direct investment. In addition, all countries have made substantial progress in transition

over the period, as well as moving towards greater integration into EU structures, highlighted by the success of Bulgaria and Romania in achieving full membership in January 2007.

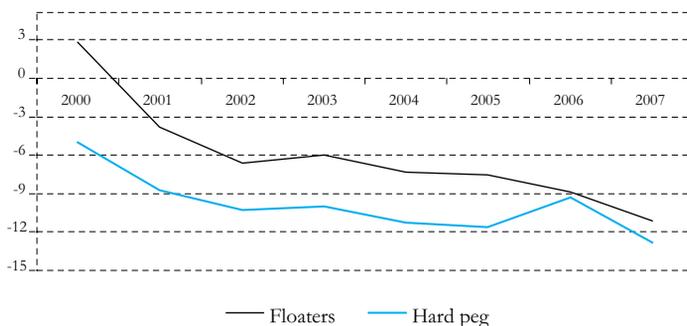
How have these developments been influenced by the choice of exchange rate regime? It is difficult to discern from macroeconomic data any strong effect one way or the other. Take, for example, the growth figures of the hard peg countries versus the floaters (see Chart 4). Average growth is higher in some years in the hard peg group, and in other years in the floaters. The evidence does not support any strong statement about the superiority of one regime over another for promoting growth. Current account deficits have tended to converge over time between the two groups, as shown in Chart 5.

Chart 4 Real GDP growth (in %), hard pegs vs. floaters compared



Source: EBRD

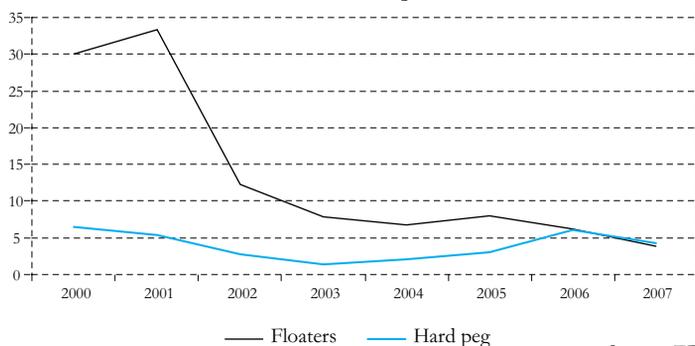
Chart 5 Current account deficits (% of GDP), hard pegs vs. floaters compared



Source: EBRD

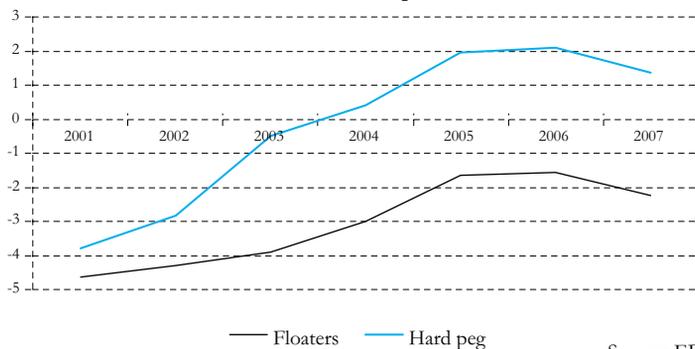
When it comes to measures of macroeconomic stabilisation – inflation and the fiscal balance – there is something of a difference between hard peg and floating countries in the region. Regarding inflation (see Chart 6), two countries in the region – Romania and Serbia – have had problems over the years in grappling with this problem, and this lies behind the relatively high average for the floaters in the early part of the decade. Similarly, floating countries have tended to run persistent fiscal deficits over recent years, whereas the hard peg countries are often in surplus. But hard peg countries such as Bulgaria are not immune from fiscal and inflationary pressures. Indeed, in fast-growing economies driven by productivity growth in the traded sector, one would expect strong pressures towards real appreciation, and therefore higher inflation in hard peg countries

Chart 6 Annual average inflation (in %), hard pegs vs. floaters compared



Source: EBRD

Chart 7 General government balance (as % of GDP), hard pegs vs. floaters compared



Source: EBRD

because, unlike in the floating case, nominal appreciation of the currency would be ruled out. Counter-balanced against this is the strong psychological anchor of having the currency tied to the euro.

#### IV. EXCHANGE RATES AND THE POLICY MIX

The choice of exchange rate policy and its effects on the real economy cannot be examined in isolation from other macroeconomic policies. The success or failure of economic performance depends on a wide variety of factors, many of which are outside the authorities' control, and the exchange rate regime is just part of the mix. Structural reforms and initial conditions are also crucially important. The determinants of growth rates in the transition region, including SEE, have been widely researched recently, and the evidence is that a combination of a good starting point, sound macroeconomic policies and reform commitment underpins the best performers in the region.

While long-term growth depends in part on a mixture of factors, including good policies and luck, the choice of exchange rate regime may affect the way in which an economy reacts to short-term shocks and surprises. In the current uncertain global environment, policy-makers may need a flexibility that would normally not be required in more benign times. This is a particularly important consideration for the hard peg countries, particularly those running a currency board. Under the rules of a currency board, there is no lender-of-last-resort role for the central bank; if banks get into liquidity difficulties, then they cannot look to the central bank to help them out. This highlights in a stark way the importance of banking sector regulation and the enforcement of prudent lending policies.

Credit growth in recent years has been rapid, and some would say excessive, in all countries of the region. What are the other tools that central banks can use to ensure that this expansion of credit does not jeopardise stability and growth? The arsenal available to central banks in the region is limited. One tool that can be used is reserve requirements. Table 2 shows the current level of reserve requirements across the region.

Table 2 Overview of the reserve requirements in the SEE region

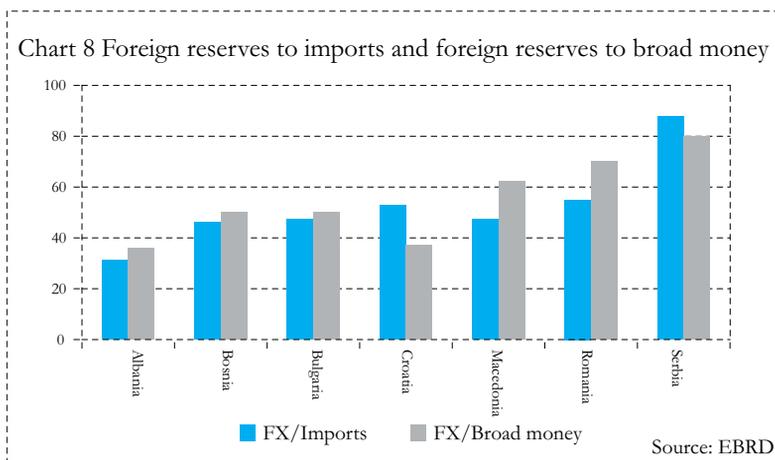
Country	National currency reserving base	Foreign currency reserving base
Albania	10%	10%
Bosnia	18%	18%
Bulgaria	12%	12%
Croatia	30%	13%
FYR Macedonia	10%	10%
Montenegro	19%/5%	19%/5%
Romania	15%	40%
Serbia	10%	45%

Note: Montenegro has two levels of required reserves, with the rate depending on the maturity of the reserves.

Source: National Bank websites

Two points stand out from Table 2. The first is the wide variation across countries for foreign currency reserves, ranging from 10 per cent in Albania and FYR Macedonia to 45 per cent in Serbia. This is surprising given the many similarities in variables such as inflation and credit growth. The second point of interest is the fact that reserve requirements tend to be higher in countries with a floating exchange rate regime. It is not clear why this should be the case. If anything, one would expect central banks to be more cautious in their reserve requirements in countries with a pegged exchange rate regime.

One possibility is that countries with flexible exchange rates have been more successful in attracting foreign exchange reserves. In general, all countries in the region have comfortable levels of foreign



reserves, whether measured as a ratio to imports or broad money (see Chart 8).

This reflects years of attracting significant amounts of capital in the form mainly of FDI and medium- and long-term credits. In the case of the two currency board regimes, BH and Bulgaria, reserves exceed the monetary base by 50 and 52 per cent respectively. A closer examination of the data reveals that countries that have seen the most rapid growth in reserves – Romania and Serbia – are also the ones with the highest reserve requirements.

## V. LOOKING AHEAD

Monetary policy in a changing SEE is not a simple matter. All economies are going through fundamental changes, and all have the ultimate goal of joining the eurozone and abandoning their domestic currencies. But for some countries, this goal is a long way off. Even the two EU members in the region – Bulgaria and Romania – face considerable uncertainty in their timetable for euro adoption. In the face of this uncertainty, central bankers cannot afford to be complacent. The wrong exchange rate policy could have serious negative consequences. But, as we have seen, it is not clear what the “right” policy might be on exchange rates. As argued above, different approaches have had similar effects on the real economy.

Given the high degree of euroisation that already exists throughout the region, one might wonder why more countries do not contemplate a unilateral adoption of the euro, as Montenegro has done. From a purely theoretical perspective, there are many attractions to such a policy, and it certainly seems to have “worked” for Montenegro, in terms of delivering stability and low inflation, as well as taking the inconvenience out of exchange rate conversion for tourists from the eurozone. However, this approach has been firmly ruled out for other countries by the European Commission and the European Central Bank. Both institutions are unhappy that a country simply bypasses all the elaborate structure of Maastricht criteria, but there is little they can do about it, except to close the door firmly on any other country that might contemplate such a step.

Central bankers must recognise that a policy that works early in the transition may no longer be appropriate at a later stage. This lesson applies especially to those countries that have chosen hard pegs – BH and Bulgaria with their currency boards, and FYR Macedonia with a fixed peg. In all cases, the peg was highly successful in achieving quickly its main objectives – acceptance of the local currency and low inflation. However, there are three key risks to continuation of this policy. These risks apply to all three countries but are particularly relevant for BH and FYR Macedonia, both of which face a number of years before eurozone membership might be possible.

The first risk is that high growth in these countries will be accompanied by high inflation well beyond eurozone levels. The well-known “Balassa-Samuelson” effect says that countries with fast-growing productivity in the traded sector will tend to see its real exchange rate appreciating, and if the currency is fixed, this appreciation must come through prices. This effect is already noticeable in several EU members with currency boards, such as Estonia and indeed Bulgaria. This will complicate the objective of bringing inflation down to the limit specified under the Maastricht criteria.

The second risk is becoming more immediate in the current global financial crisis. Some banks may run into short-term liquidity difficulties, particularly subsidiaries of western banks that may themselves be in financial trouble in their home countries. The hard peg policy rules out any direct relief from the central bank. In such circumstances, the risk of a general banking sector crisis is exacerbated. It would be wrong to exaggerate here these risks – the banking sector in the region is largely well capitalised and increasingly well regulated – but there remains the possibility that central bankers in hard peg countries of the region will have cause to regret the monetary strait-jacket they find themselves in.

The third risk comes from the external side. High current account deficits are pervasive in the region, and at double-digit levels (as a percentage of GDP) in many cases. Historically, deficits of this magnitude have often been a cause of alarm, because they can be a leading indicator of a balance of payments crisis. However, many

transition countries, in central Europe and the Baltic states as well as in SEE, have run large current account deficits for many years without presaging a crisis of any kind. One should not be surprised to see double-digit current account deficits in fast-growing, recovering economies with major investment needs. But this point is often not well understood by markets, which become nervous about persistently large deficits. A belief that a crisis is on the way can be self-fulfilling. The problem for hard peg countries is that substantial reserves can be lost in trying to defend the currency, and if this defence fails, the subsequent devaluation and associated real costs can be devastating.

All of these considerations imply that countries with a hard peg (excluding Montenegro which, strictly speaking, has no peg at all since it has no domestic currency) must consider carefully whether or not to introduce some flexibility before the ultimate step of eurozone membership. This is a very difficult choice. Historically, there are many cases of currency boards failing, and few examples of a successful conversion of a currency board into a broader currency club. On the other side of the argument, it is hard to see how a shift towards more flexibility can be explained to the public without it seeming like an admission of weakness, and hence an excuse to abandon the domestic currency, thereby contributing to a rapid devaluation.

## ENDNOTES

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<sup>1</sup> This process reached its inevitable conclusion in June 2006 when, following a referendum the previous month, Montenegro became an independent state.



# RECENT EXPERIENCES WITH EXCHANGE RATE REGIMES AND MONETARY POLICY IN SOUTH-EASTERN EUROPE AND TURKEY 2004-2007

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This contribution updates a study published in 2004. Four of the ten countries analyzed (Bosnia and Herzegovina, Bulgaria, Croatia and the Republic of Macedonia) continue to feature hard pegs and nominal exchange rate anchors to the euro, while four others (Albania, Romania, Serbia and Turkey) conduct loosely managed floats, and – with the exception of Albania – introduced inflation targeting in 2005-2006. One country (Montenegro) and one non-sovereign territory (Kosovo) remain unilaterally euroized. Although all countries have upheld prudent monetary policies supported by strengthened fiscal positions, disinflation has slowed down in recent years. Recent upticks of inflation have been triggered by rising wage pressures, accelerating credit booms, food price spikes caused by extreme weather conditions, and increases in oil prices, utility tariffs and indirect taxes (with some of the latter being one-off factors).

While the anti-inflationary effectiveness of pegs continues to be satisfactory overall, the comparatively brief experience with inflation targeting has already delivered good results in some cases. In other cases it may yet be too early to judge. The impact of capital flows on monetary policy has been on the rise, creating new challenges, and triggering repercussions (in both ways) for inflation rates.

## 1. INTRODUCTION

The main purpose of this paper is to summarize, analyze and compare the evolution of exchange rate regimes and monetary policy developments in the following ten South-eastern European countries<sup>1</sup>: Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Kosovo, the Republic of Macedonia<sup>2</sup>, Montenegro, Romania, Serbia, and Turkey. The article – an update of a study published in 2004 (Barisitz 2004) - is structured as follows: Section 2 presents a descriptive outline of the monetary policy frameworks in the region over the observation period (2004–2007). Section 3 deals with the individual countries' economic performance as well as their monetary and exchange rate aims, policies, instruments, issues and outcomes. Section 4 summarizes and compares the main results of the preceding sections and draws some overall conclusions.

## 2. EXCHANGE RATE REGIMES AND MONETARY POLICY FRAMEWORKS IN THE REGION: A CONCISE OVERVIEW OF DEVELOPMENTS FROM 2004 TO 2007

De jure and/or de facto, the euro has continued to play an important role for the economies and economic policies of South-eastern European countries. Six of the ten countries under review have used the euro as an external anchor for monetary policy (see table 1). Two of these six countries (Bosnia and Herzegovina, Bulgaria) run currency boards, while two others (Montenegro, Kosovo) have adopted the euro as their legal tender. The fifth country (the Republic of Macedonia) has pegged its currency to the euro, while the sixth country (Croatia) has conducted a tightly managed float using the euro as reference currency.

The four other countries (Albania, Romania, Serbia, and Turkey) have practiced managed or loosely managed floats coupled with money growth targeting; most recently (in 2005 and 2006) all of them except Albania opted for inflation targeting frameworks (see table 1). In early 2005, Romania chose to use the euro as the sole reference

currency, replacing a reference basket in which the euro had the largest weight. In August 2005, the country opted for inflation targeting and loosened its managed float. Serbia – after having abandoned its tightly managed float in 2003 and having pursued what was characterized as a euro-oriented “real exchange rate anchor” – further loosened its float in February 2006 in preparation for the introduction of informal inflation targeting through “inflation objectives” in September 2006. Turkey also adopted an inflation targeting regime in January 2006. Albania continued to stick to money growth targets coupled with informal inflation goals, but plans to move to formal inflation targeting soon.

Table 1 Southeastern European countries’ monetary characteristics (since 2004)

Country	Currency	Exchange Rate Regime (since); previous	Monetary Policy Framework (since); previous
Albania	Albanian lek (ALL)	Loosely managed float	Informal inflation targeting through money growth targeting
Bosnia and Herzegovina	Konvertibilna marka (BAM)	Currency board, peg to EUR	Nominal exchange rate anchor EUR
Bulgaria	Bulgarian lev (BGN)	Currency board, peg to EUR	Nominal exchange rate anchor EUR
Croatia	Croatian kuna (HRK)	Tightly managed float, reference currency: EUR	Nominal exchange rate anchor
Kosovo	All foreign currencies legalized for transactions, EUR predominant, RSD used regionally		EUR legal tender
Republic of Macedonia	Macedonian denar (MKD)	De facto peg to EUR	Nominal exchange rate anchor EUR
Montenegro	Unilaterally euroized/EUR		EUR legal tender
Romania	Romanian leu (RON, redenominated in July 2005)	Loosely managed float (August 2005); managed float, reference currency EUR (early 2005), previously: reference basket: EUR (75%), USD (25%) (early 2004)	Inflation targeting (August 2005); money growth targeting

Serbia (without Kosovo)	Serbian dinar (RSD); previously called Yugoslav dinar (YUM)	Loosely managed float (February 2006); managed float	Informal inflation targeting through “inflation objectives” (September 2006); real exchange rate anchor (January 2003)
Turkey	Turkish lira (YTL, redenominated in January 2005)	Loosely managed float	Inflation targeting (January 2006); money growth targeting, informal inflation targeting

Source: Author's own compilation

### 3. ECONOMIC DEVELOPMENTS FROM 2004 TO 2007 AND CURRENT MONETARY POLICY ISSUES BY COUNTRY

#### 3.1 ALBANIA

##### Macrostructural background

In the period from 2004 to 2007, economic growth remained robust at 5%–6% p.a. on average, and the economy's dependence on remittances continued to be strong at over 15% of GDP in 2006. Despite some progress in reducing administrative barriers to investment and enterprise creation, the business climate continues to be feeble, and governance and the rule of law are still insufficient. The economy is plagued by harmful power cuts and other infrastructure shortcomings, which are pushing up imports and containing growth. While the country's current account deficits remain relatively high, budgetary policies have been tightened somewhat in recent years. Net FDI inflows have been covering more than one-half of the external disequilibria (see table 2)<sup>3</sup> and promise to be buoyed in 2007 by the sale of Albtelemek.

Table 2 Albania: Key macroeconomic and monetary policy indicators

	2004	2005	2006	2007*
GDP growth (real, %)	6.2	5.6	5.0	6.0
General government budget balance (incl. grants, % of GDP)	-5.1	-3.6	-3.2	-3.9

Current account balance (incl. official transfers, % of GDP)	-3.9	-6.5	-5.9	-7.4
Net FDI inflows (% of GDP)	4.6	3.3	3.6	4.0
Gross foreign debt (end-year, % of GDP)	20.4	20.5	19.9	19.8
Gross reserves of central bank (incl. gold, end-year, % of GDP)	17.1	18.1	18.7	19.2
Repo rate (end-year, %)	5.3	5.0	5.5	.
Broad money growth (end-year, %)	13.5	13.9	16.3	16.3
Private credit growth (end-year, %)	36.9	73.6	57.2	43.4
CPI-inflation (end-year, %)	2.2	2.0	2.5	2.9
Exchange rate ALL/EUR (annual average)	127.7	124.2	123.1	.
Exchange rate ALL/USD (annual average)	102.8	99.9	98.1	.

\* Forecasts or projections

Source: National Statistics, Bank of Albania, IMF, wiw, EBRD, EC

### Monetary policy

The Bank of Albania (BoA) has pursued a cautious monetary policy, using informal inflation targeting based on money growth targeting. This strategy continued to be remarkably successful (compared with Albania's regional peers) in keeping inflation at low one-digit levels. By controlling M3 money supply (intermediate objective), the BoA has committed to keeping end-year inflation measured by the consumer price index (CPI) within a fluctuation band of 3%,  $\pm 1\%$  since 2003. Recently, price increases have tended to be nearer to, or at the lower end of, the band (end-2006: 2.5%, July 2007: 2.1%, see also table 2). However, most recently – in August 2007 – inflation witnessed a sharp one-off uptick to 4.2% (end-year) – the first time since the adoption of the band that the latter was exceeded. Changing repo and reverse repo<sup>4</sup> rates remains the main operative policy instrument. During the inflationary pressures that emerged in 2006 and have lasted to date (triggered by a gathering credit boom, rising oil and electricity prices, excise tax adjustments and drought-induced food price spikes which were particularly strong in the summer of 2007), the monetary authorities raised the key interest rate on four occasions by 25 basis points each time (in July 2006, November 2006, June 2007 and September 2007). In mid-October 2007, the repo rate stood at 6%. Thus, the interest rate differential with the ECB, which had been declining, was restored.

Furthermore, in an effort to keep the credit boom under control, prudential regulations and supervision of banks were strengthened

in December 2006 and January 2007. In particular, higher capital requirements were mandated for credit institutions that expand loans rapidly. The Bank of Albania has maintained a loosely managed float for the Albanian lek, which appreciated in 2004 and 2005 and has then remained largely stable against the euro in nominal terms. To the extent that the inflation goal is reached, preserving the competitiveness of the country's exports is a secondary goal of the monetary authority. The BoA intends to gradually adjust its strategy toward a formal inflation targeting regime with the aim to enhance transparency and credibility of its monetary policies.

### 3.2 BOSNIA AND HERZEGOVINA

#### Macrostructural background

Notwithstanding substantial post-war reconstruction assistance, the country has made only limited progress in putting in place viable and competitive export-oriented capacities. The economy has continued to be based largely on raw materials, mining and related manufacturing. Even though external assistance has been reduced gradually, economic growth has remained robust at 5%–6% in recent years (see table 3). This may be attributable to the strong rise in metal and other resource prices. Foreign direct investment still falls far short of offsetting the huge and persistent current account deficit; however the privatization of Telekom Srpska and a pick-up in greenfield investments are expected to narrow the financing gap in 2007. Corporate governance is poor, even compared with neighbouring countries. The persisting fragility and fragmentation of state authority further complicate structural reform efforts.

Table 3 Bosnia and Herzegovina: Key macroeconomic and monetary policy indicators

	2004	2005	2006	2007*
GDP growth (real, %)	6.0	5.5	6.2	6.2
General government budget balance (% of GDP)	-0.6	2.4	3.0	1.2
Current account balance (% of GDP)	-19.2	-21.3	-11.4	-12.5
Net FDI inflows (% of GDP)	6.5	6.6	6.3	9.0
Gross foreign debt (end-year, % of GDP)	54.8	55.4	54.0	.
Gross reserves of central bank (excl. gold, end-year, % of GDP)	23.5	26.6	30.1	32.4

Broad money growth (end-year, %)	24.3	18.2	24.7	21.0
Domestic credit growth (end-year, %)	18.0	27.6	20.6	22.0
CPI-inflation (end-year, %): Federation of BiH	-0.3	4.4	6.6	.
CPI-inflation (end-year, %): Republika Srpska	1.9	4.1	4.7	.
Exchange rate BAM/EUR (annual average) <sup>4</sup>	1.96	1.96	1.96	1.96
Exchange rate BAM/USD (annual average) <sup>4</sup>	1.58	1.57	1.56	.

<sup>4</sup> Forecasts or projections

Source: National Statistics, Centralna banka Bosne i Hercegovine, IMF, wiw, EBRD, EC

### Monetary policy

Fiscal as well as monetary policies have been prudent in recent years; in particular the currency board regime (euro peg) has become a stabilizing anchor for price developments and the economy. Foreign exchange reserves have been on the rise, reaching a value that corresponds to around five months of goods and services imports at end-2006. Managing banks' reserve requirements is the only important monetary policy tool currently at the disposal of the Centralna banka Bosne i Hercegovine (CBBH, Central Bank of Bosnia and Herzegovina).

While inflation remained subdued through 2004, loan growth kept brisk, and the surge in the oil price and in administered prices appears to have impacted inflation from 2005 onward. The total credit volume attained a level of 46% of GDP at end-2006, which is second only to Croatia in the entire region. To stem the pace of credit expansion and inflationary pressures, the CBBH hiked banks' reserve requirements on several occasions during the observation period, namely in September 2004 from 5% to 7.5%, in December 2004 to 10%, and in December 2005 to 15% of liabilities. At end-2005, CPI inflation came to 4.4% in the Muslim-Croat Federation and to 3.7% in the Republika Srpska. 2006 witnessed the introduction of a 17% value-added tax (VAT) at the beginning of the year, which immediately almost doubled average CPI inflation. Given this impact, price increases still stood at 6.6% in the Federation and at 4.7% in the Republika at end-2006 (table 3). They declined sharply in the first months of 2007 (as the VAT effects wore off), coming to 1.6% (year on year) in August in both Entities. This underlines the tendency of price changes to converge across Bosnia and Herzegovina, notwithstanding considerable differences between regional economic structures.

### 3.3 BULGARIA

#### Macrostructural background

The Bulgarian economy has witnessed overall favourable macroeconomic developments in recent years. GDP has expanded on average by around 6%, and may now (mid-October 2007) be showing signs of overheating. The persistently high current account deficit widened sharply in 2005 and 2006 (into double digits). Net FDI inflows have also been substantial and have so far kept up with the current account shortfalls, which they have largely contributed to. However, this expansion has reached dimensions that may not be sustainable. After having contracted/stagnated in recent years, foreign debt expanded again markedly in 2006; shrinking public debt has been more than offset by rising private liabilities. Foreign currency reserves cover the equivalent of 4 to 5 months of goods and services imports.

Table 4 Bulgaria: Key macroeconomic and monetary policy indicators

	2004	2005	2006	2007*
GDP growth (real, %)	6.6	6.2	6.1	6.2
General government budget balance (% of GDP)	1.8	3.2	3.7	4.0
Current account balance (% of GDP)	-5.8	-12.0	-15.8	-18.8
Net FDI inflows (% of GDP)	7.9	14.4	15.9	16.9
Gross foreign debt (end-year, % of GDP)	63.8	69.0	78.4	.
Gross reserves of central bank (excl. gold, end-year, % of GDP)	32.5	31.2	33.2	.
Base rate (end-year, %)	2.4	2.1	3.3	.
Broad money growth (end-year, %)	23.3	24.4	26.8	.
Domestic credit growth (end-year, %)	33.3	35.1	17.1	.
CPI-inflation (end-year, %)	4.0	6.6	6.5	7.5
Exchange rate BGN/EUR (annual average) <sup>4</sup>	1.96	1.96	1.96	1.96
Exchange rate BGN/USD (annual average) <sup>4</sup>	1.58	1.57	1.56	.

\* Forecasts or projections

Source: National statistics, Balgarska narodna banka, IMF, wiiw, EBRD

#### Monetary policy

In the last five years, CPI inflation has remained stubbornly at an average level of about 5% and in 2005 and 2006 exceeded 6% at end-year (see table 4). From June to August 2007, CPI inflation doubled to 12% (year on year), which gives rise to concern, even if it partly reflects an unfortunate temporary supply shock. The speed of overall price rises in recent years is linked to the persistent

confluence of a number of factors, giving rise to occasional spikes. These factors include repeated food price increases in the wake of adverse weather conditions in recent years, recurrent energy price hikes, excise tax adjustments as well as demand pressures, namely the strong credit expansion, particularly to households. The Bulgarian credit boom of recent years attained some of the highest growth rates among transition economies. The boom has sucked in imports and contributed to the deterioration of the current account. Given that the monetary policy regime (currency board anchored to the euro) largely circumscribes instruments for macroeconomic management, fiscal policy is the main tool for controlling aggregate demand and containing external imbalances. While benefitting from robust growth, fiscal policy has also become very cautious in recent years; since 2003 the general government budget has recorded no more deficits, the 2006 surplus exceeded 3% of GDP, and the 2007 surplus is expected to reach around 4% of GDP.

To help check the credit boom and its repercussions on monetary stability and external balances, the Bulgarian National Bank (BNB) launched a containment strategy in 2003. It successively chose a number of monetary, prudential and administrative tightening measures: repeated increases of the BNB base interest rate and of reserve requirements, strengthening of capital adequacy and risk exposure regulations, recourse to credit controls/ceilings for quarterly and annual loan growth (since early 2005). While prudential indicators did not show signs of serious deterioration, bank lending eventually slowed down in late 2005 and in 2006 (see table 4).

This slowdown was, however, partly circumvented by the migration of credit activities abroad and by recourse to nonbank financial intermediation (e. g. leasing companies, retailers), which contributed to the increase of private foreign debt. At the beginning of 2006, the monetary authorities extended supervision to the nonbank financial sector, and in the second half of the year, they started gradually abolishing administrative restrictions, but maintained a stringent supervisory framework. In early 2007, domestic bank loan growth regained momentum, buoyed by the country's EU accession in January of that year. Credit expansion reached 38% in real terms in January-August 2007 (year on year). This reacceleration, the strong wage hike

of early 2007 and emerging labour shortages as well as soaring energy prices and exceptionally bad weather (droughts followed by floods) may have been particular causes for the skyrocketing of consumer prices in the summer of 2007. The BNB reacted to the renewed credit boom by hiking the required reserve rate for banks from 8% to 12% on 1 September 2007. The authorities are still planning to enter ERM II at an early date (as far as this is feasible), while retaining the currency board as a unilateral commitment.

### 3.4 CROATIA

#### Macrostructural background

The Croatian economy has steadily grown (at 4% to 5% p.a.) since the turn of the millennium. The country used to suffer from twin deficits (budget and current account), but has gradually improved its fiscal performance in recent years. Net FDI inflows have been high, but not always sufficient to cover the substantial current account gaps. Concern remains focused on the country's large gross foreign liabilities, which have been steadily increasing and reached a level of almost 85% of GDP at end-2006 (see table 5). The largest part of the recent debt expansion stems from credit institutions borrowing from parent banks and from corporations directly taking up funds abroad.

Table 5 Croatia: Key macroeconomic and monetary policy indicators

	2004	2005	2006	2007*
GDP growth (real, %)	4.3	4.3	4.8	5.2
Consolidated general government budget balance (% of GDP)	-4.8	-4.1	-3.0	-2.8
Current account balance (% of GDP)	-4.9	-6.3	-7.6	-7.8
Net FDI inflows (% of GDP)	2.5	3.9	7.8	6.2
Gross foreign debt (end-year, % of GDP)	79.4	81.7	84.7	85.0
Gross reserves of central bank (excl. gold, end-year, % of GDP)	22.5	23.6	25.3	.
Discount rate (end-year, %)	4.5	4.5	4.5	.
Broad money growth (end-year, %)	9.3	10.5	18.0	10.4
Domestic credit growth (end-year, %)	11.8	19.2	18.9	.
CPI-inflation (end-year, %)	2.7	3.6	2.0	2.9
Exchange rate HRK/EUR (annual average) <sup>†</sup>	7.50	7.40	7.32	7.38
Exchange rate HRK/USD (annual average) <sup>†</sup>	6.04	5.95	5.84	5.49

\* Forecasts or projections

Source: National statistics, Hrvatska narodna banka, IMF, wiiw, EBRD, EC

### Monetary policy

The Croatian kuna's long-standing tightly managed float has been upheld in recent years. Actually, since 2002, a de facto corridor of about  $\pm 4\%$  around a hypothetical central rate of 7.5 to the euro has been observed. Notwithstanding the country's sustained low inflation track record (CPI inflation was 2.6% in August 2007), about two-thirds of loans as well as deposits continue to be denominated in, or indexed to, a foreign currency (persistently high level of euroization). The unfolding of a credit boom has added to macroeconomic tensions (weighing on external imbalances) and inflationary pressures in recent years. At end-2006, Croatia's ratio of credit to GDP reached 76%, the highest of the region and one of the highest of all transition countries.

After implementing some temporary restrictions on credit growth in 2003, the Hrvatska narodna banka (HNB, Croatian National Bank) introduced and progressively tightened marginal and special reserve requirements during 2004 to 2006. In addition, prudential regulations were strengthened in 2005 and 2006. These steps could, however, not prevent lending from re-accelerating in 2005 and 2006 (the credit volume grew by about one-fifth each year, see table 5) and from contributing to the further rise of foreign debt. In December 2006, the HNB resorted to a new administrative intervention: It imposed a credit growth limit of 12% on banks for 2007. Moreover, the HNB issued new guidelines to banks on managing household and currency-induced credit risk. While the new measures appear to have delivered some results with respect to reining in bank credit expansion in the first months of 2007, it remains to be seen whether they will keep on being effective for a longer period.

## 3.5 KOSOVO

### Macrostructural background

Kosovo's economy remains almost totally driven by foreign financial aid and by remittances from the Kosovar diaspora. After external donor assistance had declined sharply and the post-conflict reconstruction boom had come to an end, GDP growth ground to a halt in 2002 and all but stagnated at least until 2006, which

saw some revival of economic activity. The current account deficit after grants deteriorated from 3% of GDP in 2001 to 19% in 2006 (see table 6). Some fiscal loosening in 2004 and 2005 could not compensate for the drain of resources triggered by the downsizing of the international community's presence in Kosovo. In 2006 fiscal policy was tightened again and the tighter stance was upheld in 2007. Given a weak business climate, foreign investors have remained largely reticent so far. On a more positive note, significant increases in the number of new firms have been registered. Despite partly still unclear property rights, the privatization of socially-owned enterprises has made marked progress in 2005 and 2006, and a rise in capital formation, including FDI inflows, has been recorded.

Table 6 Kosovo: Key macroeconomic and monetary policy indicators

	2004	2005	2006*
GDP growth (real, %)	2.1	0.6	3.8
Consolidated budget balance (after grants, % of GDP)	-5.8	-2.6	3.4
Remittances (% of GDP)	15.0	17.2	18.7
Current account balance (after grants, % of GDP)	-11.3	-15.0	-19.1
Net FDI inflows (% of GDP)	0.9	2.6	9.8
Interest rate (non-financial firms, 3-12 month loans, %)	15.7	15.6	15.5
Growth of credit volume (end-year, %)	60.5	37.5	24.0
CPI-inflation (annual average, %)	-1.1	-1.5	0.7
Exchange rate EUR/USD (annual average)	1.24	1.24	1.26

\* Preliminary data.

Source: Central Banking Authority of Kosovo, IMF, EC

### Monetary regime and performance

Kosovo, under unilateral de jure euroization since late 1999, has boasted low single-digit euro CPI inflation since 2002. The Serbian dinar continues to be legal tender in some areas of the province, though. Having contributed to boosting prices in the early years of the United Nations Interim Administration Mission in Kosovo, the international community subsequently scaled down its activities and investments, which was also reflected in modest euro deflation in 2004 and 2005 (see table 6), despite the upward pressure of oil prices and utility tariffs in these years. In the first quarter of 2007, the price level was 1.6% higher than a year earlier. However, repercussions of extreme weather conditions in the summer of 2007 and of international food price developments triggered the strongest

increases of consumer prices recorded in the province for half a decade. Accordingly, the CPI rose 4.7% in July and 6.6% in August 2007 (year on year). In August 2006, the Banking and Payments Authority of Kosovo (BPK) was re-designated as the Central Banking Authority of Kosovo (CBAK). CBAK uses liquidity ratios and reserve requirements as the main tools of prudential intervention. Banking and credit activity have been expanding strongly, if from a tiny base. 75% of sector assets have already passed into foreign hands.

### 3.6 REPUBLIC OF MACEDONIA

#### Macrostructural background

Although the Republic of Macedonia had only witnessed a hesitant recovery in the wake of the economic destabilization triggered by the 2001 ethnic and security crisis, growth seems to have gathered some momentum since 2004, helped by strong external demand for basic metals (the major export staple). Robust growth and increasing fiscal rigor helped bring about a near-balanced budget, which was accompanied by a substantial narrowing of the current account gap in recent years. Apart from occasional spikes, like in 2006, FDI has so far not been impressive, though (see table 7). Continued political risk, weak governance, a feeble judiciary and the modest quality of transport connections have been the main obstacles for strategic foreign investment.

Table 7 FYR Macedonia: Key macroeconomic and monetary policy indicators

	2004	2005	2006	2007*
GDP growth (real, %)	4.1	3.8	3.1	5.0
General government budget balance (% of GDP)	0.0	0.3	-0.6	-1.1
Current account balance (% of GDP)	-7.7	-1.4	-0.4	-1.5
Net FDI inflows (% of GDP)	2.9	1.7	5.8	2.5
Gross foreign debt (end-year, % of GDP)	39.2	39.8	40.4	.
Gross reserves of central bank (excl. gold, end-year, % of GDP)	15.3	22.3	26.9	.
Basic rate of NBRM (end-year, %)	6.5	6.5	6.5	.
Broad money growth (end-year, %)	16.1	15.2	24.6	25.1
CPI-inflation (end-year, %)	-1.9	1.2	2.9	2.5
Exchange rate MKD/EUR (annual average)	61.34	61.30	61.19	62.0
Exchange rate MKD/USD (annual average)	49.41	49.29	48.79	.

\* Estimates or forecasts

Source: National statistics, Narodna banka na Republika Makedonija (NBRM), IMF, wiiw, EBRD, EC

### Monetary policy

Budgetary consolidation has also been flanked by successful perseverance with a tight monetary stance. The Narodna banka na Republika Makedonija (NBRM, National Bank of the Republic of Macedonia) has retained its de facto peg of the Macedonian denar to the euro, keeping inflation under control. In 2006, CPI inflation rose to about 3% (see table 7), influenced by a combination of higher energy prices, excise tax adjustments and declining food prices as a result of import liberalization due to the country's WTO accession. With the impact of the excise tax adjustment waning, the overall price level increase declined to 1.3% in July 2007, before a seasonally (drought) driven strong spike in food prices lifted inflation to just over 2% in the following month (year on year). Given the continued mixed performance of external accounts, the exchange rate of the Macedonian denar remained intermittently under pressure. The NBRM countered this pressure by intervening on the foreign currency market and upholding policy rates. Liquidity was also withdrawn through auctions of central bank bills as well as treasury bills.

The improvement in the external accounts since 2005 – largely on the back of staple price rises, expanding remittances and the privatization of a big power distribution company – has reduced macroeconomic tensions. The capital inflows enabled the central bank to replenish its foreign currency reserves, to repay in advance its remaining Paris Club and IMF liabilities and to ease its monetary reins to some degree. From October 2005 to May 2007, interest rates on NBRM bills declined by a total of 5 percentage points. A number of important structural reforms have been adopted recently (among them steps to increase labour market flexibility, improve banking regulation and upgrade infrastructure), which may also attract more FDI in the future and thereby strengthen competitiveness and confidence in the monetary regime. Commercial banks' deposits and loans are expanding steadily (albeit not quite as fast as in neighbouring countries), which points to growing re-intermediation and confidence in the financial system.

### 3.7 MONTENEGRO

#### Macrostructural background

While Montenegro's recovery following the Kosovo war of 1999 was rather feeble initially, growth picked up in 2004 and almost doubled to around 8% in 2006, the country's year of independence. While fiscal reforms (including an overhaul of the tax system and the adoption of a centralized treasury) contributed to reining in deficits and even achieving surpluses, current account disequilibria have remained high. Despite growing tourism revenues and workers' remittances, current account shortfalls have expanded dramatically, reaching 29% of GDP in 2006 and about the same level in the first half of 2007 (see table 8). However, similar to some other countries of the region, rising FDI inflows have been the principal drivers of this expansion. These inflows included the privatization sales of the Republic's main generator of exports and GDP, the Kombinat Aluminijuma Podgorica (KAP), as well as the privatization of large parts of banking sector, entailing significant restructuring efforts. Moreover, investment in real estate and the tourism sector has started to boom. It appears that Montenegro's independence (obtained in June 2006) reduced uncertainty for investors and other economic actors.

Table 8 Montenegro: Key macroeconomic and monetary policy indicators

	2004	2005	2006	2007*
GDP growth (real, %)	4.2	4.1	8.0	6.5
General government budget balance (% of GDP)	-2.4	-2.7	1.1	2.0
Current account balance (% of GDP)	-7.6	-8.9	-29.1	-26.0
Net FDI inflows (% of GDP)	3.2	22.0	24.2	22.0
Gross foreign debt (end-year, % of GDP)	.	39.3	38.4	.
Gross reserves of monetary authority (excl. gold, end-year, % of GDP)	3.9	10.5	11.1	.
Broad money growth (end-year, %)	16.3	49.6	87.4	.
Domestic credit growth (end-year, %)	42.4	10.6	135.9	.
CPI-inflation (end-year, %)	1.6	2.5	2.8	3.0
Exchange rate EUR/USD (annual average)	1.24	1.24	1.26	.

\* Forecasts or projections.

Source: National statistics, Centralna banka Crne Gore, IMF, wiiw, EBRD, EC

#### Monetary regime and performance

Montenegro's unilateral de jure euroization in 1999-2000 seems

to have succeeded in breaking the very high inflation of the past. Annual consumer price increases (euro-based) have declined steadily to about 2%–3% since 2004 (see table 8), coming to 2.3% in May 2007. However, August 2007 witnessed a spike of 4.6% (year on year) on account of drought-induced food price rises, international food price hikes and increases of utility prices. The Centralna banka Crne Gore (CBCG, Central Bank of Montenegro) uses the regulation of commercial banks' mandatory reserves as its main policy instrument; furthermore, it issues central bank bills as an indirect possibility to influence interest rates.

Starting in 2003, bank loans have been expanding briskly (they even more than doubled in 2006 and continued this pace in the first half of 2007), albeit from a modest point of departure. To check the unrelenting speed of the credit expansion, the CBCG tightened reserve requirements as of early October 2007. In the face of swift increases of the money supply (e.g. broad money growth accelerated to over 80% in 2006), the overall low level of inflation reflects a strong re-monetization process. Notwithstanding the most recent seasonal spike, the danger of euroized Montenegro losing competitiveness due to an excessively high inflation differential to the euro area seems to have been contained. This may also be ascribable to the above-mentioned upswing of productivity-enhancing capital inflows. Still, continued structural reforms seem necessary to uphold the momentum and retain competitiveness.

### 3.8 ROMANIA

#### Macrostructural background

Romania has continued to experience robust GDP growth, which accelerated to above 7% in 2006, and may be showing signs of overheating. After the country's fiscal imbalances had descended to low levels in recent years, some loosening occurred in 2006 and seems to have gathered momentum in 2007. The current account gap widened sharply in 2004 and expanded further over the following years, particularly in 2007. This deterioration was driven by an acceleration of domestic demand stemming from rapid wage growth, the above referred-to fiscal relaxation, and a swift expansion

of credit to the private sector. The Romanian leu has also been appreciating since 2004 – until most recently. The strong increase in FDI has played an important role in the widening of the current account gap, although this role appears to be fading in 2007 (see table 9), with large privatizations so far absent during the year.

Table 9 Romania: Key macroeconomic and monetary policy indicators

	2004	2005	2006	2007*
GDP growth (real, %)	8.5	4.1	7.7	5.8
General government budget balance (% of GDP)	-1.0	-0.8	-1.7	-2.8
Current account balance (% of GDP)	-8.4	-8.7	-10.3	-14.5
Net FDI inflows (% of GDP)	8.4	6.6	9.3	6.1
Gross foreign debt (end-year, % of GDP) <sup>1</sup>	30.6	31.1	28.6	26.7
Gross reserves of central bank (excl. gold, end-year, % of GDP)	17.9	21.1	22.0	.
Discount rate (end-year, %)	18.0	7.5	8.8	7.0
Broad money growth (end-year, %)	40.1	33.8	29.4	30.0
CPI-inflation (end-year, %)	9.3	8.6	4.9	4.9
Exchange rate RON/EUR (annual average) <sup>2</sup>	4.05	3.62	3.52	3.35
Exchange rate RON/USD (annual average) <sup>2</sup>	3.26	2.91	2.81	.

\* Forecasts or projections.

<sup>1</sup> Without short-term liabilities.

<sup>2</sup> The lei was redenominated in July 2005. All exchange rates have been converted to the post-July 2005 lei.

Source: National statistics, Banca Națională a României, IMF, wiiw, EBRDla a României, IMF, wiiw, EBRD

### Monetary policy

Until recently, the Banca Națională a României (BNR, National Bank of Romania) conducted a money growth targeting strategy. This was coupled with a managed float that reflected nominal depreciation tendencies of the Romanian leu which, on the whole, resulted in a degree of stability of the real effective exchange rate. The IMF characterized this regime as an implicit crawling band (IMF, 2004, p. 767). From early 2002 to early 2005, a EUR/USD currency basket was the reference unit for the managed float; since early 2005, the euro has been the sole reference currency. Since the early years of the new millennium, the Romanian currency has been under overall appreciation pressure, which was punctuated from time to time by reversals and (short) intervals of weakness. Appreciation pressures have been partially countered by the build-up of foreign exchange reserves and sterilizing interventions. This stance, supported by a

coherent policy mix, led inflation to decline from 41% in 2000 to 9% at end-2004 (see table 9). In response to the downward trend of inflation, the central bank lowered its interest rates substantially.

Favoured by the improved macroeconomic situation, a credit boom soon emerged. This reflected a long-deferred structural catching-up process in consumption and capital formation. As alluded to above, however, this process has worsened external balances and rendered disinflation more difficult. The BNR responded by tightening its reserve requirements, temporarily hiking its reference rate, strengthening banking supervisory procedures and regulations, as well as imposing credit restrictions per borrower in February 2004. But the latter measure only proved effective in temporarily preventing loan growth from accelerating. A further liberalization of the capital account in April 2005 opened the way for larger capital inflows, thus heightening the upward pressure on the Romanian leu.

In August 2005, the BNR shifted to inflation targeting, which it expects to be a more effective monetary policy strategy in an environment of macroeconomic growth tensions and ubiquitous and volatile capital flows. The introduction of inflation targeting went hand in hand with a loosening of the exchange rate regime. This loosening of the managed float was followed by increased nominal (and real) appreciation of the Romanian leu, which rendered foreign currency loans even more attractive, triggering a tightening of prudential regulations on foreign currency lending in September 2005.<sup>5</sup> With inflation coming to 8.6% at end-2005, the monetary authorities slightly overshot their target for that year (7.5%,  $\pm 1\%$ ).

Therefore, after interest rates had declined again, the reference rate was readjusted upward in the first half of 2006. Moreover, several factors contributed to driving inflation further down to 4.9% in 2006 (table 9), which was in line with that year's target of 5%,  $\pm 1\%$ : a faster liquidity drain through open market operations, a further nominal appreciation of the Romanian leu (triggered by capital inflows), as well as a pause in the increases of administered prices and the temporary dip in the oil price in the fall of the year, whereupon interest rates were allowed to recede again. In June 2007, inflation bottomed out at 3.8%, before it rose again to 5.0%

in August. Reasons for the uptick in the summer of 2007 were the re-acceleration of credit expansion after removal of some controls at the beginning of the year, a reversal of the appreciation tendency of the leu under the impact of the international financial turbulences and of concerns about Romania's external vulnerabilities, as well as drought-induced sharp food price increases. The 2007 target is set at 4%,  $\pm$  1%. While the (still) relatively low level of inflation is certainly a major achievement, the possible further acceleration of price increases and continuing depreciation against the backdrop of fiscal relaxation might soon trigger a reversal of the BNR's monetary policy stance.

An EU member since the beginning of 2007, Romania plans to join ERM II around 2012 and to become ready for entering the euro area two years later. The authorities take the view that the country needs some years to entrench macrostability, lower inflation and carry on with structural reforms to fulfil the Maastricht criteria in a sustainable manner.

### 3.9 SERBIA (WITHOUT KOSOVO)

#### Macrostructural background

Serbia witnessed economic expansion accelerating in 2004 and remaining robust since (5%–6% p.a.). This brisk growth, (first) successes of macrostabilization and fiscal reforms have improved the country's budgetary performance, leading to budget surpluses in 2004 through 2006. However, some fiscal loosening has emerged in 2007. Previously weak foreign direct investment gathered momentum in 2003 and further strongly expanded in 2006 (see table 10), driven by a few large successful privatizations. Following a period of decisive banking sector restructuring in 2002, foreign strategic investors moved in and acquired the majority of sector assets, and credit activity gathered momentum and turned into a boom. While current account disequilibria have remained high (about 11% of GDP in 2006), about three-quarters of the shortfalls have been covered by FDI on average in recent years, even if these inflows have been quite volatile. FDI and privatization proceeds have allowed the central bank to steadily increase its reserves to a comfortable level (over

one-third of GDP) and have permitted the authorities to pre-pay some of their foreign debt.

Table 10 Serbia: Key macroeconomic and monetary policy indicators

	2004	2005	2006	2007*
GDP growth (real, %)	8.4	6.2	5.7	6.2
General government budget balance (% of GDP)	0.9	1.9	1.6	0.5
Current account balance (% of GDP)	-11.7	-8.5	-11.4	-13.5
Net FDI inflows (% of GDP)	3.9	5.9	13.7	.
Gross foreign debt (end-year, % of GDP)	52.5	61.9	58.5	.
Gross reserves of central bank (excl. gold, end-year, % of GDP)	15.2	22.6	34.7	.
Two week repo rate (end-year, %)	17.4	19.2	14.0	0
Broad money growth (end-year, %)	17.1	31.4	47.3	30.2
CPI-inflation (end-year, %)	13.7	17.5	6.6	6.8
Exchange rate RSD/EUR (annual average)	72.57	82.91	84.06	82.00
Exchange rate RSD/USD (annual average)	58.38	66.71	66.82	.

\* Forecasts or projections.

Source: National statistics, Narodna banka Srbije, IMF, wiiw, EBRD, EC

### Monetary policy

In order to better protect the Serbian economy's fragile external accounts and overcome the strong real appreciation tendency that had emerged after the launching of the dinar's tightly managed float in 2000 (anchor currency: DEM/EUR), the Narodna banka Srbije (NBS, National Bank of Serbia) chose to loosen somewhat the dinar's float at the beginning of 2003. During the three years until the end of 2005, the Serbian currency nominally depreciated by a cumulative 40% against the euro (and by some percentage points against the U.S. dollar), but the dinar's real effective exchange rate remained broadly unchanged. The NBS thus pursued a "real exchange rate anchor" policy (not unlike the Romanian strategy until 2005). However, after it had fallen to around 8% at end-2003, inflation strongly increased again to 17.5% in 2005 (see table 10). The deterioration of the situation had been triggered by repeated adjustments of administered prices, raising costs of oil and other fuel imports, and the one-off effect of VAT introduction in 2005. Moreover, despite some progress in privatization, Serbia's backlog in still-to-be-tackled restructuring efforts (compared with other countries of the region) implied that strong domestic demand met with still relatively unresponsive supply

coupled with weak competition. Furthermore, continuing dinar depreciation and the widespread exchange rate indexation of prices (entrenching high pass-through rates) played a major role.

The NBS reacted to the inflation spike of end-2005 by readjusting its strategy. It further loosened the exchange rate regime by withdrawing from foreign exchange interventions in early 2006. This discontinued the managed nominal depreciation tendency. As a result of persisting large capital inflows, the Serbian currency appreciated by 8% in nominal terms vis-à-vis the euro and by 15% vis-à-vis the U.S. dollar in the course of 2006. In September 2006, the Narodna banka Srbije adopted a new monetary policy framework that focused on achieving price stability through numeric inflation objectives, which can be viewed as a kind of informal inflation targeting. These objectives are initially defined in terms of core inflation (excluding i.e. administered prices and food prices, 2006 end-year target corridor: 8%,  $\pm 1\%$ ) and are to be achieved primarily by adjusting the NBS's key policy rate, the interest rate on its two-week repo operations. With efforts underway to strengthen its research capacity, the central bank envisages to adopt a formal inflation targeting regime by 2008.

Disinflation success was impressive in 2006. By December, consumer prices had declined to 6.6% (see table 10) and core inflation came in at 5.9%. This overfulfillment of the year's inflation objective was attributable to a combination of several factors: a sharp nominal appreciation of the dinar, the NBS's substantial interest rate hike, its tightening of reserve requirements and the government's (temporary) freezing of controlled prices. As a result of the marked deceleration of inflation and in order to check further dinar appreciation which threatened to put Serbian export industries under renewed pressure, the NBS cut its policy rate in a number of steps in late 2006 and the first half of 2007 to 9.5%. After continuing to decline in the first months of 2007, inflation rose again somewhat in the second and third quarters and came to 6.3% in August; core inflation, however, remained stable at 3.0% that month. Given renewed inflationary pressures (adjustment of regulated prices, fiscal weakening, strong wage growth, drought-triggered food price spikes), the NBS put an end to its loosening cycle in August 2007 and raised its key rate by 25 basis points. That same month, the government resorted to

direct market intervention: It decreed a 90-day grain export ban and one-year price controls on bread and cooking oil. Notwithstanding these surprising and distorting measures, the core target band for end-2007 (6%,  $\pm$  2%) looks well within reach or may be undershot again.

### 3.10 TURKEY

#### Macrostructural background

The core of Turkey's 2001 stabilization program was the floating of the Turkish lira and the reintroduction of money growth targeting (pertaining to restrictive base money goals), accompanied by ambitious fiscal, structural and institutional reforms. The country's economic recovery since 2002 has been quite impressive: Growth exceeded 7% p.a. on average in the period from 2002 to 2006. The implementation of the fiscal reform component has contributed to spectacular results. After its crisis-driven peak in 2001, the fiscal imbalance steadily receded to 9% of GDP in 2003 and to around 1% of GDP in 2005 and 2006 (table 11). This performance was of course assisted by the unexpectedly strong and sustained economic expansion. At the same time, robust growth has partly been responsible for the sharp widening of the current account shortfall in recent years (8% of GDP in 2006). Having increased strongly in 2005 and 2006, FDI may have been a key factor in driving the widening of the current account gap most recently.

The expansion of foreign direct investment embodies a long awaited and important ingredient of structural adjustment and productivity growth. The change in strategic investors' stance was apparently triggered by the launch of EU accession negotiations in 2005. FDI has also made inroads in the Turkish banking sector, lifting the share of foreign ownership in total sector assets from less than 5% at end-2004 to over 25% in mid-2007. Credit expansion has gained momentum in recent years; banks and enterprises have been attracted by low foreign currency interest rates and have taken recourse to foreign loans, which can be regarded as the second major driving force behind the recent swelling of the external disequilibrium.

Table 11 Turkey: Key macroeconomic and monetary policy indicators

	2004	2005	2006	2007*
GDP growth (real, %)	8.9	7.6	6.1	5.3
Consolidated fiscal balance (% of GDP) <sup>1</sup>	-4.6	-1.3	-0.8	-1.4
Current account balance (% of GDP)	-5.2	-6.3	-8.2	-7.8
Net FDI inflows (% of GDP)	0.7	2.4	4.8	5.0
Gross foreign debt (end-year, % of GDP)	50.1	46.7	50.6	52.8
Gross reserves of central bank (excl. gold, end-year, % of GDP)	11.0	14.8	15.0	.
Discount rate (end-year, %)	22.0	17.5	22.5	.
Broad money growth (end-year, %)	22.1	24.5	24.1	14.9
Credit growth to the private sector (end-year, %)	42.0	41.3	35.6	.
CPI-inflation (end-year, %)	9.4	7.7	9.7	6.5
Exchange rate YTL/EUR (annual average) <sup>2</sup>	1.78	1.68	1.81	1.80
Exchange rate YTL/USD (annual average) <sup>2</sup>	1.43	1.35	1.44	1.35

\* Forecasts or projections.

<sup>1</sup> Public sector.

<sup>2</sup> The lira was redenominated in January 2005. All exchange rates are based on the post-January 2005 lira.

Source: National statistics, Türkiye Cumhuriyet Merkez Bankası, IMF, wiiw, EC

### Monetary policy

The commendable adjustment of inflation and the reestablishment of trust in the Turkish lira were among the salient factors that contributed to the swift stabilization and the restoration of confidence after the crisis of 2001. CPI inflation descended steadily over the years to below 8% at end-2005 (table 11), a level unseen since the early 1970s. After rising sharply in late 2001, interest rates came down again. Given the encouraging inflation environment, the Türkiye Cumhuriyet Merkez Bankası (TCMB, Central Bank of the Republic of Turkey) repeatedly cut its intervention rate (overnight deposit rate) in a number of steps down to 13.5% in April 2006. The decline in interest rates and payments helped in reducing budgetary pressures and fiscal deficits, which in turn reduced pressure on interest rates (virtuous circle). But inflation might not have come down as much as it did, had the Turkish lira not appreciated substantially in nominal-effective terms. This was caused by rising capital inflows and happened despite the monetary authorities' recurrent interventions to stem appreciation pressures and build up foreign currency reserves.

In this situation, the TCMB adopted formal inflation targeting at the beginning of 2006. The 2006 end-year inflation target was set at 5%,

$\pm 2\%$ , the 2007 target at 4%,  $\pm 2\%$  (uncertainty bands). The nominal appreciation of the Turkish lira (on top of a still sizable inflation differential) started to raise concerns about the country's competitiveness against the above-mentioned backdrop of fragile external accounts. In the spring of 2006, the global financial markets witnessed a widespread decline in risk appetite for emerging markets exposures, with tangible but transient consequences for Turkey. Capital flows temporarily reversed. In May and June 2006, the Turkish lira's exchange rate against the euro fell by about 25%, but in the following months recovered again partially. The exchange rate shock pushed inflation up to 11.7% in July, before it declined again to 9.7% in December 2006 (table 11).

The monetary crisis was quickly overcome by the energetic response of the TCMB, which intervened on the foreign exchange market to defend the Turkish currency, withdrew liquidity through open market transactions, reversed its policy of interest rate cuts and ratcheted its key rate back up by 4 percentage points in the summer of 2006. (Thus the interest rate level reverted back to where it had been in early 2005 and stayed there until early September 2007.) Inflation was brought back under control, even if the 2006 target was missed by a considerable margin. The monetary tightening may have contributed to the weakening of economic growth in 2006, though. By July 2007, inflation had receded to 6.9% (year on year), a new record low. Like practically all other countries of South-Eastern Europe, Turkey experienced an uptick of inflation in the late summer of 2007, triggered by drought-induced food price rises. In August, the overall price level increase came to 7.4%. The U.S. subprime crisis also had repercussions in Turkey, but these largely pertained to heightened volatility – not weakness – of the exchange rate, revealing nervousness on the part of financial markets. Notwithstanding the inflationary uptick, which was apparently judged to be a one-off event, the TCMB decided to cut its key rate by 25 basis points in early September, in order to support economic activity.

#### 4 COMPARATIVE OVERVIEW AND CONCLUSIONS

The South-Eastern European countries all appear to be on more or less robust catching-up routes; they have typically faced many

similar economic challenges and they have produced comparable economic performances. Yet they continue to employ a wide array of monetary and exchange rate regimes and instruments. This may suggest that various paths can lead to success or progress. The majority of countries in the region (including the smallest ones, though) have opted for the euro as an external anchor: Croatia (with its tightly managed float), the Republic of Macedonia (de facto peg), Bosnia and Herzegovina as well as Bulgaria (currency boards) and Kosovo and Montenegro (euro as legal tender). Four countries (among them the largest in the region) have introduced or retained loosely managed floats, while conceding primary weight to the euro as reference currency. These countries have moved toward inflation targeting. Romania made the transition in August 2005, Serbia in two steps in the course of 2006, Turkey in January 2006, while Albania is planning to move to formal inflation targeting soon.

Taking a closer comparative look at the evolution of macrostructural environments of monetary policies and regimes, and at policymakers' reactions and their endeavours to shape developments and achieve monetary stability: Economic expansion in most countries under review has remained strong and even accelerated in the period from 2004 to 2007 (with GDP growth averaging 6% p.a.) compared with preceding years. It has been less dynamic, but accelerated, too, in the Republic of Macedonia (4%) and in Kosovo (2%).

Given generally buoyant and accelerating private domestic demand, practically the entire region (with the notable exception of the Republic of Macedonia) remains saddled with high or very high current account shortfalls, which have even been on the rise most recently. Kosovo has been particularly dependent on foreign grants and financial assistance to help cover exorbitantly high external gaps. But this support is dwindling, which is one reason why international attention still focuses on whether the Kosovar economy will be viable in the long run. Foreign financial assistance to Bosnia and Herzegovina as well as to Albania has already declined to low levels. Bosnia and Herzegovina's growth has meanwhile benefited from high staple prices, masking continued serious structural weaknesses. In contrast to external disequilibria, fiscal deficits have narrowed

substantially or vanished altogether across the region in recent years. This development is ascribable to the strengthening of economic growth, to tax and budget reforms and to fiscal tightening measures. Fiscal policies have generally become cautious (even producing surpluses in 2005 and/or 2006 in Bosnia and Herzegovina, Bulgaria, Kosovo, Macedonia, Montenegro and Serbia), which has considerably reduced the burden on monetary policy. More recently, however, some weakening and slippage occurred in a number of countries.

FDI used to be weak across the region, but has expanded dynamically in recent years (in some cases multiplying from a basis of almost zero), and has obviously been pushing external imbalances to some degree. In 2005 and 2006, net FDI inflows covered current account deficits almost or fully in Bulgaria, the Republic of Macedonia (although both indicators remain modest in this country), Montenegro and Romania. Important progress has also been achieved in Croatia, Serbia and Turkey. Foreign direct investment is still remarkably feeble in Albania, Bosnia and Herzegovina, and Kosovo. In 2007, Romania seems to have witnessed a weakening of FDI inflows and a reduction of their coverage of the external deficit. Gross foreign indebtedness is not generally high in South-Eastern Europe and seems to be stagnating or slowly declining (as a percentage of GDP) in most countries. This is being driven by prudent fiscal policies and contracting public liabilities, while corporate and bank debt have been rising. The two striking exceptions to the overall trend are Croatia and Bulgaria, where the increase in private foreign debt has been more than offsetting the decline of public debt and where national liabilities have attained very high levels, although this does not appear to have perturbed markets so far. In the two countries – as in the entire region – foreign exchange reserves have been on the rise.

During the observation period (from 2004 to 2007), average annual CPI inflation rates (end-year) have been low (below 3% in Albania, Croatia, Kosovo, the Republic of Macedonia and Montenegro. They have been on a medium level (between 3% and 6%) in Bosnia and Herzegovina. They have been relatively high (above 6%) in Bulgaria, Romania, Serbia and Turkey. In this context, it appears striking that the three countries that have recently reverted to explicit inflation targeting with loosely managed floats (the latter three)

witness relatively high price increases, whereas the two countries with long-standing currency boards anchored to the euro (Bosnia and Herzegovina, Bulgaria) cannot boast of low inflation either. In any case, the two very small countries that are unilaterally euroized (Kosovo and Montenegro) feature among the best-performing countries on the inflation front.

In 2005/2006, and then again in the summer of 2007, inflationary upticks could be observed in many countries. There are various reasons for these upticks: the ubiquitous credit booms, oil and electricity price rises, wage hikes, utility tariff increases, excise tax adjustments, bad weather conditions impacting on food prices, sharp depreciation triggered by financial turbulences (Turkey). In early 2007, inflation tended to ease somewhat. This easing pertained to several factors: monetary policy reactions including key interest rate hikes (following trend declines in previous years), the raising of minimum reserve requirements, tightening of prudential regulation and supervision of credit institutions, controlled currency appreciation in some countries, and a temporary freezing of administered prices in others. However, inflation re-accelerated again in the summer of 2007, driven by near-pervasive drought-induced food price spikes coupled with world market agricultural and energy price rises, and, in some countries, a further acceleration of credit expansion.

Despite the apparent entrenchment of inflation in recent years (incl. the seasonal or one-off uptick of the summer of 2007) after a long period of decline since the late 1990s, there can be little doubt that persistent monetary policy stringency has served the South-Eastern European countries well in improving their inflation track records. Such was the stabilizing influence of the exchange rate as an external nominal anchor that all countries with hard pegs – except Bulgaria – have registered low single-digits lately. Bulgaria witnessed the confluence of a number of factors fuelling inflation in recent years, the most important of which may have been the unrelenting credit boom, which the authorities, so far, do not seem to have gotten under full control.

Countries with loosely managed floats – except for Albania – are for various reasons still struggling with somewhat higher inflation

levels, which, however, continue to be on a long-term downward trend. In Serbia, the transformation of the nominal exchange rate anchor into a “real exchange rate anchor” in 2003 contributed to interrupting the tendency of declining price increases in 2004 and 2005. The loosening of the exchange rate regime in early 2006 in the context of the transition to inflation targeting triggered a swift appreciation in an environment of rising FDI, portfolio capital and credit inflows. Disinflation resumed. In Romania, a comparable environment and a similar transitional strategy had corresponding effects in 2005 through the first half of 2007. The latter two inflation performances may represent a particular degree of dependence on – partly volatile – capital flows. Repercussions of such dependence have been recently suffered by Turkey, which introduced inflation targeting in early 2006. However, Turkey can point to a (so far) very successful path of breaking decades of inertia and bringing down stubbornly high price increases. Finally, Albania, a country which has conducted a loosely managed float for around 15 years now, has boasted an extended performance of commendably low inflation.

Notwithstanding prioritizations inherent in monetary policy choices, most of the inflation targeters have had to live up to recurrent conflicts of aims: cutting inflation (monetary stability objective) versus limiting currency appreciation or depreciation (external equilibrium objective). Policy rates have therefore repeatedly zigzagged up and down, reflecting the switching priorities of the moment, and finding themselves increasingly at the mercy of capital flows. Perhaps the most illustrative example of such developments and contingencies is what has been going on in Serbia’s and Turkey’s monetary policies in the period between 2005 and today.

Summing up, the confidence and stability-enhancing effect of hard pegs appears to have borne out success in most of the countries analyzed; but this does not preclude other monetary strategies – notably inflation targeting and a loose float – from being effective as well. Overall monetary and economic policy soundness, credibility and perseverance remain the key to success here. In particular, prudent fiscal policies and general policy discipline, possibly favoured by peer pressure within the South-Eastern European region, IMF surveillance and EU membership aspirations (now already fulfilled

in the cases of Bulgaria and Romania), have assisted the central banks in pursuing their goals.

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## ENDNOTES

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<sup>1</sup> Not all of them are independent countries at present, but they are all separately administered currency areas. Thus, for the sake of simplicity, the author chooses to call Kosovo (Kosova in Albanian) a “country” in this contribution. He is, of course, aware that Kosovo is a UN-administered province of Serbia, and therefore a non-sovereign territory according to international law.

<sup>2</sup> The Former Yugoslav Republic of Macedonia (FYROM) will be referred to as Republic of Macedonia in this contribution.

<sup>3</sup> However, not all of foreign direct investment is equity-based, or non-debt-creating. According to expert estimates, on the average about one quarter of FDI in Southeastern European countries consists of credits and other debt-creating instruments, which therefore add to external liabilities. Yet data clearly separating debt- and non-debt-creating FDI are not always easy to procure. Moreover, FDI - of whichever type - is generally assumed to go to productive uses which should enhance future competitiveness of a country's economy and its capacity to earn foreign exchange. Therefore, comparing total FDI inflows with current account deficits, in the author's opinion, still makes sense.

<sup>4</sup> A repo (repurchase agreement) is an instrument that central banks use to temporarily reduce banking system liquidity by selling T-bills or other debt securities of high credibility and repurchasing them shortly thereafter. In a reverse repo, the transaction is carried out in the reverse order with the aim of temporarily increasing liquidity (Bank of Albania 2007, p. 11).

<sup>5</sup> Effective as of the beginning of that month, a 30% reserve ratio on all forex-denominated liabilities with maturities longer than two years was implemented (Barisitz et al. 2005, p. 48).

# PRIVATISATION, CONSOLIDATION AND THE INCREASED ROLE OF FOREIGN BANKS

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*Dubravko Mihaljek\**

## INTRODUCTION

This paper discusses three major structural changes – privatisation, consolidation and an increased role of foreign banks – that have been taking place in banking systems of emerging market economies, focusing on the period since 2000. It assesses, on the basis of standard indicators, how far the banking systems studied have increased intermediation efficiency as a result of these changes. In this regard the paper looks at both the productive efficiency of the banking industry itself and some aspects of allocative efficiency, focusing on changes in the composition of lending to different sectors of the economy. The issues of dynamic efficiency – the impact of changes in banking systems on economic growth and financial stability – are not discussed. The paper also identifies some challenges that the evolving banking structure might create for market discipline and supervisory oversight.

When these issues were last discussed by deputy governors at the Bank for International Settlements (BIS) in December 2000, many emerging market economies were still recovering from financial crises of the second half of the 1990s (Hawkins and Mihaljek, 2001). Deregulation of financial services at the national level and opening-up to international competition were just beginning. Although privatisation was well advanced in Central Europe and Latin America, many state-

owned banks in these regions as well as Asia had yet to be privatised. The global financial industry was in the midst of an unprecedented boom in the use of information technology. Changes in corporate behaviour such as the growing use of debt markets and increased emphasis on shareholder value were also beginning to spread worldwide.

Changes in the structure of the banking industry that have taken place over the past five years are important but perhaps less spectacular than what was expected in December 2000. Trends in privatisation, consolidation and the increased role of foreign-owned banks have continued, but the banking systems in many countries – particularly large Asian economies – have yet to be fully integrated with the global financial system. Improvements in the efficiency of intermediation have been more uniform, suggesting that benefits to industry and consumers from greater competitive pressure in banking have been widespread. But questions continue to be raised about the effectiveness of banking systems in Asian countries with high saving rates in steering funds towards the most productive uses from the global economy perspective (Bernanke, 2005, Clarida, 2005). Banks in many Asian and Central European economies have shifted lending from the public sector and corporations towards households and smaller firms, but in some Latin American countries the share of bank credit to the government has actually increased.

The paper is organised as follows. Section 1 reviews broad changes in the structure of banking systems in emerging market countries since 2000, focusing on trends in privatisation and bank consolidation. Section 2 looks at the effects of these changes on the composition of bank lending and on bank efficiency. Section 3 concludes with a discussion of some policy challenges facing central banks and supervisory authorities in this new environment.

## 1. STRUCTURAL CHANGES IN THE BANKING SECTOR SINCE 2000

### 1.1 STRUCTURE OF THE BANKING SYSTEM

Two main elements of the structure of banking systems that are considered in this section are the degree of government versus private

domestic or foreign ownership of banks, and trends in consolidation in the banking industry. There is a large literature on benefits and costs associated with privatisation and foreign ownership of banks in emerging market economies.<sup>1</sup> In general, studies suggest that productive, allocative and dynamic efficiency tend to be lower in banking systems dominated by state owned banks, while privatisation and an increased role of foreign banks helps to improve at least some aspects of efficiency. There has been less research on bank consolidation in emerging market economies, partly because the relevant problem in many banking systems is excess fragmentation rather than excess concentration (see below). Research on industrial countries suggests that concentration in banking plays a more complex role than would be suggested for traditional industries such as manufacturing and trade.

Commercial banks retain a dominant role in providing credit in emerging market economies (see Mohanty et al., 2006). Outside Latin America and a few Asian economies, non-bank financial institutions supply negligible amounts of aggregate credit.<sup>2</sup> Within the banking sector, commercial banks provide on average 90% of total credit. This share has actually increased over the past five years, in particular in Latin America, but also in some crisis-hit countries in Asia, where many fringe financial intermediaries have collapsed. Deposit-taking institutions other than commercial banks play a more important role only in Korea, Malaysia and Thailand, where they supply roughly a quarter of total credit.

Changes in the ownership structure of banks have been more significant. As indicated in chart 1, the share of state-owned commercial banks in total bank credit has declined or remained stable in all emerging market regions since 1999.<sup>3</sup> Except in China, India and Indonesia, state-owned banks are no longer major providers of credit to the economy. The declining role of state-owned banks has been particularly pronounced in Central Europe, where bank privatisations have essentially been completed.

There have also been major shifts in the relative importance of domestic and foreign private banks. Continuing a trend that was

observed five years ago, since 1999 the share of private domestic banks has declined in Latin America and Central Europe (to 60% and 13% of total bank credit, respectively) while that of foreign-owned banks has increased significantly. But in some Asian countries (Indonesia, Malaysia and Thailand) and other emerging market economies (Israel, Saudi Arabia and Turkey), there has been no further penetration of foreign-owned banks since 1999.

In terms of total assets, the share of foreign ownership ranges from nil in Saudi Arabia to 96% in the Czech Republic. The share is higher in Central Europe and Latin America, and lower in Asia, Israel, Saudi Arabia and Turkey; it also tends to be higher in smaller economies than in larger ones. Upper middle income countries (e.g., Chile, Hungary, Mexico, Malaysia and Poland) tend to have a higher proportion of foreign ownership of bank assets. Interestingly, foreign banks own about the same percentage of bank assets in many high-income economies (e.g. Israel and Korea) as in lower-income economies (e.g. India and Indonesia). Overall, these comparisons do not reveal a simple relationship between country characteristics and degree of foreign ownership of banking assets.

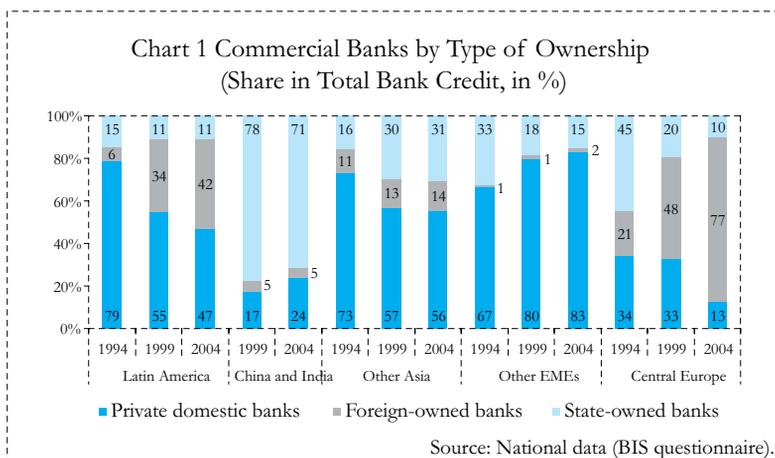


Table 1 provides some preliminary evidence on the extent of bank consolidation. Since 1999, the number of commercial banks has increased only in China, Saudi Arabia and Colombia, while in other economies mergers, acquisitions and liquidations have resulted

in a decrease in the number of banks ranging from 10 to 30%. Chart A1 in the Appendix reveals another common pattern: after an initial increase – for instance, in Hong Kong SAR, Indonesia, Czech Republic and Poland during the first half of the 1990s – the number of commercial banks has subsequently retrenched. The number of bank branches has also decreased in most countries over the past five years; large expansions in branch networks have taken place only in Chile, Colombia and Malaysia. As indicated in the second column of table 1, bank consolidation had already started in the mid-1990s, but at that time the branch network was still growing in most countries, in particular in Asia and Latin America. With few exceptions, this has also resulted in a decrease in the number of bank employees per branch (chart 2). Given that economies in the sample differ widely in terms of market size and level of financial development, it is hard to generalise about the future direction of change in banking density.

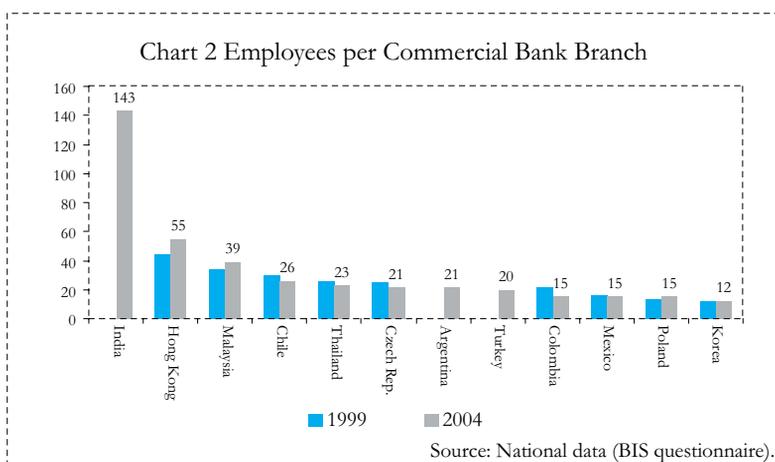
*Table 1 Number of Commercial Banks and Branches<sup>1</sup>*

1990–94			1994–99			1999–2004		
Country	Banks	Branches	Country	Banks	Branches	Country	Banks	Branches
Czech Rep	511	-41	Thailand	17	35	China	92	...
Hong Kong SAR	132	...	Mexico	13	60	Saudi Arabia	20	2
Indonesia	43	22	Singapore	8	35	Colombia	13	20
Colombia	19	...	Venezuela	8	18	Chile	-10	10
Saudi Arabia	0	18	Hungary	-2	...	Thailand	-12	2
Thailand	-3	...	Poland	-6	-16	India	-13	4
Singapore	-6	12	Malaysia	-8	47	Hungary	-15	-3
Chile	-8	23	Israel	-13	-2	Venezuela	-17	2
Turkey	-8	-7	Korea	-17	44	Czech Rep	-17	-11
Venezuela	-10	24	Saudi Arabia	-17	-2	Korea	-19	-5
Malaysia	...	29	Chile	-19	15	Singapore	-19	-38
			Turkey	-19	14	Argentina	-20	-12
			Colombia	-23	-3	Indonesia	-21	-5
			Czech Rep	-24	...	Mexico	-21	-3
			Hong Kong SAR	-25	2	Israel	-23	-10
			Indonesia	-33	3	Turkey	-23	-11
						Hong Kong SAR	-27	-17
						Malaysia	-29	11
						Poland	-30	-16

Note: <sup>1</sup>Change in the number of commercial banks/bank branches during the period, in %.

Source: National data (BIS questionnaire).

In sum, banking systems in emerging market economies have generally continued to evolve towards more private and foreign-owned structures, with fewer commercial banks and often smaller numbers of bank branches. As discussed below, in some countries these trends have been the result of post-crisis weeding-out of weak financial institutions, and mergers encouraged by the authorities under financial sector “master plans” (e.g. in Indonesia, Malaysia and Thailand). Elsewhere, these developments have been mostly market-driven (e.g. Central Europe, Mexico). However, the pace of structural change has slowed compared with the second half of the 1990s. Three main reasons come to mind: first, banking crises have been less widespread – Argentina’s and Turkey’s crises being the only major ones after 2001. Second, the transition towards market-based systems had been largely completed in Central Europe by the early 2000s. And third, in the favourable macroeconomic and financial environment that has prevailed over the past five years there has been less urgency to reform banking systems.



## 1.2 PRIVATISATION

Since 2000 there have been 51 partial or full privatisations in the 19 emerging market countries studied in this paper (table 2). The major privatisations took place in Indonesia, Korea, Thailand and Central Europe. In Indonesia, 15 banks accounting for 70% of

total banking sector assets were sold in initial public offerings by the bank restructuring agency between 2000 and 2004. The Korean authorities privatised four banks nationalised during the 1997/98 crisis, representing 18% of total banking sector assets at the time of privatisation (see Kim et al., 2006). In Thailand, the authorities reduced their shareholdings in three out of five major domestic banks taken over by the Financial Institutions Development Fund during the 1997 crisis. The government still retains large holdings in three major domestic banks – including Krung Thai Bank, one of the largest in the country – and is waiting for favourable market conditions to sell these stakes.

Privatisations have largely been completed in the Czech Republic and Hungary, but have yet to run their course in Poland. In the Czech Republic, the government sold holdings in two major banks (accounting for 38% of total banking sector assets in 2001) to strategic foreign investors in 2000–2001. In Hungary, three smaller banks with a combined market share of 7% were sold in 2003. In both countries, government ownership is now restricted to special purpose institutions which provide support to exporters, small firms and municipalities (Czech Republic), or were set up to develop the mortgage bond market (Hungary). In Poland, the government sold 30% of shares in the country's largest retail bank, PKO BP, at the Warsaw Stock Exchange in late 2004. However, the government still retains a majority stake in the bank.

Elsewhere, progress in privatisation has been mixed. The authorities in China are focusing on four large state-owned banks, which control 60% of the market. The goal is to diversify their ownership rather than privatise the banks. Since 2003, three state-owned banks have become joint stock companies in preparation for partial privatisation. The authorities have exposed their non-performing loans and allowed foreign strategic investors to buy shares. The Bank of Construction has been listed on the Hong Kong Stock Exchange, while the Industrial Bank and the Bank of China could be listed in 2006. As with the large state-owned banks, one goal of reform with respect to other joint stock banks with part local government, part private ownership is to expand foreign ownership and participation in management. Presently, 17 joint

stock banks have 22 foreign strategic investors and a large number of foreign professionals work in these banks (see Shiyu et al., 2006). Another important area for China is cooperative banks. As 60% of the population lives from agriculture, China has over 30,000 credit cooperatives. The government has invested large sums of money in restructuring with a view to ensuring that cooperative banks become profitable, commercially oriented and founded on mixed ownership.

In India, no state-owned commercial bank has been privatised since 2000, nor are there any plans for divesting government shareholdings. India's 28 public sector banks account for 80% of total commercial bank credit and by law the government's shareholding in these banks cannot fall below 51%. There is a new roadmap for opening up the banking sector which envisages a greater role for foreign banks after 2009, by which time the consolidation process of domestic banks is expected to be completed.

Russia privatised one state-owned bank in the period under review, in June 2005. The government's strategy for the banking sector does not set out any significant steps to reduce the dominance of state-owned banks (Lohmus and Teo (2005)). Russia's largest bank, Sberbank, accounts for 28% of total banking sector assets, 42% of total deposits and 30% of credit to the economy. The gradual decline in Sberbank's dominance – its share in total household deposits declined from 75% in 2000 to 60% in 2004 – has been offset by the expansion of other state-controlled banks.

*Table 2 Commercial Bank Privatisations, 2002–2005*

Country	Number and main characteristics of privatised banks		Guarantees extended		Residual state ownership
Colombia	0	But privatisations initiated for 2 banks intervened in late 1990s	Yes	In the past; depositors, employees' pensions	3 banks acquired during the crisis in the late 1990s
Mexico	2	Smaller banks intervened in 1999 auctioned off in 2000 and 2001	Yes	Assets not adequately valued; hidden liabilities	None; minority holdings in previous privatisations

Venezuela	0	Privatisations were carried out from 1992 to 1998			2 state-owned banks; no privatisation plans 1 failed bank taken into state ownership in 2000
China	14	Joint stock commercial banks sold shares to foreign investors. No plans to initiate widespread privatisation, but shares of 2 state banks to be sold in public offerings	Yes	Implicit guarantees to depositors	Majority state holding of shares in all major banks; plans to reduce shareholdings in the long run
India	0				28 public sector banks; government shareholding cannot fall below 51%
Singapore	0				Less than 1/3 shareholding in former development bank
Indonesia	15	Banks, accounting for 70% of total assets, sold in IPOs	Yes	Guarantees to depositors; gradually reduced	Minority ownership in a number of banks; to be sold
Korea	4	Banks nationalised during the 1997/98 crisis sold through private placement, tender and auction	Yes	Deposits; bad loans; contingent liabilities (subject to limit; none in some cases)	Plan to sell 32% in one major bank; privatise holding company with 4 state bank subsidiaries
Thailand	3	Large banks out of 5 taken over during the 1997/98 crisis sold through public offering to strategic partners	Yes	Limited compensation for NPL losses	Holdings (incl. majority) in 3 major banks, waiting for market opportunity to sell

Table 2 continued: Commercial Bank Privatisations, 2000–2005

Country	Number and main characteristics of privatised banks		Guarantees extended		Residual state ownership
Czech Republic	2	Major banks (38% of total assets) sold in 2000–01 through tender to strategic foreign investors	Yes	Impaired assets guaranteed or transferred to a special purpose entity	2 special purpose banks (state support of exporters, small firms, municipalities)
Hungary	3	Banks (7% of total assets) sold through public offerings, tender or auction	Yes	Impaired assets; contingent liabilities	Residual shares in several banks (mostly small); full share in mortgage bank
Poland	5	Banks with majority or minority state ownership were partially privatised to domestic and foreign investors	No	Employment guarantee schemes (2–3 years) as part of privatisations	1 fully owned state bank; 1 major and 3 smaller banks with majority share; 8 banks with minority share
Russia	1	Bank set up in 1993 to implement priority investment projects			State ownership in banking sector remains dominant
Turkey	0	Initiated restructuring ahead of privatisation of 2 major banks			12 banks taken over during the 2001 crisis; 11 since sold, merged or liquidated
Israel	2	One small bank privatised; one major bank (16% of total assets) currently being privatised	No		Plans to privatise major state-owned bank (30% of total assets)
Saudi Arabia	0	Partial privatisations in 1980s and 1990s of banks rescued during the 1960s crisis			Shareholdings of 10–80% in 4 out of 11 domestic banks; held largely by 3 government funds as passive investors

Note: There were no privatisations in Chile, Hong Kong SAR or the Philippines.  
Source: Central bank answers to BIS questionnaire.

The Turkish authorities have initiated restructuring two state banks which they plan to privatise in 2006. The only privatisations in the four Latin American countries for which data are available are those of two smaller banks in Mexico, which were acquired during rescues in 1999.

As in the 1990s, the primary motive for privatisations over the past five years has been to sell the stakes held by the government to investors with the skills and experience necessary to complete the restructuring of banks and transform them into viable business-oriented organisations. More specifically, governments of emerging market economies have generally wanted to strengthen banks' capital and overall stability, increase their profitability and competitiveness, broaden the range of products and services offered and increase the overall efficiency of financial intermediation. Considering the huge fiscal costs of banking crises in the 1990s, many governments also wanted to limit the size of any potential future intervention in the banking system.

Regarding privatisation methods, in the late 1990s impaired assets of many banks nationalised during the crisis in Asia were disposed of by asset management companies, while in Central Europe and Latin America state-owned banks were often sold to strategic foreign investors. By contrast, from 2000 to 2004 several different methods were used, including the sale of shares through initial and subsequent public offerings; sale of shares through tender or auction; and, in some cases, sale of shares through private placement, often to strategic investors. These changes in privatisation methods have reflected normalisation of the banking industry after the crises and, in Central and Eastern Europe, the completion of the systemic transformation towards a market-based economy in the late 1990s.

So far, there have been no comprehensive analyses of net costs of bank rescues and privatisations for taxpayers.<sup>4</sup> Cost-benefit considerations seem to be largely absent when banks are rescued during systemic crises. Limited evidence from individual bank cases suggests that, even under the best of circumstances – a quick rescue followed by successful privatisation – the net costs are very large, which perhaps explains why governments prefer not to know exactly

how much money taxpayers lose when the state restructures and recapitalises distressed banks before selling them to new owners.<sup>5</sup> Several central banks observed in this context that recapitalisation rarely solved banks' problems, but many governments nonetheless saw it as necessary because banks could not have otherwise found strategic partners.

With the exception of Israel and Poland, governments extended guarantees to depositors in privatised banks and to purchasers of state-owned banks, covering various impaired assets and contingent liabilities. In many countries, limits on guaranteed deposits were reduced over time and guarantees for contingent liabilities were subject to a ceiling.

As already indicated, the public sector still has a major residual role in many emerging market banking systems, in particular in large economies such as China, India and Russia. Expectations expressed in Hawkins and Mihaljek (2001) that this role would diminish relatively quickly have proved to be overly optimistic. Outside of Central Europe, Mexico, Hong Kong and Singapore, policymakers in many countries apparently still see a useful role for state-owned commercial banks, not just in serving customers in remote areas or certain types of customers (farmers, small firms), but more generally, as necessary for socio-economic development. In view of the strong conclusions reached in the empirical literature on the inefficiency of using state ownership of banks as a social and development tool, why such perceptions are still held remains an open question. As discussed below, one reason might be that the remaining state-owned commercial banks have been subjected to greater market discipline and have become less inefficient than in the past.

### 1.3 CONSOLIDATION

In the late 1990s, the banking systems of many emerging market economies were highly fragmented in terms of the number and size of institutions, ownership patterns, profitability and competitiveness, use of modern technology, and other structural features. Very often, three or four large commercial banks coexisted with a large number

of smaller urban and rural banks, many of them family-owned (especially in Asia) or under the influence of the public sector (as in Latin America and Central Europe). In general, few commercial banks, even larger ones, were listed on a stock exchange. Profitability varied widely, with some banks earning high gross returns but operating very inefficiently, and others competing fiercely for a narrow segment of the market. Likewise, while some banks used advanced technology and financial innovation, many were still struggling with basic operations such as credit risk assessment and liquidity management.

In this environment, bank mergers were considered to be a potentially important vehicle for improving the structure and efficiency of the banking industry. They were expected to derive both cost reductions (from economies of scale, improved organisational efficiency, lower cost of funding, greater risk diversification, and economising on capital) and revenue gains (by exploiting economies of scope, making large deals possible, etc). In many crisis-hit countries, mergers and acquisitions were seen as an exit strategy for weak banks; while in others, officials wanted domestic banks to be large enough to compete with foreign entrants.

The drive towards consolidation has continued. The number of mergers and acquisitions has declined since 2000, but only slightly. As shown in table 3, from 2000 to 2004 there were 99 M&A deals between domestic institutions and 45 deals between domestic and foreign-owned institutions. The corresponding figures for 1995–1999 were 108 and 31 deals, respectively. In addition, domestic banks from Hungary, Malaysia and Singapore acquired a total of 11 banks abroad from 2000 to 2004; while subsidiaries of foreign-owned banks in Colombia, Hungary, the Philippines and Turkey were involved in a total of eight mergers and acquisitions in these host and other countries. Moreover, the total value of assets of institutions merged since 2000 now exceeds USD 270 billion, compared with USD 170 billion in the second half of the 1990s. One should note that the figures on the value of mergers do not include data for several countries with significant M&A activities, such as the Czech Republic, Hong Kong SAR, Poland, Russia and Turkey.

The largest numbers of deals were completed in Hong Kong, Korea, Malaysia, Poland and Russia. By far the biggest deals involved Mexican banks, followed by Thai, Korean and Philippine banks. Mergers and acquisitions in Poland and Russia have involved mostly smaller banks. In Central Europe, merger activity was strong in both periods. During the 1990s, however, this activity was mostly domestic; while since 2000, many mergers and acquisitions have also involved domestic and foreign banks, reflecting merger activity among parent banks from the European Union. Despite numerous mergers and acquisitions, the number of commercial banks in Indonesia and Central Europe remains large (see Appendix chart A1).

Mergers in Latin America, Central Europe and Hong Kong seem to have been by and large market-driven. This is evident from central bank responses to the BIS questionnaire. The central bank, the supervisory authorities and the competition authorities in these countries generally have a neutral stance vis-à-vis mergers and acquisitions in the banking sector, which are considered to be private business deals. The authorities fulfil their respective duties if financial institutions apply for registration of such deals by considering, among others, standard industrial organisation criteria to assess the impact on competition and concentration in the banking industry. However, the authorities take a neutral stance towards the broader impact of such deals on financial market development and the economy – market forces are presumed to work, and the satisfaction of standard prudential and competition criteria is regarded as sufficient to assure favourable effects on the market and fiscal development.

By contrast, in many Asian countries (including Indonesia, Malaysia, the Philippines and Thailand), mergers and acquisitions have been more or less actively promoted by the authorities. The Thai approach is illustrative in this respect (see Watanagase, 2006). Since January 2004, the Bank of Thailand has, together with the finance ministry, started to implement the Financial Sector Master Plan, a medium-term development plan for Thailand's financial sector. The purpose of this plan is to develop a "competitive, efficient, stable, and balanced financial system, capable of servicing both sophisticated and unsophisticated users". One of the key

policies under the plan is a new licensing regime, which foresees only two types of deposit-taking institutions – commercial banks and retail banks – in lieu of the current four. In line with this new regime, existing financial institutions have to apply for a change in their licensing status. For instance, finance companies or real estate companies may merge with one another to become commercial banks; if they do not wish to merge, they can submit an application to become retail banks on their own. In Indonesia, where bank mergers have also been actively encouraged, there has been little dynamism in M&A activity so far, partly because owners of small banks have been reluctant to give up ownership without special incentives (see Goeltom, 2006).

*Table 3 Mergers and Acquisitions (M&As) in Commercial Banking Sectors*

Type of M&A	1995–1999			2000–2004		
	Country	Number of M&As	Value (USD m) <sup>1</sup>	Country	Number of M&As	Value (USD m) <sup>1</sup>
M&As between domestic institutions	Colombia	6	20	Colombia	7	10
	Chile	2	480	Chile	2	530
	Mexico	6	64,600	Mexico	1	18,600
	Singapore	2	1,700	China	1	...
	Indonesia	1	...	Hong Kong	14	...
	Korea	10	13,500	SAR	2	8,000
	Malaysia	2	20	Singapore	5	23,480
	Philippines	2	6,900	Korea	15	40
	Thailand	1	47,700	Malaysia	9	16,400
	Czech Rep	4	...	Philippines	2	28,000
	Hungary	5	3,000	Thailand	1	...
	Poland	9	...	Czech Rep	11	...
	Russia	58	...	Poland	29	...
				Russia	9	...
			Turkey			
Total		108	137,920		99	95,060
M&As between domestic and foreign-owned institutions	Colombia	2	20	Colombia	1	10
	Chile	2	380	Chile	4	690
	Mexico	2	17,300	Mexico	4	152,000
	Korea	1	860	Korea	2	3,930
	Thailand	4	10,000	Philippines	3	300
	Czech Rep	5	...	Czech Rep	2	...
	Hungary	2	4,700	Hungary	2	12,200
	Poland	13	...	Poland	19	...
			Turkey	8	...	
Total		31	33,260		45	169,130

Cross-border M&As by domestic institutions <sup>2</sup>	Chile	1	10	Singapore	6	3,400
	Singapore	6	1,200	Malaysia	1	2,980
				Hungary	4	...
Total		7	1,210		11	6,380
Cross-border M&As by foreign-owned institutions <sup>3</sup>	Colombia	1	0	Colombia	3	30
	Hungary	4	920	Philippines	1	1,040
	Poland	1	...	Hungary	3	5,790
				Turkey	1	...
Total		6	920		8	6,860
All M&A activities		152	173,310		163	277,430

Note: <sup>1</sup> Value of assets of merged institutions, rounded up to the nearest USD 10 million.

<sup>2</sup> Acquisition by domestic institutions of banks in other countries.

<sup>3</sup> Acquisition by foreign-owned institutions in host country of banks in host and other countries.

Source: Central banks (BIS questionnaire).

Singapore has pursued a different, facilitative approach. Recognising that increasing globalisation of financial markets and cross-border competition offered Singapore the opportunity to become an Asian financial hub, the authorities launched a phased opening-up of the domestic financial market in 1999. The policy involved encouraging the local banks to engage in mergers and takeovers in a bid to realise economies of scale, as well as to strengthen their capability to invest in technology and management systems and to attract talent. However, the authorities did not seek to influence the outcome of mergers and takeovers, letting the new configuration be determined by market forces.

How effective the different approaches to consolidation will in the end prove to be remains to be seen. So far, there have been no unintended consequences of either the neutral or the more active stance vis-à-vis bank consolidation. A key reason might be that issues of excessive concentration have not yet arisen in emerging market banking industries.<sup>6</sup> By and large, central banks and other authorities have not yet seen an increase in market concentration resulting from domestic bank mergers sufficient to raise concerns

about market competition. However, concerns have emerged about increased regional concentration of banks' activities in some countries. Moreover, as will be discussed in Section 3, cross-border mergers among large institutions that own subsidiaries in emerging market countries with an already large presence of foreign-owned banks could bring such issues to the fore of the policy agenda in the near future.

## 2. IMPACT ON FINANCIAL INTERMEDIATION

In late 2000, the impact of structural changes in the banking industry on financial intermediation could not yet be discerned. Growth of bank credit to the private sector was weak in most countries and falling sharply in those that had experienced a banking crisis in the late 1990s. Newly established domestic and foreign-owned banks were in many cases in the midst of restructuring and were reluctant to extend credit to customers other than large corporations or the government. Intermediation margins were very wide, and lending to households and small and medium-sized enterprises (SMEs) was largely absent. In many emerging market countries policymakers complained about “cherry-picking” by foreign-owned banks, and some even lamented the diminishing role of state-owned banks, which were seen as key providers of credit to small firms and households. They also referred to evidence that lending by state-owned commercial banks was less procyclical than lending by private domestic and foreign-owned banks.

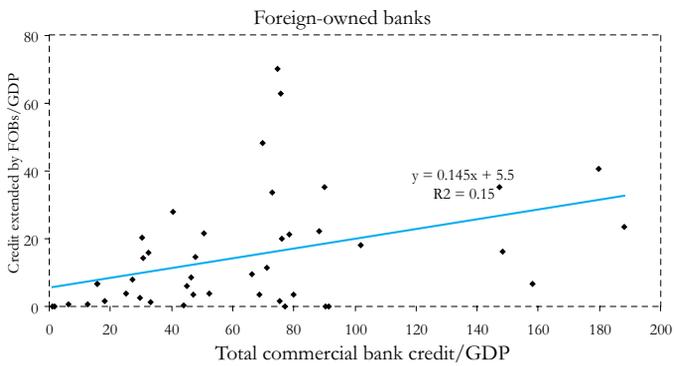
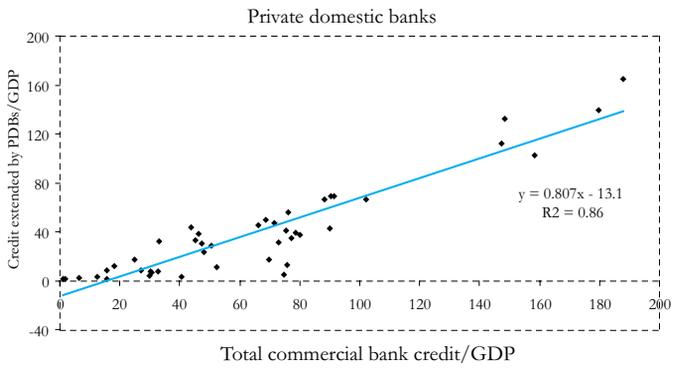
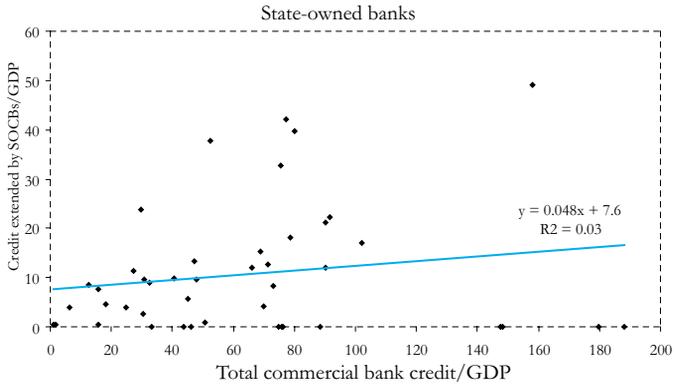
Since late 2000 there has been a sea change in the bank lending landscape, so much so that policymakers in many emerging market countries have started to worry about – and in several cases seek to limit – too rapid growth of bank credit to the private sector, and in particular to households. The factors explaining the resurgence of private sector credit are discussed for instance in Mohanty et al. (2006). This section will focus on the evolving composition of private sector credit and bank performance by different types of banks (state-owned, private domestic, foreign-owned), rather than on the performance and impact of banking systems as a whole.

## 2.1 IMPACT ON BANK LENDING

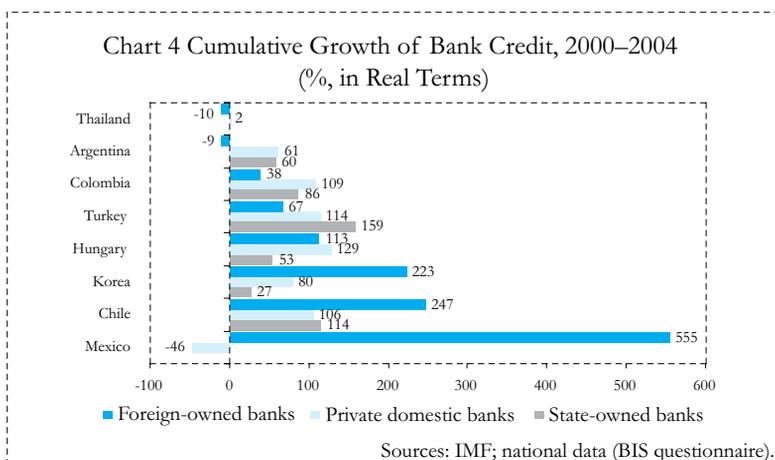
Chart 3 assesses how far banks with different ownership structures have participated in the process of financial deepening observed over the past 10 years. Points in this graph match total commercial bank credit as a percentage of GDP in 1994, 1999 and 2004, with the corresponding shares of state-owned, domestic and foreign-owned bank lending (as a percentage of GDP) for 14 emerging market economies for which data were available. Over the past 10 years, private domestic banks have participated in total credit expansion to a considerably greater extent than either foreign- or state-owned banks: for every 10 percentage point increase in the credit to GDP ratio, credit extended by private domestic banks has expanded on average by 8% of GDP, while the share of foreign-owned banks has increased by about 1½% of GDP, and that of state-owned banks by less than half a percentage point.

Over the past five years, however, foreign-owned banks have expanded lending more rapidly than private domestic banks in several countries, including Chile, Korea and Mexico (chart 4). In Brazil, by contrast, the share of foreign-owned banks stabilised at about 20% of total loans and their role in the domestic banking system has not grown, as private domestic banks seemed more capable of profiting from the growing domestic market. Private domestic banks also led the credit expansion in this period in Argentina, Colombia and Hungary. The contrast in lending by different types of banks is particularly stark in the case of Mexico, where foreign-owned banks expanded credit fivefold, while credit by private domestic banks contracted by almost 50% from 2000 to 2004. Turkey is one of the few examples of state-owned banks dominating credit expansion in recent years.<sup>7</sup>

Chart 3 Credit Growth and Bank Ownership  
(as a Percentage of GDP)



Source: National data (BIS questionnaire).



Further insights can be obtained from the data on the composition of bank lending (table 4 and chart 5). Focusing first on credit to the government, it is interesting that, on average, both state- and foreign-owned banks increased their lending to the government relative to lending to other sectors between 1999 and 2004, in particular in Argentina, Colombia and Turkey (state-owned banks) and Argentina, Colombia, Hungary, Korea, Mexico and Thailand (foreign-owned banks). While fiscal dominance seems a plausible explanation for the increased lending by state-owned banks (especially in Argentina and Turkey, which experienced crises in 2001), why foreign-owned banks would increase lending to the government in countries such as Colombia, Korea, Mexico and Thailand is puzzling.

The share of loans to the corporate sector declined in all three types of banks in almost all countries between 1999 and 2004, with the largest average declines occurring for state- and foreign-owned banks. The exceptions are few: Chile, Israel, Mexico (private domestic banks) and Turkey (foreign-owned banks). Much of this decline is healthy, reflecting deleveraging by large firms and diversification of their sources of finance (to corporate bonds, equity and, in some cases, borrowing from banks abroad). Data for countries in Central Europe indicate, for instance, a strong increase in lending to SMEs in recent years, which in several countries rivals lending to households in terms of the pace of credit expansion.

Some of the decline in corporate lending also reflects post-crisis risk aversion and balance sheet repair on the part of banks.

The most significant change in the composition of bank lending in the last five years has been a shift towards lending to households. Foreign-owned banks in particular have offset the large decline in the share of corporate loans (by 17 percentage points) with a rise in the share of household loans in total loans. Even state-owned banks increased lending to households between 1999 and 2004 (with the exception of Argentina and Colombia). The increase in the share of loans to households has been most pronounced in Hungary, Korea and Turkey.

Comparing the composition of loans across banks, household loans accounted for roughly one quarter of total lending for all three types of banks in 2004 (table 4). The big differences are in lending to corporations and the government. Private domestic banks lend mostly to the corporate sector (60% on average) and relatively little to the government (with the exception of Argentina, 15% on average).

For state-owned banks, government and corporate loan portfolios are on average of the same size. Foreign-owned banks also lend primarily to the corporate sector, but unlike private domestic banks, the government accounts for over a quarter of their loan book; moreover, with the exception of Chile, Hungary and Turkey, this share has increased significantly since 1999.

These differences in the composition of loans probably reflect the different business strategies, risk attitudes and histories of state-owned, private domestic and foreign-owned banks. Today's state-owned banks for the most part inherited a large portfolio of loans to the public sector and corporations, including in several countries not just large corporations but also SMEs, which are supported by various government credit schemes (Mihaljek, 2004). Initially, they did not lend much to households, except in some cases under subsidised housing schemes. But over time, as competitive pressures have increased and state-owned banks have become more business- and profit-oriented, they have increasingly turned to the household

sector, in many countries providing both consumer and housing loans. Korea and Hungary are clear examples in this respect. Nonetheless, state-owned banks still lend disproportionately to the government.

*Table 4 Composition of Lending<sup>1</sup>*

	Government <sup>2</sup>		Corporate		Household	
	1999	2004	1999	2004	1999	2004
State-owned banks						
Korea	6.3	4.9	76.1	58.6	15.6	36.5
Argentina	35.8	77.4	31.0	9.7	33.2	12.8
Chile	0.1	0.4	53.2	47.9	46.7	51.7
Colombia	20.0	50.6	44.5	34.3	35.5	15.1
Hungary	49.4	30.4	48.4	30.4	2.2	39.3
Turkey	30.3	65.2	64.9	27.7	4.8	7.1
Israel	34.7	33.9	52.1	52.7	13.1	13.4
Average	25.2	37.5	52.9	37.3	21.6	25.1
Private domestic banks						
Korea	8.4	5.2	61.1	42.7	30.5	52.2
Thailand	4.5	4.9	68.1	66.9	27.4	28.2
Argentina	25.6	64.8	32.2	18.4	42.2	16.8
Chile	1.0	0.6	64.0	66.6	35.0	32.8
Colombia	14.4	30.7	62.2	55.6	23.4	13.7
Mexico	45.4	23.6	33.0	56.2	21.6	20.2
Hungary	39.2	18.8	36.9	29.7	23.9	51.4
Turkey	27.2	22.6	64.2	60.6	8.5	16.9
Israel	10.8	7.2	89.2	92.8	9.0	18.2
Average	21.0	21.7	56.2	55.9	23.9	24.8
Foreign-owned banks						
Korea	8.1	23.1	75.2	41.2	16.8	35.7
Thailand	5.6	13.0	89.7	75.0	4.7	13.0
Argentina	26.2	60.1	45.5	25.9	28.3	13.9
Chile	1.6	1.4	86.0	73.6	12.4	24.9
Colombia	9.5	32.6	73.7	47.6	16.8	19.8
Mexico	36.3	55.2	51.1	22.7	12.7	22.0
Hungary	14.2	14.6	80.5	65.1	6.4	20.3
Turkey	59.2	15.8	38.4	57.2	2.4	27.0
Average	20.1	27.0	67.5	51.0	12.6	22.1

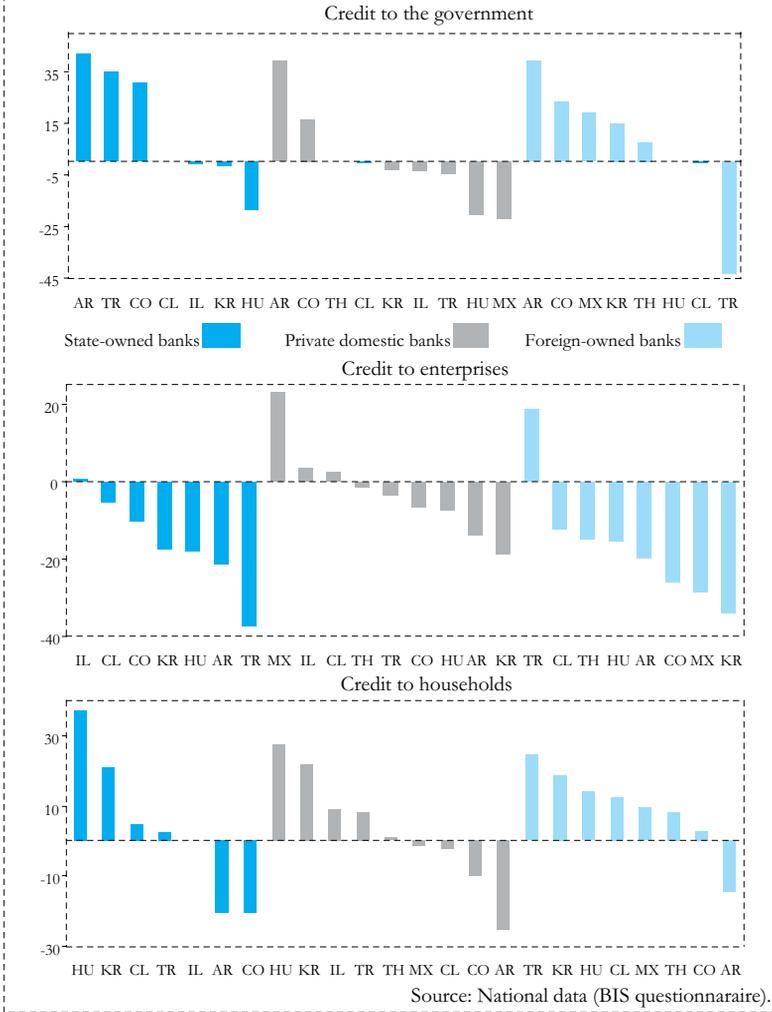
Note: <sup>1</sup> As a percentage of total credit, excluding interbank credit.

<sup>2</sup> Net claims on the government for most countries.

Chart 5: Change in the Composition of Lending between 1999 and 2004 (Percentage Points of Total Bank Lending)

Source: National data (BIS questionnaire).

Chart 5: Change in the Composition of Lending between 1999 and 2004  
(Percentage Points of Total Bank Lending).



From a governance point of view, one might argue that the lack of independence of state-owned banks from their owners is similar to connected lending practices in the private sector, with similar risks to profitability and soundness, and in principle would have to be sanctioned as such by independent supervisory authorities.

Private domestic banks, on the other hand, emerged from the crises and restructuring of the late 1990s holding portfolios that consisted mainly of corporate loans (about 60%) and roughly equal proportions of claims on the government and the household sector. As macroeconomic conditions improved, they shifted their business towards households to a greater extent and more quickly than did state-owned banks. The fall in corporate lending shares also reflects an overextension of corporate lending in the past. As a result, both supply side (a pullback of banks from corporate lending) and demand side factors (weak corporate borrowing) have been at play.

Russia's experience is particularly interesting in this regard. A few years ago foreign-owned banks accounted for only 5% of total bank loans in Russia (including cross-border loans); in 2005, the figure had risen to 40%. The main customers of foreign banks have become big Russian exporters, which used to be serviced by large domestic banks in the past. These domestic banks have reoriented their lending towards SMEs, which used to be serviced by medium-sized banks in the past. These banks, in turn, have reoriented lending towards households, which used to be served by small banks. As a result of this domino effect, many small banks are being taken over or closed.

Foreign-owned banks that entered emerging markets by buying local state-owned banks also inherited a large portfolio of loans to the government and the corporate sector. Like private domestic banks, these foreign-owned banks initially focused on the corporate sector (see Pruski and Zochowski, 2006). Other foreign banks, which entered emerging markets either as greenfield operations or by buying local mid-sized state-owned banks, were from the start more oriented towards households. As the financial position of large firms strengthened over time and many of them started to issue bonds and equity, foreign-owned banks that serviced them also started to turn to the household sector in search of higher margins. And as competition in consumer and housing credit markets has intensified, foreign-owned banks in some countries – in particular in Central Europe – have turned to the next underserved segment of the market: SMEs. More recently, larger corporations in countries such as Hungary and Mexico have again begun to borrow from domestic

banks, partly because the banks are offering them new types of loans at lower interest rates, including foreign currency loans. The development cycle of different loan products has thus turned full circle in some countries and a new cycle has begun.

## 2.2 IMPACT ON BANK EFFICIENCY

In the wake of the emerging market banking crises of the 1990s, a growing number of studies have found evidence that foreign bank entry tends to benefit the host country.<sup>8</sup> It has been argued in particular that foreign bank entry may stimulate competition in the banking industry, leading to higher efficiency for domestic banks, and result in improvements in the quality and accessibility of financial services for host country firms and individuals. Data provided by central banks confirm that structural changes in emerging market banking systems have generally led to an improvement in standard prudential and efficiency indicators over the past five years. However, it has not been possible to assess improvements in the quality and accessibility of financial services.

The average share of non-performing loans (NPLs) in total loans declined significantly for all types of banks between 1999 and 2004 (table 5). The largest improvements were on average achieved by state-owned banks. Israel is the only country where there was an increase in the share of NPLs for all three bank categories. Other exceptions are Hungary and Venezuela for state-owned banks and Turkey for private domestic banks. The improvement in NPL ratios has been fairly uniform across countries and regions.

One should note that much of this improvement probably reflects the business cycle and is not necessarily the result of different behaviour of representative bank categories. In addition, many banks, in particular state-owned ones and those that were sold to foreign strategic investors, unloaded a significant portion of their NPL portfolios to asset management companies and other vehicles for resolution of bank distress. This is partly confirmed by central bank answers to the questionnaire on guarantees offered to buyers of privatised banks (see table 2 above). Nevertheless, there seems to

have been some structural improvement in NPLs, as the 2004 NPL ratios shown in table 5 are generally below those observed during the previous cyclical upturn in the mid-1990s (cf. Hawkins and Mihaljek, 2001).

Provisioning against loan losses has also risen significantly (chart 6). Banks in most countries had set aside provisions for at least two thirds of NPLs at end-2004; in Chile, Korea, Mexico and Saudi Arabia cover exceeded 100% of NPLs. Cover seems relatively low only in Central Europe, India, Malaysia and Venezuela, and these provisioning ratios are in many cases considerably higher than prior to the crisis in the mid-1990s (in the case of Turkey, prior to 2001).

*Table 5 Non-Performing Loans<sup>1</sup>*

	State-owned banks		Private domestic banks		Foreign-owned banks		All commercial banks	
	1999	2004	1999	2004	1999	2004	1999	2004
Argentina	23.4	13.7	13.6	12.5	12.0	7.1	16.5	11.1
Chile	1.4	0.8	1.7	1.1	1.8	1.5	1.7	1.2
Colombia	22.8	3.5	7.1	3.8	7.3	2.1	10.0	3.4
Mexico	...	...	10.8	1.2	2.2	2.2	9.2	2.1
Venezuela	24.0	29.5	6.2	1.6	5.1	0.7	6.1	1.7
China <sup>2</sup>	22.4	15.6	12.0	4.9	...	...	...	...
India	16.0	8.1	10.3	5.9	7.2	4.9	14.6	7.4
Korea	15.0	1.9	8.7	2.0	20.6	1.6	11.4	1.9
Thailand	55.3	9.6	21.6	12.8	7.5	2.6	31.2	10.9
Hungary	4.3	17.6	4.4	2.0	3.7	2.9	3.9	3.5
Turkey	11.3	11.4	3.8	5.1	2.4	3.3	6.1	6.4
Israel	4.9	6.5	0.6	3.5	...	...	1.7	4.2
Average	18.3	10.7	8.4	4.7	7.0	2.9	10.2	4.9

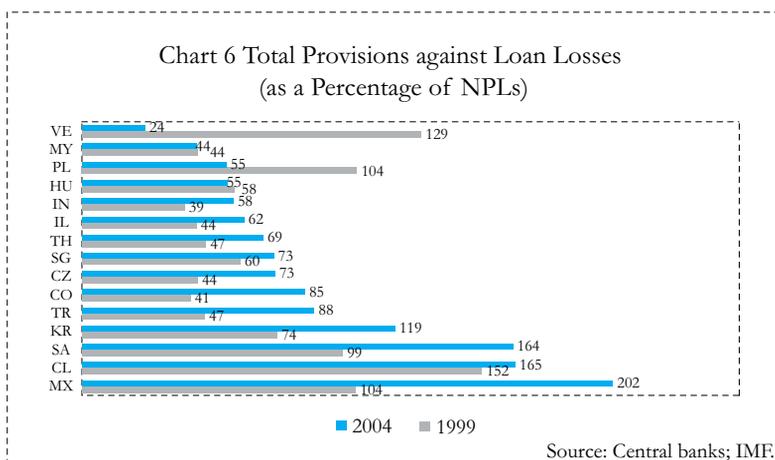
Note: <sup>1</sup>As a percentage of total loans.

<sup>2</sup>Based on five-tier classification. Data for private domestic banks are for joint stock commercial banks.

Source: Central banks (BIS questionnaire), IMF.

Capital adequacy has generally improved for state-owned banks, and has stayed relatively high for private domestic and foreign-owned banks (table 6). With risk-adjusted capital/asset ratios (capital adequacy ratios) of around 32%–37%, state owned banks in the Czech Republic, Hungary, Thailand and Turkey are probably overcapitalised

while those in China, with an adjusted CAR of below 7% in 2004, are clearly undercapitalised. In Korea and the Czech Republic, foreign-owned banks have reduced capital adequacy ratios that were perhaps unsustainably high for a competitive banking environment to more normal levels. In most other countries, including India and Turkey, private banks have either increased or maintained relatively high levels of capital adequacy. Again, these levels compare favourably with capital adequacy ratios from pre-banking crisis periods.



Structural changes have also had a visible impact on bank profitability, as measured by returns on assets and equity. State-owned banks in particular have significantly improved both their return on assets (Appendix table A1) and their return on equity (Appendix table A2) since 1999, as well as with respect to the mid-1990s. Improvements in these indicators were also pronounced for private domestic banks in Colombia, the Czech Republic, Hungary, Korea, Saudi Arabia and Thailand. For instance, in 2004 the return on equity of private domestic banks in Colombia, Hungary and Venezuela exceeded 30% and the return on assets exceeded 3%, with banks in Saudi Arabia realising slightly lower but still fairly high returns. The improvement since 1999 has been less pronounced for foreign-owned banks, whose profitability was already somewhat higher in 1999 than that of private domestic banks. In Argentina, profitability of foreign-owned banks declined drastically after the 2001 crisis.

Table 6 Capital Adequacy<sup>1</sup>

	State-owned banks		Private domestic banks		Foreign-owned banks		All commercial banks	
	1999	2004	1999	2004	1999	2004	1999	2004
Argentina	16.5	9.1	31.5	16.3	16.3	11.9	19.7	12.3
Chile	13.3	10.1	11.4	12.0	15.4	16.7	13.5	13.6
Colombia <sup>2</sup>	9.1	8.3	11.7	11.1	12.0	11.1	11.2	10.7
Mexico	...	...	16.4	17.8	14.6	13.2	16.0	14.1
Venezuela	15.2	10.9	12.8	12.6	13.6	12.6	13.3	12.5
China <sup>3</sup>	5.4	6.8	...	7.6	...	...	...	...
India	11.3	13.2	11.9	11.2	10.8	15.0	11.3	12.9
Korea	9.3	12.5	11.6	11.3	21.9	13.1	12.0	11.8
Thailand	24.4	31.9	16.3	13.7	13.8	12.1	15.0	13.2
Czech Rep	...	31.6	11.5	14.0	18.6	12.1	13.6	12.6
Hungary	24.4	31.9	16.3	13.7	13.8	12.1	15.0	13.2
Poland	8.8	16.3	12.6	15.1	15.0	15.4	12.4	15.6
Turkey	11.7	36.8	17.2	22.3	22.5	26.9	7.0	26.2
Israel	9.6	10.8	9.3	10.7	...	...	9.4	10.8
Average	13.3	13.7	14.7	13.5	15.7	14.4	13.0	13.8

Note: <sup>1</sup> Risk-weighted capital adequacy ratios, in %.

<sup>2</sup> Total capital over total assets.

<sup>3</sup> Data refer to end-2001 and June 2004, respectively. Data on private domestic banks are for joint stock commercial banks.

Source: Central banks (BIS questionnaire); OECD.

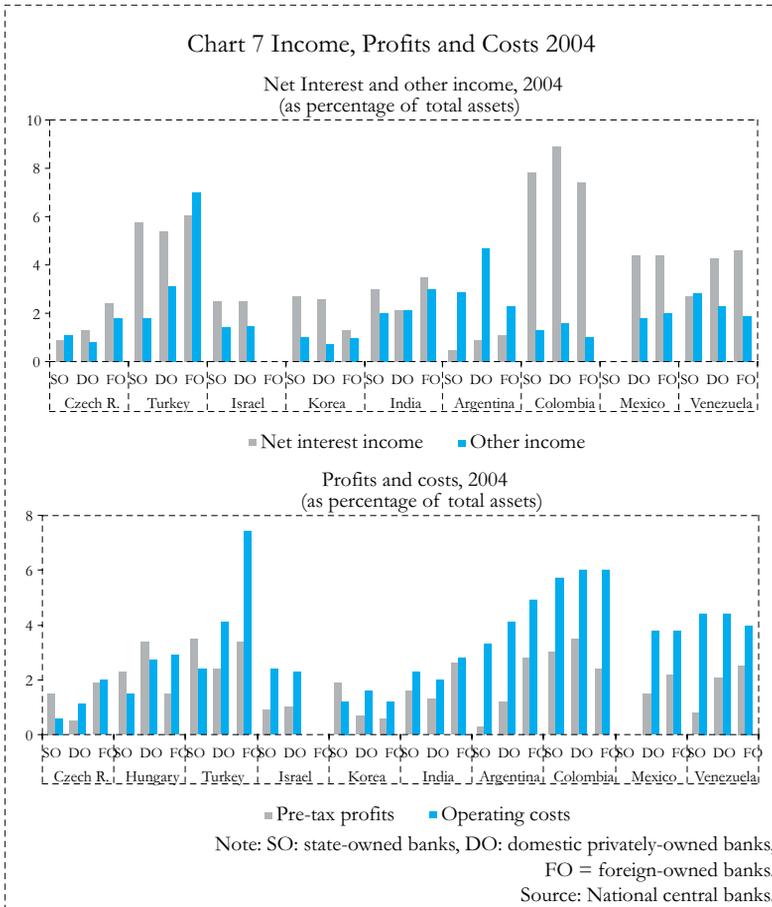
Changes in net interest income and other income have been less pronounced. State-owned and private domestic banks generally increased net interest income relative to total assets between 1999 and 2004 (Appendix chart A2). But for foreign-owned banks net interest income ratios were either constant or declined in most countries, reflecting the narrowing of interest rate margins brought about by greater competition. In Hungary, Turkey, Colombia and Venezuela, net interest income ratios for most banks exceeded 4% in 2004, suggesting that intermediation margins were still quite high. In Hungary, Turkey and Venezuela, high interest margins in addition partly reflected relatively high real interest rates in an environment of rapid disinflation.

Chart 7 compares sources of income (upper panel) and profits and costs (lower panel) for different categories of banks in 2004. With the exception of Argentina, net interest income is still the main income source for most banks, regardless of ownership structure.

But the share of non-interest income is generally higher for foreign-owned banks than for state-owned or private domestic banks, reflecting the broader range of products offered by foreign banks. For all three types of banks there has been a widespread increase in this share since 1999 (Appendix chart A2), suggesting an expanding scope of financial intermediation as banks have introduced new fee-based products and services.

Increased competition in the banking industry has also been reflected in generally lower interest rate margins. As shown in chart 8, with the exception of Hong Kong SAR and Turkey, the spread between representative bank lending rates and customer deposit rates declined from an average of 6.1 percentage points in 1999 to 4.1 percentage points in 2004. The narrowing of interest margins has been particularly pronounced for state-owned banks, suggesting that large rents were extracted in the past from their dominant position in many countries. There has also been a substantial narrowing of interest rate margins for foreign banks, with private domestic banks making on average less progress.

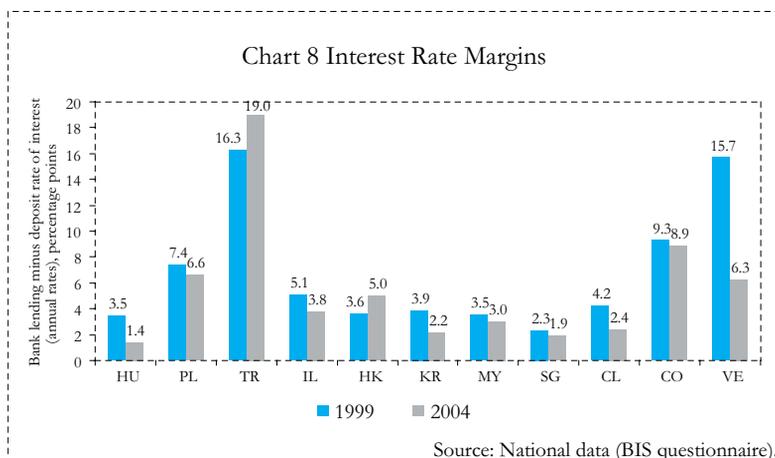
Pre-tax profits have risen in most countries and operating costs have generally declined since 1999 (Appendix chart A3), as well as with respect to the mid-1990s. For both profits and costs, the magnitude of these improvements has been similar across different types of banks. The absence of clear “winners” suggests that increased competition has provided state, private domestic and foreign-owned banks with roughly equal incentives to improve performance. What differences remain probably reflect different starting positions. As shown in the lower panel of graph 7, foreign-owned banks tend to have slightly higher pre-tax profits (2.2% of total assets on average, compared with 1.8% for private domestic and state-owned banks), but they also have higher costs (3.9% of total assets, compared with 3.2% for domestic banks and 2.6% for state-owned banks). It is not entirely clear what factors have contributed to these differences. One reason might be that, compared with foreign banks, state banks often own real estate in attractive locations (or rent it at low cost from city authorities), and can offer their staff higher state benefits in exchange for somewhat lower salaries.



In sum, several indicators point to a positive impact overall of structural change on bank lending and efficiency. The structure of lending has become more diversified, with less credit going to the government and large enterprises and more to households and – at least in Central Europe – smaller enterprises. Banks in emerging market countries have by and large also become financially stronger and operationally more efficient. Greater foreign bank participation has helped improve bank governance.

Yet differences between state-owned and other banks still remain. Compared with foreign-owned banks, for instance, state-owned

banks have generally been slower in diversifying their lending and reducing non-performing loans; but have been recapitalised to a greater extent (perhaps excessively so in some countries), and have done more to improve return on equity/assets and narrow interest rate margins, albeit often from worse starting positions.<sup>9</sup> Positive effects of competition on bank performance have also been visible in the case of private domestic banks. This is perhaps the most significant development, considering that in many countries these banks had to cope with restructuring at their own shareholders' expense, whereas the state-owned banks were typically restructured at taxpayers' expense and subsequently sold to foreign-owned banks, in most cases below the cost of restructuring.



### 3. CHALLENGES FOR MARKET DISCIPLINE AND SUPERVISION

The changing structure of the emerging economies' banking systems has many implications for financial stability and in particular the supervisory regime. This section addresses two specific issues that arise in this context: first, supervision of foreign-owned banks; and second, the impact of delisting of large domestic banks from local stock exchanges after takeovers by foreign-owned banks.

The presence of foreign banks has generally led domestic supervisory authorities to upgrade the quality and increase the size of their staff in

order to supervise the more sophisticated activities and new products being introduced by these banks. In addition, supervisory authorities in banking systems dominated by foreign-owned banks have had to cooperate with home country supervisory authorities to a greater extent. In virtually all countries in the sample, domestic supervisory authorities have established formal channels of communication with the authorities in charge of financial supervision in parent banks' home countries. In most cases, the framework for cooperation is set out in bilateral memoranda of understanding. Areas of cooperation typically cover: exchange of information on operations of foreign-owned banks in host and home countries; exchange of information on management of foreign-owned banks; and joint consultations and visits to foreign owned banks. Cooperation is generally judged to be smooth, and the main obstacle in establishing closer working relationships with foreign supervisory authorities is usually seen to be the different legal treatment of confidential data and information in various jurisdictions.

Yet some central banks have expressed more general scepticism about overly legalistic modes of communication among supervisors. In practice, the consolidated (home) supervisor has tended to dominate the host country supervisor even in the case of subsidiaries. Moreover, comments provided in the BIS questionnaire suggest that some host country authorities were not always fully informed about the situation of parent banks in home countries. One special challenge is governance: foreign-owned banks are managed from their headquarters from a global perspective, which means that different transactions are booked in different banking hubs around the world. As a result, some subsidiaries end up with a greater concentration of certain risks than would otherwise be the case. As reporting lines for different operations often bypass local managers, central banks in host countries might not always be informed in time about issues such as liquidity problems of local subsidiaries. Different accounting standards also create problems, in part because they affect the type of business activities that foreign banks carry out in host countries.

Several central banks noted that foreign bank affiliates are often of marginal importance from the parent perspective, but might well be systemically important for the host country. One issue that arises

in this context is what would happen if a foreign-owned subsidiary that was systemically important locally ran into problems. One central bank acknowledged that it did not know what parent banks would do in such a case. There were cases where a parent company had helped its subsidiary immediately, without asking host country authorities for any assistance. But there were also some cases of a parent abandoning its subsidiary.<sup>10</sup> The response would seem to depend on financial health of the parent – if the parent was in weak shape, it might care less about reputation costs and abandon its subsidiary. Another central bank attached less probability to foreign parents abandoning their subsidiaries than to foreign owners more generally not acting in the interests of local shareholders.

A related issue in this context is the possible conversion of systemically important subsidiaries of foreign-owned banks into branches. This development has been facilitated in the European Union by the adoption of the single EU banking passport. But the issue is more general, as the centralisation of the decision making process in global financial institutions has led to a system in which subsidiaries operate more or less like branches anyway.<sup>11</sup> The issue in this case is less whether such systemically important branches (or quasi-branches) might be abandoned in a period of distress – legally, branches cannot be “abandoned” because claims on the bank stay with the parent – and more how the central bank and supervisory authorities in the host country might deal with the loss of liquidity in the domestic banking system and disruptions to the payment system if the parent institution decides to close a branch that is small for the parent, but systemically important for the host country.

Developments in the global banking industry are important for market discipline and supervision in emerging market host countries for yet another reason: mergers between parent institutions in industrial countries might result in a significant increase in concentration in host countries. For instance, the merger between Unicredito and HVB has implications for competition in the Polish banking market, as these two parents own the second and third largest banks in Poland. As noted above, bank consolidation in most emerging economies has not yet been associated with any marked rise in concentration, as most mergers have involved smaller banks.

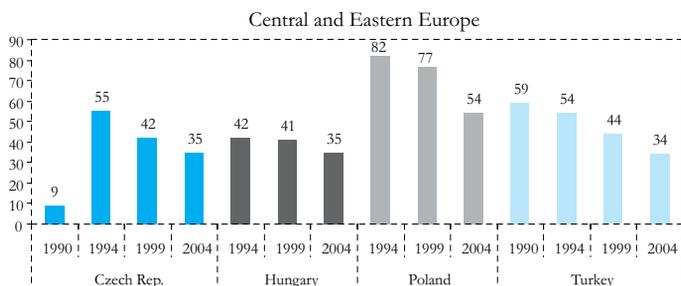
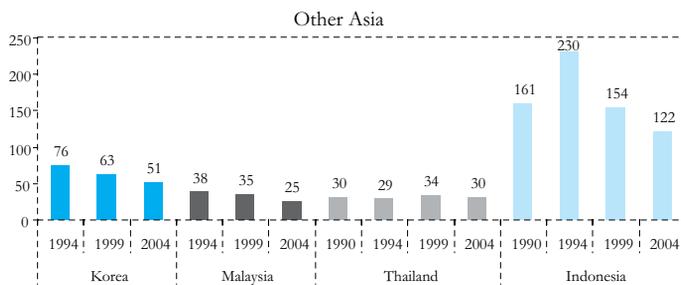
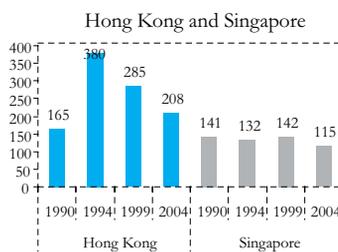
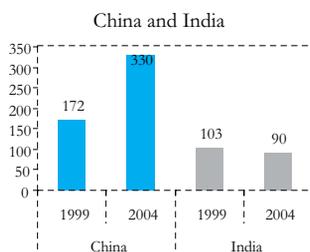
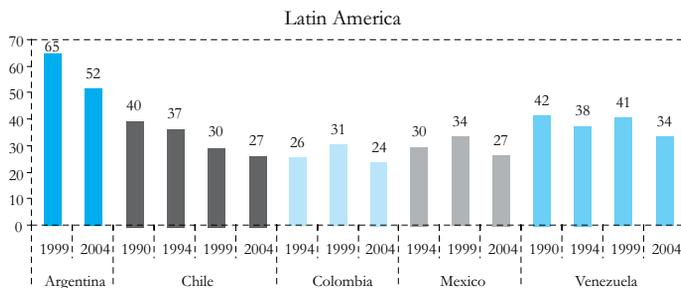
But mergers between large domestic institutions that reflect merger activity outside the borders of the host country might be harder to resist. What could supervisory authorities do in such circumstances if they cannot challenge such domestic mergers on legal grounds?

The delisting of foreign-owned subsidiaries from local stock exchanges raises a different set of concerns. Among countries in the sample, such delisting has occurred in the Czech Republic, Hong Kong SAR, Korea, Mexico and Poland. In the Czech Republic, it involved one institution with a 12% share in market capitalisation; in Hong Kong, one very small bank; in Korea, two institutions with a 0.8% share in total market capitalisation each; and in Poland, three institutions with a combined share in stock market capitalisation of 5%.

Delisting has been by far the biggest issue in Mexico (see Sidaoui, 2006). From 2000 to 2005, five of the largest institutions in Mexico, representing 77% of total bank assets, were acquired by foreign-owned banks (foreign-owned banks now account for 82% of the country's total bank assets). All of these five institutions were subsequently delisted from the Mexican stock exchange, leading to a significant loss of market prices and scrutiny by independent analysts. Moreover, as these banks represented 15% of total stock market capitalisation at the time of acquisition (11% at the time of delisting), their delisting affected the development of the Mexican capital market more generally. Even though supervisors required subsidiaries to report as if they were listed, that information did not benefit the local market. In addition, the disclosure of timely and meaningful information about developments in institutions accounting for close to 80% of Mexico's banking sector was impaired, making it necessary to significantly improve information flows from parent banks to markets, and from home supervisors to host authorities. The delistings also raise broader questions about financial and corporate development in emerging market economies and possible policy responses.

## APPENDIX

### Chart A1 Number of Commercial Banks



Source: National data (BIS questionnaire).

Table A1. Return on Assets<sup>1</sup>

	State-owned banks		Private domestic banks		Foreign-owned banks		All commercial banks	
	1999	2004	1999	2004	1999	2004	1999	2004
Argentina	-0.1	0.3	1.4	1.1	-0.1	-3.0	0.2	-0.5
Chile	0.7	0.5	0.5	1.5	0.8	1.3	0.7	1.2
Colombia	-14.5	3.0	-0.2	3.5	-1.4	2.4	-3.7	3.2
Mexico	...	...	1.8	1.0	0.7	1.1	1.5	1.1
Venezuela	0.7	1.5	2.6	4.2	3.5	4.9	2.9	4.2
China	0.1	0.3	...	...	...	...	...	...
India	0.4	1.1	0.7	1.0	0.9	1.6	0.5	1.1
Korea	-3.7	1.9	-0.0	0.7	-1.0	0.6	-1.2	0.8
Thailand	...	...	-6.0	1.2	-0.2	2.3	-5.2	1.4
Czech Rep	...	0.9	-1.0	0.4	0.7	1.4	-0.3	1.3
Hungary	0.6	2.5	1.5	3.7	0.1	1.7	0.5	2.4
Poland	1.1	1.8	2.0	0.5	1.2	1.4	1.4	2.0
Turkey	1.1	2.5	4.3	1.6	5.4	2.3	-0.7	2.1
Israel	0.5	0.6	0.6	0.7	...	...	0.6	0.7
Saudi Arabia	...	...	1.7	2.7	...	...	1.7	2.7
<i>Average</i> <sup>2</sup>	-1.3	1.5	0.7	1.7	1.0	0.9	-0.1	1.9

Note: <sup>1</sup> In percent.

<sup>2</sup> Excluding Argentina.

Source: Central banks (BIS questionnaire); IMF.

Table A2. Return on Equity<sup>1</sup>

	State-owned banks		Private domestic banks		Foreign-owned banks		All commercial banks	
	1999	2004	1999	2004	1999	2004	1999	2004
Argentina	-1.3	3.6	6.9	8.4	-0.8	-30.3	1.9	-4.9
Chile	12.9	12.1	9.6	21.0	8.6	14.0	9.4	16.7
Colombia	-159.0	36.3	-1.5	31.1	-11.9	21.3	-32.5	29.9
Mexico	...	...	17.6	11.9	10.5	12.4	16.3	12.3
Venezuela	4.3	13.7	20.2	32.7	26.0	38.7	21.7	34.0
India	8.5	20.9	12.5	16.3	9.9	15.4	9.2	19.3
Singapore	...	...	10.5	13.5	...	...	10.5	13.5
Korea	-60.1	29.6	-0.5	15.0	-7.8	11.2	-17.5	16.5
Czech Rep	...	14.9	-16.8	9.6	9.8	25.1	-4.3	23.4
Hungary	4.0	19.1	27.2	41.2	1.2	22.7	6.3	28.5
Poland	18.7	27.3	19.5	8.5	13.7	16.9	16.3	18.3
Turkey	27.6	26.6	33.2	10.3	44.9	-61.9	-14.0	14.0
Israel	10.5	11.4	11.8	11.6	...	...	11.3	13.2
Saudi Arabia	...	...	15.8	26.2	...	...	15.8	26.2
<i>Average2</i>	-14.7	21.2	12.2	19.1	10.5	11.6	3.7	20.4

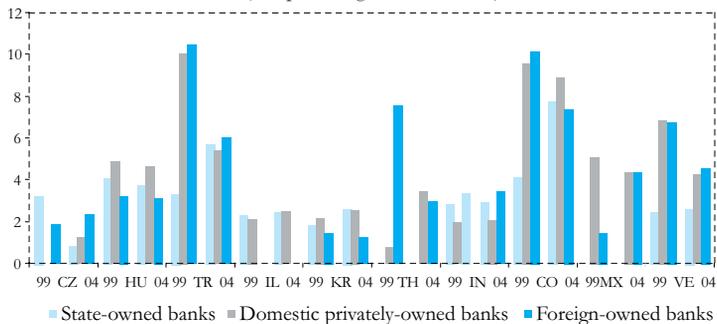
Note: <sup>1</sup> In percent.

<sup>2</sup> Excluding Argentina.

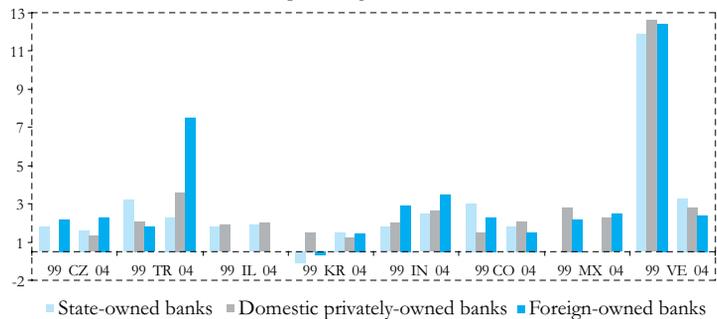
Source: Central Banks (BIS questionnaire).

Chart A2 Income Sources, 1999 and 2004

Net interest income  
(as a percentage of total assets)



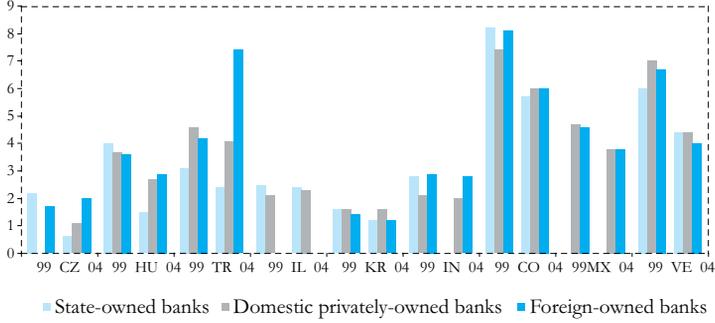
Other income  
(as a percentage of total assets)



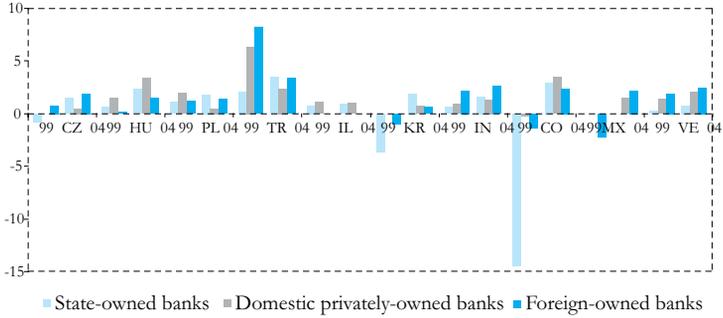
Source: Central banks (BIS questionnaire).

Chart A3 Operating Costs and Pre-Tax Profits

Operating costs  
(as a percentage of total assets)



Pre-tax profits  
(as a percentage of total assets)



Source: Central banks (BIS questionnaire).

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## ENDNOTES

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1 See, for example, the review article by Barth et al. (2004).

2 Unless otherwise indicated, the country groupings used in this paper are as follows: Latin America (Chile, Colombia, Mexico and Venezuela); other Asia (Indonesia, Korea, Malaysia and Thailand); Central Europe (Czech Republic, Hungary and Poland); and other emerging market economies (Israel, Saudi Arabia and Turkey).

3 The small increase in the share of state-owned banks in total credit in other Asian countries in 2004 is due entirely to Indonesia, where the majority of commercial banks that failed during the 1999 crisis were nationalised and subsequently gradually privatised.

4 On aggregate costs of banking crises see eg Honohan and Klingebiel (2001) and Sherif (2004).

5 One well documented case is the rescue of Hungary's Postabank in 2000. The rescue cost the state around HUF 150 billion (about EUR 580 million), and the bank was sold for HUF 100 billion at end-2003, implying a net loss of 33%. Another exception to the lack of transparency about costs and benefits of bank rescues is the Czech Republic – Barta and Singer (2006) calculate costs of both bank crises and delays in privatisation.

6 One concentration issue that has arisen in a number of countries is provision of non-bank financial services by commercial banks. In Israel, for instance, commercial banks have typically been advisers to and providers of mutual funds, putting them into conflict of interest situations. In 2005, the authorities required the banks to divest such non-banking activities (see Sokoler, 2006). In many central and eastern European countries, commercial banks own leasing companies, which provide increasing amounts of credit to consumers.

7 Other examples would include China and India, for which the same breakdown of credit expansion is not available.

8 See e.g. Claessens et al. (2001) and Demirgüç-Kunt and Huizinga (2001).

9 One common complaint about foreign banks in Latin America is that their managers have very short time horizons and tend to act procyclically (see Betancourt et al., 2006). By contrast, publicly owned banks tend to have longer time horizons.

10 One well known case is that of Riječka banka, Croatia's third largest bank, in which a currency trader caused losses of nearly USD 100 million, or three quarters of the bank's capital, in 2002. Germany's Bayerische Landesbank decided to sell its 59% share in the bank for a symbolic price of USD 1 to the Croatian government when the losses were discovered. The government subsequently sold the bank to Austria's Erste Bank for EUR 55 million plus a capital increase.

11 See CGFS (2004, 2005) and Domanski (2005).

# MONETARY STRATEGY IMPLEMENTED IN KOSOVO

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*Michel Svetchine\**

## INTRODUCTION

Among the numerous challenges that Kosovo had to face just after the 1999 conflict was to choose a monetary framework. For various reasons, and, above all, due to the massive loss of confidence in the Yugoslav Dinar and the correlative use of German Deutsche Mark as a medium of transactions and savings, the United Nations Interim Mission in Kosovo (UNMIK) decided to legitimize the use of the deutsche mark (DEM) as well as, in parallel, the use of other currencies<sup>1</sup>. Since the DEM was the only means of payment allowed to perform mandatory payments and to keep accounts, the German currency was adopted unilaterally as the de facto currency of Kosovo. Then, after the euro change in early 2001, the euro became, in turn, the legal tender of Kosovo<sup>2</sup>. Presently, Kosovo's economy is a fully euroised one, with a limited use of Serbian Dinars in Kosovo Serb populated areas, while other currencies, even the US dollar, are very marginally used, even by foreigners.

Since Kosovo does not belong to the euro zone, it does not participate in the single currency mechanisms set up by the European Central Bank and consequently cannot issue any euro. This implies, first that the Central Banking Authority of Kosovo (CBAK) is not an issuing central bank and, secondly, that it has not in hand all

the traditional instruments to perform an extensive monetary policy. Indeed, the CBAK does not exercise functions of lender of last resort and does not provide any liquidity, either to commercial banks or the Treasury. Therefore, it does not exercise any direct action on lending rates through its interventions on the money market. Should the regulation in force permit, the CBAK could only use its free accumulated reserves to grant liquidity. For the time the amount of these free reserves is negligible.

Such a situation is not exceptional among Balkans countries, having in mind that another country (Montenegro) has spontaneously introduced the euro, two countries (Bulgaria and Bosnia-Herzegovina) implement a strict currency board based on a peg with the euro, FYROM uses an implicit peg with the euro, and several countries (namely Croatia, Albania and Serbia) are largely euroised; that deeply reduces their margins of manoeuvre to conduct an independent monetary policy. No doubt that euroisation brings some constraints to central banking activities, but, on the other hand, the advantages brought by the use of euro -in particular in a territory as Kosovo- are so huge that they totally offset its possible disadvantages.

More, thanks to its strong financial supervisory capacities, the CBAK has in hand several tools to exercise action on money supply; it has also significant means to enhance financial stability. Indeed, one of the main goals given to the CBAK by Regulation 2006/47 on the Central Banking Authority of Kosovo is to “foster the soundness, solvency and efficient functioning of a stable market-based financial system”.

## 1) SHORT REMINDER OF THE ADVANTAGES AND CHALLENGES OF THE USE OF THE EURO IN KOSOVO

### 1.1 ADVANTAGES OF THE USE OF THE EURO

After the conflict, following years of financial and political instability, Kosovo's economy, which had accumulated numerous

factors of weakness and was partly destroyed, urgently needed monetary stability. In that field, the use of the euro immediately brought price stability. Indeed, since 2002 prices have been stable in Kosovo<sup>3</sup>. The limited inflationary pressures observed in 2007 are the result of an increase in raw material prices in the international markets. Even more, the disconnection between the euro and the USD -in which most prices are denominated in international markets-, protects Kosovo from the direct impact of price volatility of some basic consumer goods.

The use of the euro also eased the restoration of confidence in the currency in use. That enhanced the development of large deposit based banking activities, thanks to an extensive conversion of cash savings into banking deposits<sup>4</sup>, even though Kosovo is still partially a cash economy, like most of its neighbours.

More, the use of euro allows Kosovo to benefit from a free exchange regime, with free movements of capital, while the use of a domestic currency would automatically impose a strict control of exchange that will be unsustainable in the long run, not to mention the high transaction and bureaucratic costs it will generate. By eliminating exchange risk and exchange control, the use of euro is consequently one competitive advantage Kosovo has to attract investors and to promote trade. In that respect, it is worth mentioning that 31% of imports and 22% of exports are made with EU countries. The use of the euro could also be seen as protection against possible temptations to rely on loose monetary policies -and not on demanding budgetary measures and structural reforms- to put Kosovo's economy back on track.

Last, no need to emphasize that in practice and in the Kosovo specific context, issuing a domestic currency will quickly lead to capital evasion, high inflation, a double currency circulation, an unfair situation for those citizens whose salaries would be paid only in local currency, not to mention trafficking and black market.

## 1.2 CHALLENGES OF THE USE OF THE EURO

One of the major challenges of a fully dollarized or euroised

economy (as well as those using a strict currency board) is to get enough liquidity to perform transactions, to finance trade activities and to fuel economic growth. Indeed, an insufficient quantity of money could lead to a strong deflation of internal prices –namely salary costs- or to a lack of internal demand, both phenomena that are not sustainable in the long run. More, Kosovo’s economy, like most of the dollarized or euroised ones, suffers from a large trade deficit, which cannot be compensated by currency adjustments<sup>5</sup>.

In practice, Kosovo affords the challenges of a comprehensive euroisation without facing neither liquidity shortages nor significant internal prices adjustments, because its large trade deficit is compensated by inflows denominated in convertible currencies - specifically euro coming from remittances from Kosovo Diaspora-, from donors’ assistance and international presence, and last from a positive balance in direct investments<sup>6</sup>. Should this equilibrium not exist, Kosovo could face strong internal price adjustments that are in practice salaries deflation<sup>7</sup>, not to mention shortages in goods supply.

Ones could also reproach euroisation for the lack of means for the central bank to influence lending rates. Again, there is a need to refer to the actual situation of Kosovo, in which funding costs represent only a very limited part of intermediation costs<sup>8</sup>. In other words, should the CBAK provide liquidity to banks at a zero cost, lending interest rates would not be significantly reduced. The best way to push interest rates down in Kosovo is through structural actions –namely an increase in competition, a better legal environment, an improved image of the Territory ...- and not through a low cost money supply from the central bank.

As far as the Kosovo financial sector is concerned, it cannot obtain any liquidity from the CBAK. This absence of lender of last resort functions should not be seen as problematic in the local context, first because more than 90% of the deposits collected by the industry are in hands of foreign banks having access to other sources of funding. Secondly because the supervisory authorities are encouraged to address any weaknesses in one financial institution by using, without any delay, all their supervisory tools, including if necessary strong enforcement measures.

In conclusion, the adoption of euro in Kosovo has been more than beneficial in bringing macroeconomic stability, which is so much needed by the Territory, as well as by its economy. Given its specific situation, Kosovo strongly benefits from the use of the euro, even though the Central Banking Authority of Kosovo has not in its hands all the theoretical instruments to conduct a traditional monetary policy. Nonetheless, the CBAK has managed to use other instruments to enhance financial stability and to promote an efficient financial sector able to supply the needs of a growing economy.

In that respect, CBAK performs two types of actions:

- on liquidity and credit supply,
- on the performances and structures of the financial sector.

## 2) ACTIONS ON LIQUIDITY AND CREDIT SUPPLY THROUGH BANKING REGULATION AND SUPERVISION

### 2.1 ACTION ON LIQUIDITY

Based on amended Rule XVII on the Minimum Required Liquidity Reserves with the CBAK<sup>9</sup>, a deposit taking institution shall keep a liquidity reserve of at least 10% of the total of its deposits, borrowings and debt securities having a maturity less than one year. The assets with which a deposit taking institution may satisfy its liquidity requirement are its deposits with the CBAK and fifty per cent of the cash in its vaults. However, deposits with the CBAK may not be less than half of the applicable minimum reserve requirement (that is 5% of the said total deposits, borrowings and debt securities).

CBAK is entitled to modulate the reserve ratio, either globally, or for a category of institution, or just for one single bank. This measure has been used on several occasions. For instance, in 2005 and 2006, the liquidity reserves to be kept in CBAK books were elevated to 10% (instead of 5%) for certain institutions which were submitted to enforcement actions by the CBAK. This also happened

during two weeks, in March 2006, for domestically owned banks, as a general precautionary step after the license revocation and the closing down of one local bank by the CBAK.

By modulating globally or individually the liquidity reserve rate, as well as by acting on the interest rate it pays on the mandatory liquidity reserves, the CBAK could influence money supply and its costs—at least in a limited manner<sup>10</sup>. Consequently the CBAK could use for purely monetary targets an instrument originally designed for supervisory purposes.

CBAK also implements a variable loan to deposit ratio, whose targets are double: keeping banks liquid and controlling their credit expansion (see *supra*).

## 2.2 ACTION ON CREDIT SUPPLY

There are two main instruments: solvency ratio and the loan to deposit ratio. Additionally the CBAK could use its loans provisioning policy.

- Solvency ratio: as defined by CBAK Rule I on Capital Adequacy, the risk asset capital ratio set up by the CBAK is very close to the Cooke ratio, with nonetheless more demanding requirements, since the ratio is fixed at 12%, with tier 1 at 8%. In practice, at the present stage of development of Kosovo banking system, there are very few instruments that could compose a tier 2. As a result, the ratio is presently almost fully met with “hard” capital (and is above the requirements, with, as of September 2007, a systemic average ratio of 17.8%, of which tier 1 is at 15.5%).
- Loan to deposit ratio: based on its supervisory powers, the CBAK has designed and imposed a loan to deposit ratio applicable to all banking institutions, but with a variable rate according to the individual situation of each institution. This ratio compares on one hand all loans and on the other side all deposits (without the borrowings from banks). For the time being, the minimum is 80%, while some institutions could be submitted to more demanding requirements (in practice between 70% and 80%). As of September 2007, the systemic loan to deposit ratio is 75.6%, while it was 65.9% as of end of December 2006. This

loan to deposit ratio is used mainly for supervisory purposes, for instance to maintain under control loans expansion of any bank whose deposit base appears concentrated or on a stagnant trend. It is also used to control and put under constraint credit expansion for those banks that appear too lax or adventurous in their credit practices. In that regard, the loan to deposit ratio is used as a monetary instrument to control credit growth. In other words, thanks to a modulation of this ratio, the CBAK could if needed either promote or restrict credit expansion.

- In addition, CBAK imposes strict provisioning rules for commercial banks. The minimum provisioning rates are 20%, 50%, and 100% for substandard, doubtful, and loss loans, respectively. In addition, any loan granted to a borrower who does not comply with the legal requirement to have its yearly financial accounts audited is submitted to a specific provision requirement of 1%. By doing so CBAK promotes lending to companies that comply with good financial reporting standards. More generally, through its provisioning requirements, as well as through its rules and policies and “best practice” advisory letters on risk management and internal control, the CBAK invites the banking sector to upgrade its credit proceedings. In parallel, high provisioning requirements increase the cost of potentially risky credits. In the medium term, such supervisory action has an impact on credit supply, both in quantity and in quality.
- In addition to the above-mentioned points, CBAK supports the efforts of the most solid banks to obtain long or medium term credit lines from development institutions such as the European Bank or the European Fund for South East Europe (EFSE). This action tends to soften the credit policy implemented through the above mentioned ratios. Indeed, the long term funding offered by these institutions, combined with the technical assistance they provide, has without any doubt another positive impact in credit supply in quantitative as well as in qualitative terms<sup>11</sup>.

### 3) ACTIONS ON THE PERFORMANCES AND STRUCTURES OF THE BANKING SECTOR

The Central Banking Authority of Kosovo is committed to

enhance financial stability by using all the supervisory means it has through UNMIK Regulation No 2006/47. Indeed, this regulatory framework gives to the CBAK an extensive scope of actions of all kind, in order not only to address specific supervisory issues, but as well to promote a sound and efficient financial sector. Indeed, many supervisory actions have a positive impact on lending supply, and more generally on the enhancement of a sound macro economic framework.

Among the numerous steps taken by the CBAK to promote sound banking practices it is worth quoting Rules X, XX and XXIX. Rule X deals with the prevention of money laundering and terrorist financing, while Rule XX sets up restrictive limits to credits granted to related persons. The newly approved Rule XXIX -adopted by the CBAK Board on October 31, 2007- forbids banks to allow the disbursement of credits in cash<sup>12</sup>. Finally, the CBAK, with the support of a European fund provider, is considering setting up a deposit insurance fund.

Simultaneously, the CBAK has shown its readiness to use all the scope of its powers to enforce the regulation and to upgrade professional and managerial practices. This led the CBAK management to suspend or revoke managers and directors, to freeze their voting rights, to force shareholders to sell their shares at a given price, to force insiders to pay back their loans, and to send facts which could violate criminal laws to the relevant Prosecutors. More, in March 2006, the CBAK Board revoked the license of one commercial bank, which had accumulated non performing loans and was deeply insolvent. The CBAK intervened on a preventive manner, while the insolvent bank still held enough liquid assets to cover immediately small depositors and consequently avoid any run off of deposits in the whole banking sector. Liquidation of the failed bank is still on going, in parallel with criminal investigations against most of the former directors and shareholders. The CBAK decision to revoke the license of one institution and to close it down had a positive impact on the whole industry and led to an improvement of credit policies and corporate governance practices, to a reduction of insider lending and last to a speeding up of the restructuring process of local banks.

Indeed, in order to increase competition and a broader supply of financial services, as well as for strengthening some domestic institutions, the CBAK supports the initiative of locally owned banks to find strong and reliable foreign partners. In parallel, the CBAK has welcomed the settlement in Kosovo of a limited number of foreign banks –namely regional ones-. This brings a Slovene bank to take over two locally owned banks (which are now merging) and to grant a branch license to two regional institutions. Another license application is under review<sup>13</sup>. Consequently, the banking sector moves towards an ideal structure with an adequate proportion of banks from different sizes, origins and capacities. These positive evolutions could bring the CBAK to consider with care any new entrance in a local market that -whatever the development of Kosovo's status could be- will remain narrow and submitted to structural constraints.

## CONCLUSION

Modern monetary policies usually aim at four main goals: promoting price stability, protection of the national currency, monitoring banks' liquidity and enhancing financial stability.

In Kosovo, thanks to the use of the euro, the first two objectives of a traditional monetary policy are de facto transferred to the European Central Bank and consequently Kosovo benefits from the monetary stability of the euro zone. Anyhow, in a small, weak and open economy in which the banking industry is dominated by large foreign banks that have an independent access to funding in hard currencies, it could be presumptuous or adventurous to pretend implementing an independent monetary policy.

As far as liquidity is concerned, the CBAK has in hand a set of measures to monitor banks' liquidity at a reasonable cost for the industry, even though it cannot act as a lender of last resort. In practice, the CBAK's situation is not far as the one of many of the central banks of the region. Indeed, these central banks either use the euro or a domestic currency pegged to the euro through a strict currency board, or they are confronted with a domestic banking industry in which consolidated liabilities are in a large proportion

denominated in euro currency. In such a context, should a domestic bank lack liquid assets denominated in euro, it could hardly seek the support of the local central bank.

When all is said and done, the main goal of CBAK's monetary policy is financial stability. For this purpose the Kosovo financial supervisor is granted by the existing regulation with an extensive set of efficient means. In practice, the CBAK plays an active and important role in promoting financial stability. Indeed the CBAK uses a full scope of actions through its licensing policy, the issuance of regulations and rules and last its supervisory and enforcement capacities. CBAK, as provided by Regulation 2006/47, can also provide advice to decision makers and as such enhance a sound, open and free economic framework.

To conclude, it should be emphasized that the sound financial sector promoted in the last couple of years, as well as the actual financial stability which prevails in Territory are among the tangible assets of Kosovo's economy. These achievements are the result of monetary and financial policies which rely namely on structural actions and on constant implementation of measures aiming to enhance financial stability. These actions and policies could be designed and implemented only thanks to the medium term vision that has an independent and professionally driven institution such as the Central Banking Authority of Kosovo. Keeping the financial sector efficient, sound, stable and attractive for investors requires to preserve and even to enhance independence and professionalism of the Central Banking Authority of Kosovo. It is, without any doubt, one of the ways to ease regional and European integration of Kosovo.

## APPENDIX:

### 1) Characteristics of the banking sector (as of September 2007, in Eur mln)

Licensed commercial banks	Ownership	Total loans	Total deposits and borrowings
ProCredit Bank Kosovo	Foreign	325,733	451,812
Raiffeisen Bank Kosovo	Foreign	301,118	370,825
National Commercial Bank (branch)	Foreign		1,055
NLB Kasabank	Foreign	87,324	109,594
NLB New Bank of Kosovo	Foreign	29,935	54,565
Economic Bank	Domestic	27,744	44,024
Bank for Business	Domestic	26,487	33,843
Komercijalna Banka (branch)			
<b>TOTAL:</b>		798,341	1,065,718
Liquid assets/total assets			35.0%
Consolidated Capital Adequacy Ratio			17.8%
Loan to deposit ratio)			77.7%
Financing by Foreign Development Institutions			Eur 28.8 million

### 2) Macro economic indicators (for 2006)

GDP (in million of euro)	2 273
GDP per capita (in euro)	1 118
GDP annual growth	3,1%
CPI	1,5%
Investment as % of GDP	31,3%
Primary budget balance as % of GDP	3,6%
Remittances as % of GDP (estimate)	15,5%
Foreign assistance as % of GDP	14,6%
Population (estimate, in thousands)	2 033

## ENDNOTES

\* Michel Svetchine, Managing Director, Central Banking Authority of Kosovo.

<sup>1</sup> See UNMIK Regulation No 1999/4 on the Currency permitted to be used in Kosovo, and Administrative Direction (AD) No 1999/2 implementing Regulation No 1999/4.

<sup>2</sup> See AD No 2001/24 amending AD No 1999/4. According to section 1 of AD No 2001/24, all financial accounts and records, including private enterprises and private persons shall be designated only in euro. As for section 2, it provides that compulsory payments shall be performed only in euro (or in Dinar with an additional administrative fee of 10%).

<sup>3</sup> Evolution of CPI in annual average: 2002: 3.6%; 2003: 1.1%; 2004: -1.1%; 2005: -1.5%; 2006: 0.7%. (Source: Statistical Office of Kosovo- SOK-).

<sup>4</sup> Total amount of deposits doubled from euro 450 million at end of 2002, to 930 million at end of 2006, and 1056 million at end of September 2007. The deposit to GDP ratio in Kosovo was 38% in December 2006, close to the ones of Bosnia, Serbia, and FYROM, and higher than in Montenegro (17.6%).

<sup>5</sup> In 2006, total imports reached euro 1 306 million, while total exports amounted euro 111 million.

<sup>6</sup> Kosovo's Balance of Payments for 2006 shows a deficit in current accounts of 1 157 million, and positive balances in current transfers by 737 million (remittances and other transfers for 348 million), and in direct investments by 242 million (Source CBAK ).

<sup>7</sup> It could be stated that euroisation could hamper, or delay, macro economic adjustments, since it is theoretically easy to devalue a domestic currency -and to keep blocked nominal salaries denominated in a local currency- while it is more difficult to obtain a decrease of nominal salaries denominated in euro. That is why the Authorities in Kosovo should take care of maintaining salary costs at a level compatible with the competitiveness of local economy and to undertake all necessary steps to enhance local production.

<sup>8</sup> In 2005, within an average total lending rate of 17%; the funding costs represented a cost of 2%; operational costs 5,5%; risk costs 4,5%; regulatory costs 0,5%; profit and residual 4,3%; (Source: CBAK Bulletin number 5 page 39, posted on CBAK web site [www.cbak-kos.org](http://www.cbak-kos.org) ).

<sup>9</sup> Rule XVII, approved on August 30, 2007 takes over from previous rules (All CBAK regulations and Rules are posted on the CBAK web site: [www.cbak-kos.org](http://www.cbak-kos.org)).

<sup>10</sup> Regulatory costs represent round 50 basic points (0,5%) of the lending rate paid by borrowers (see footnote No 7).

<sup>11</sup> As of Sept 2007, EBRD credit lines to registered banks in Kosovo amounted 4 million, and EFSE credit lines euro 24,7 million.

<sup>12</sup> According to Rule XXIX on Direct and Indirect Disbursement of Credit in Cash loans, cash disbursement of loans and cash withdrawal of loans proceeds in amounts greater than euro 10 000 are prohibited, unless supported by bona fide evidence of the use of such proceeds. In any cases, funds in amount or above euro 50 000 shall be disbursed only by bank transfers.

<sup>13</sup> In early 2007, Nova Ljubljanska Banka (NLB) took over Kasabank and New Bank of Kosovo. Then, in mid 2007, a branch license has been given to Banka Kombetare Tregtare –BKT- (from Albania) and to Komercijalna Banka –KB- (from Serbia). Consequently, as of end of November 2007, the Kosovo banking sector is composed by two international banks (Raiffeisen Bank Kosovo and ProCredit Bank Kosovo), three regional institutions NLB, BKT, KB (and maybe soon a fourth one) and two locally owned banks (Economic Bank and Bank for Business –BpB-). At end of 2005, there were 5 locally owned banks and two quoted international ones.

# INFLATION TARGETING IN TURKEY: A REVIEW OF RECENT EXPERIENCE AND PROSPECTS

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*Yusuf Soner Baskaya\**

## 1) INTRODUCTION

After having experienced very high and volatile inflation rates for almost three decades, Turkey has exhibited a remarkable performance since 2002 in terms of disinflation. Today, CPI inflation rate in Turkey indicates single digit numbers. However, the shift towards the current monetary policy regime, namely the inflation targeting and the disinflation process observed in Turkey have been far from trivial due to the lack of favourable initial conditions in the years that followed the deep economic crisis of 2001. A close scrutiny of the experience of Turkey during recent disinflation may provide important insights about inflation-targeting regime in general, as it involves differences from the experiences of other inflation targeting countries in terms of how the new regime was introduced. This study briefly reviews the Turkish experience between 2001 and 2007 with a particular focus how inflation targeting can be launched in the absence of ideal conditions for the success.

The rest of this paper is organized as follows. The next section presents briefly the macroeconomic outlook in Turkey in pre-inflation targeting period with a summary of Turkey's stabilization attempt in 2000 and how that program ended with a financial crisis in 2001. Section 3 provides the experience of Turkey under *implicit inflation*

*targeting*. Section 4 outlines the preparations that the Central Bank of Turkey (CBT) undertook during the implementation of implicit inflation targeting with the aim to eventually start with the *explicit inflation targeting*. Section 5 presents the main features of explicit inflation targeting regime. Section 6 briefly discusses the policy challenges that CBT faced under inflation targeting. The final section provides a general assessment of the period and some concluding remarks.

## II) THE MACROECONOMIC OUTLOOK IN TURKEY PRE-INFLATION TARGETING

After experiencing high and volatile inflation rates and lack of fiscal discipline due to various institutional weaknesses for almost three decades, which had adverse contemporaneous and inter-temporal effects on the economy, Turkey decided to launch a stabilization program in 2000 supported by a Stand-By Agreement with International Monetary Fund. Towards the end of 1990s, it was becoming more apparent that the cost of having volatile and persistently high inflation rates was getting higher and higher. As a particular example, the combined effect of unfavourable inflation environment and lack of comprehensive attempts to improve fiscal stance had brought Turkey to the point of unsustainable fiscal deficits and steadily growing debt stock in that period. The latter would further lead to higher degree of fragilities, which would make Turkey sensitive to any external shock.

The stabilization program launched in December 9, 1999 had an ambitious fiscal adjustment program as well as monetary policy aiming at a rapid disinflation via implementing an exchange rate peg compatible with program's inflation targets. Despite its initial success in reducing inflation expectations and improving the fiscal conditions to some extent, the program started showing insufficient performance to achieve inflation targets, thereby resulting in the real appreciation of the Turkish lira against major currencies. The resulting concerns about the sustainability of the exchange rate regime and the overall stabilization program combined with the high degree of fragilities in the banking sector and high current account deficit led to a deep economic crisis in February 2001<sup>1</sup>. The economic

crisis in 2001 resulted in one of the largest contraction in the output and employment as well as a discrete jump in inflation rate and the exchange rates.

### III) EARLY PHASE OF INFLATION TARGETING

Having lost the exchange rate as the intermediary target, the inflation targeting emerged as the natural candidate for the new monetary regime. However, Turkish economy did not have the ideal preconditions that are crucial for a successful inflation targeting. In particular, Turkey had to start the new regime with an annual inflation rate of 68 percent, a considerable degree of fiscal dominance, very large debt to GDP ratio, a high risk premium on the government debt and on the average very short time to maturity of the debt (See Charts 1 to 3). Moreover, partly because of the rapid and sizeable depreciation of Turkish lira right after the crisis, the degree of dollarization in Turkey had reached very high levels.

The by-product of these conditions is worth considering further, as it was directly relevant for the potential success of the inflation-targeting regime. The main obstacles for an active monetary policy were the fiscal dominance, high degree of dollarization, and high and volatile inflation rates. In the meanwhile, the uncertainty surrounding the monetary transmission mechanism would create further challenges for the monetary policy practice. The uncertainties in overall economic relationships in the aftermath of the economic crisis and the regime change would pose substantial difficulties regarding the forecasts. High exchange rate pass-through could easily result in a case where movements in the exchange rate would make the targets unattainable. Finally, the institutional set-up was also inappropriate for a successful inflation targeting, which showed itself in the form of weakness such as the lack of central bank independence and accountability. These would also have adverse effects on the credibility of the monetary policy.

Under these circumstances, building credibility and communicating a medium-term outlook required institutional changes, as well as intermediary solutions. A particular institutional change, which

resulted in a considerable credibility gain, was the new Central Bank Law, which introduced price stability as the primary objective of the CBT. In April 2001, the new Law had provided the independence of the CBT for attaining the price stability. In addition, the CBT's accountability for the monetary policy actions was introduced for the first time by the Law. Finally, the Monetary Policy Council (MPC) has been formed with the new Law.

Although the new Law resulted in an immediate credibility gain, the preconditions for a full-fledged inflation targeting were still far from being ideal. In such an environment, the implicit inflation targeting emerged as the intermediary solution. The implicit inflation targeting resembled the full-fledged inflation targeting in a couple of ways. As an example, the CBT stressed price stability as the sole objective with the implicit inflation targeting. In addition, the short-term interest rates started to be used as a policy instrument. On the other hand, since the CBT was in the process of regaining credibility, it kept on emphasizing the risk that improperly functioning transmission mechanism would endanger the practice of the monetary policy. Finally, CBT used the communications policy in the meanwhile to stress the necessity of fiscal discipline and structural reforms to reduce the extent of the fiscal dominance and thereby to increase the effectiveness of the monetary policy.

On the operational side, the monetary policy's ultimate objective was to keep the year-end CPI inflation at the point targets, which were set one year in advance. However, as a major deviation from the standard inflation targeting, the CBT had used base money as a co-anchor in the early phase of the IT regime, which was conditionality due to new Stand-By Program.

Another point that needs to be mentioned was the role of the MPC during the implicit inflation-targeting period. In this period, MPC may be viewed mostly as having an advisory role. As an example, the interest rate decisions were taken by the governor, rather than MPC. The MPC meeting dates were not based on a preannounced schedule, which resulted in some degree of opaqueness in practice.

#### IV) PREPARATIONS FOR THE EXPLICIT INFLATION TARGETING DURING THE IMPLICIT INFLATION TARGETING PERIOD

During the implicit inflation-targeting period, the CBT also undertook several important steps towards full-fledged inflation targeting. For instance, being motivated by the fact that the technical capacities of the Research Department would be a key for identifying economic relationships and for improving the forecasts, the Research Department has been reorganized<sup>2</sup>. In addition, the new forecasting and policy analysis systems were formed in order to increase the quality of the input that would be used in monetary policy practice. Since understanding public's inflation expectations, price-setting behaviour of the firms and possible demand developments are important for determining the monetary policy stance, the CBT also started new surveys in the implicit inflation targeting period. The technical capacities of the Research Department have improved steadily over this period as part of preparations for explicit inflation-targeting.

During this period, the CBT also started communicating the rationale of the policy decisions, which enhanced the transparency of monetary policy considerably. In addition, along the transition path to the new monetary policy regime as well as to the low inflation environment, the CBT played a proactive role explaining how the public should perceive the newly available economic information and the economic data. These constituted important focal points for coordinating the public's expectations especially since the Turkish economy was yet to experience the single digit inflation figures for the first time in the last three decades.

However a couple of other developments outside the CBT have helped in improving the credibility of the new regime. For instance, the structural reforms to rehabilitate the financial system, which was damaged substantially during the financial crisis in 2001, not only provided a considerably larger room for the effectiveness of the CBT's policy actions but also possibly helped in the development of a properly working monetary policy transmission mechanism.

In this period, several structural reforms were undertaken to improve the public finances in Turkey as well. These included improvement in the transparency in government expenditures, the social security reform, and a successful privatization practice, as a result of which the fiscal dominance that would potentially constrain the effectiveness of the monetary policy actions had been diminished significantly. The political stability and the dual anchors at that time, namely the IMF-supported Stand-by program and the Turkey's accession process to the European Union, also had a complementary role in the meanwhile. The outcome of these policy measures were a rapid decline in realized and expected inflation, a sizable primary surplus in government budget, a large decline in the country risk premium as well as in the nominal and real interest rates and a fascinating growth performance.

## V) EXPLICIT INFLATION TARGETING

On January 1, 2006, the CBT started implementing the explicit inflation targeting. The new regime involves targeting the year-end 12-month headline CPI inflation, which is set jointly by CBT and the government. The target horizon is 3 years, i.e. the year-end inflation target for year  $t+3$  is set in year  $t$ .

This set-up comes with a couple of advantages. The co-responsibility of the CBT and the government is important for the credibility of the targets. The choice of the CPI rather than other prices indices as the target makes it easy for the public to understand and monitor the monetary policy stance. In the meanwhile, the CBT uses several core measures excluding the items beyond the control of monetary policy such as the food and energy prices to assess inflation dynamics and to communicate with the public the sources of variations in CPI inflation. The core measures gain particular importance whenever the prices of items such as the food and energy become highly volatile.

One cornerstone of the current monetary policy practice is the accountability of the CBT for the policy actions it takes. According to Article 42 of the CBT Law:

*“The Bank shall submit information to the Government in writing and inform the public disclosing the reasons of incapability to achieve the determined targets in due time or the occurrence of the possibility of not achieving such targets and the measures to be taken thereof.”*

In addition to the letters written to the Government, CBT reports to the Council of Minister and the Planning and Budget Commission at regular frequencies explaining the possible inflation developments as well as the track record of the monetary policy actions. Finally, the periodical reports prepared by CBT, such as the quarterly Inflation Report providing a detailed analysis of recent economic developments and monetary policy practice as well as the inflation forecasts, risks and possible policy steps by CBT in forthcoming periods, constitute an important policy tool designed in accordance with CBT’s accountability towards the general public.

The explicit inflation-targeting regime has also increased the transparency of the monetary policy practice considerably. With the new regime, the meeting dates of the Monetary Policy Council have been tied to a preannounced monthly schedule. After each meeting, the policy decision of MPC and its rationale are explained to the public with an immediate short press-release note published right after the MPC meeting and with a detailed summary note published both in Turkish and English within 8 days following the meeting. These notes are crucial also for communicating the signals about future monetary policy stance so as to keep the public’s expectations anchored. The new monetary policy regime requires an active communication by CBT about the sources of variations in the inflation as well as the forecasts. CBT publishes short assessment notes after the announcement of inflation figures in each month, so that the public would be informed of the factors that have driven inflation. This is particularly helpful in guiding the public about the temporary and seasonal factors, which might have affected the recent inflation figures without having potential to affect the medium term inflation outlook. Finally, the Inflation Report, the release of which follows a preannounced schedule, is an important part of the CBT’s communication strategy. Inflation Report not only provides a detailed analysis of current economic developments that would be relevant for the inflation dynamics but also provides CBT’s official inflation forecasts as the main communication tool.

As mentioned above, MPC did not have a clear role in monetary policy-making during the implicit inflation-targeting period. In contrast, MPC has been given sole responsibility of designing and implementing the monetary policy with full-fledged inflation targeting. In each meeting the MPC decides for the level of the monetary policy instrument, i.e. the overnight interest rates, by voting. In practice, the MPC sets the overnight interest rates by considering the medium term inflation outlook and how it compares with the inflation target. The MPC's decision making process also involves the active participation of the Bank's staff to provide policy inputs. For example, the various divisions of CBT make presentations to MPC in each meeting before the interest rate decision is taken. In addition, the Bank staff provides baseline inflation forecasts, the final version of which is fine-tuned by MPC before they are used as inputs in decision-making and published in the Inflation Report.

## VI) CURRENT POLICY CHALLENGES

Despite the success of CBT in implementing inflation-targeting and decreasing the inflation in the last couple of years, there are some challenges, which require further policy steps. These challenges mainly involve the difficulties encountered in communicating the monetary policy objectives and actions, and the task of conducting monetary policy in an uncertain environment as a result of economy's rapid evolution due to structural reforms and developments that are exogenous to monetary policy.

A successful inflation targeting practice requires public understanding about various factors, such as the central bank's reaction function and the lag between initial policy action and the ultimate impact on the inflation. In addition, the public may sometimes have difficulties in identifying the factors that are beyond the central bank's control but still relevant for the variations in inflation. However, these factors may be the key for public's inflation expectations and the realized inflation. In practice, the public's assessment of the monetary policy credibility may be contaminated with imperfect knowledge about factors beyond the

control of monetary authority and the lag in the monetary policy transmission. Therefore, inflation-targeting central banks may need to devote a considerable effort for communication.

Another challenge that a central bank may face in the aftermath of substantial changes in the economic structure is the difficulties in fully exploiting the benefits of using models in monetary policy making. In such an environment, CBT has recently increased the set of signals that it receives about the inflation dynamics, overall economic performance and the pricing behaviour of the firms. However, there is still room for further improvement by expanding the set of signals that are relevant for monetary policy. These involve issues like how inflation expectations affect the firms' price setting behaviour, how wage decisions are affected by realized and expected inflation, or how attentive the economic agents are to the signals revealed by the CBT.

## VII) CONCLUDING REMARKS

This study reviews the monetary policy experience in Turkey under inflation targeting. The Turkish experience under inflation targeting deserves a particular attention, as it was introduced in a period when Turkey was far from an ideal starting point for launching inflation-targeting regime. However, with a couple of intermediary solutions that eventually led to inflation targeting and substantial institutional changes that would directly be relevant for inflation expectations, Turkey rapidly moved towards single digit inflation figures. Today, CBT conducts full-fledged inflation targeting, and actively uses short-term interest rates and the monetary policy communication as policy tools. The monetary policy decisions taken by MPC involve a very intense process, where the Bank's various departments' staff provides input through their technical analysis and expertise. The communication of the decisions is another intense process, which requires CBT to have a proactive role in anchoring public's expectations, in guiding public how monetary policy actions should be interpreted. These are key for the overall credibility of the central bank, monetary policy regime and ultimately for the level of inflation.

# ANNEX

Chart 1 The Annual CPI Inflation in Turkey (Percent)

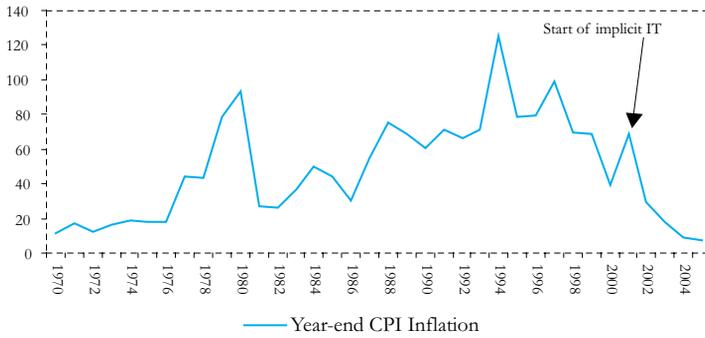


Chart 2 The Ratio of Public Debt to GNP in 2000-2002 Period (Percent)

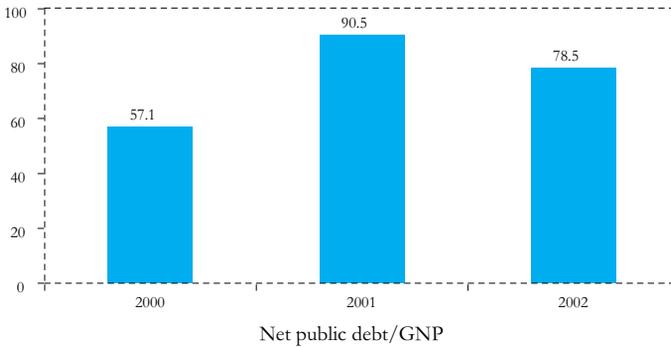


Chart 3 Monthly Average EMBI + Spread for Turkey (Basis Points)



Chart 4 The Ratio of Primary Surplus to GNP (Percent)

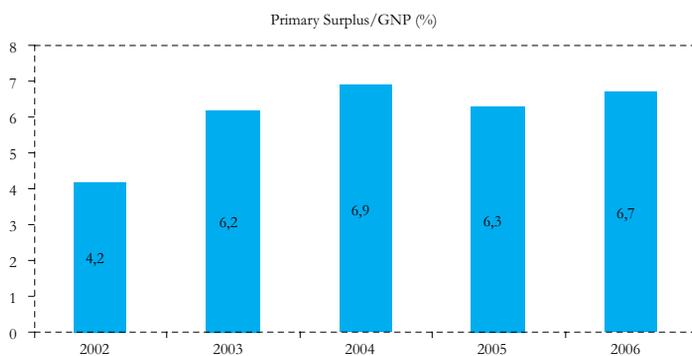


Chart 5 The Inflation Target and Realizations (Percent)

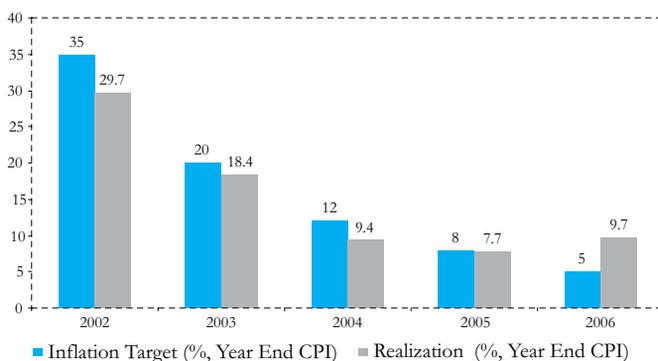


Chart 6 The Year End Inflation Expectations and Inflation Target (Percent)

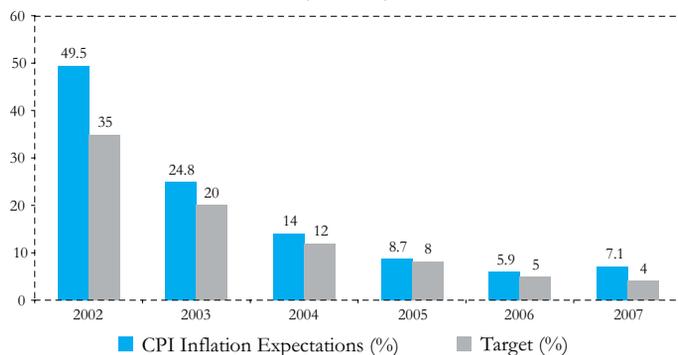
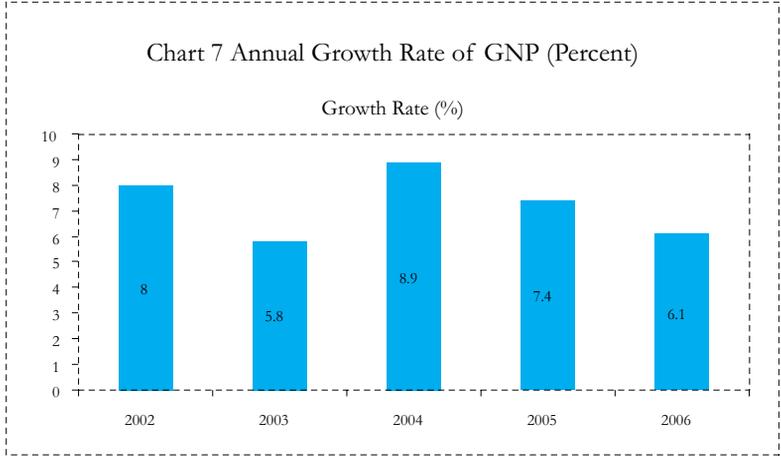


Chart 7 Annual Growth Rate of GNP (Percent)



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<sup>1</sup> See Ozatay and Sak (2002) for a detailed analysis.

<sup>2</sup> As part of the reorganization agenda, the Research Department was renamed as “Research and Monetary Policy Department” in July 2005.

# NEW MONETARY POLICY FRAMEWORK AND REDUCTION OF INFLATION IN SERBIA

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*Milan Sojić\**

## ABSTRACT

With a view to ensuring key macroeconomic conditions for Serbia's accession to the European Union, the National Bank of Serbia (NBS) has introduced a new monetary framework which envisages further reduction in core inflation and preservation of financial system stability.

NBS medium-term projection for the period 2007-2010 places year-on-year core inflation between 4-8% in 2007, 3-6% in 2008, 2-5% in 2009 and 2-4% in 2010.

To achieve this, the NBS Monetary Policy Committee uses the key policy rate, i.e. two-week repo rate applicable in open market operations, as its main instrument and conducts a flexible exchange rate policy. At the same time, due to robust inflow of foreign capital, reserve requirement ratio on foreign currency deposits of commercial banks is set significantly higher than that on dinar deposits.

Key words:

New Monetary Policy Framework, NBS Monetary Programme, reduction in core inflation, financial system stability, key policy rate, flexible exchange rate

As is the practice in modern monetary systems in the EU, US and many other developed market-oriented countries and countries in transition, the key objective of the National Bank of Serbia, as defined in the Law on the NBS, “is to achieve and maintain price stability”. Without prejudice to its key objective, the National Bank of Serbia shall support the pursuit of the economic policy of the Government of the Republic of Serbia, aiming to contribute to the achievement of financial stability and sustainable economic growth.

Monetary policy of the National Bank of Serbia is formulated in the Memorandum of the National Bank of Serbia on the Principles of the New Monetary Policy Framework Aiming at Low Inflation Objectives. This document defines monetary policy principles in the transitional period until the adoption of the inflation targeting regime.

In practice, this means that the National Bank of Serbia has introduced implicit inflation targeting with a projected inflation corridor. The adoption of official inflation targeting is expected in about two years. The projected inflation corridor trends down in line with the medium-term projection of target inflation in the Republic of Serbia.

The *Memorandum*, adopted by the Monetary Policy Committee of the National Bank of Serbia on 30 August 2006, sets out that inflation will be contained within a defined inflation corridor, with the key policy interest rate of the NBS (repo rate) as the main instrument and other monetary policy measures as supporting instruments.

The *Memorandum* outlines the new monetary policy framework and the manner of its implementation:

- Core inflation corridor for a calendar year is defined as a numerical interval (December-to-December). Projections of the annual retail price growth will be prepared in cooperation with the Government of the Republic of Serbia, based on planned adjustments in administered prices.
- Maintaining inflation within the projected corridor enhances credibility of the NBS monetary policy and enables anchoring of inflation expectations.

- Monthly changes in prices over a year earlier represent a very important point of reference for the Monetary Policy Committee decisions, as they enable an assessment of any deviation of inflation from the projected inflation corridor.
- The Serbian Bureau of Statistics collects data and publishes information on movements in prices, core inflation and headline inflation.
- The application of annual indices enables justification of short-term, unsystematic and seasonal deviations.
- The purpose of defining inflation corridor is to ensure that inflation objective is met regardless of shocks and changes to the economic environment. The NBS anticipates a neutral impact of economic shocks that will not call for a change in the monetary policy stance.
- The National Bank of Serbia will counter sudden and powerful shocks to the economy to prevent departure from the projected inflation corridor band.
- The NBS monetary policy response to sudden and powerful shocks will depend on their strength and nature, as well as on the level of inertia of inflation expectations.
- It should be noted that a response to demand shocks is easier to accomplish, as changes in inflation and economic activity move in the same direction. Rises in interest rates and inertia of inflation expectations weaken economic activity and dampen inflationary pressures.
- Adequate response to supply shocks, however, is a much more complicated matter, as economic activity and inflation move in opposite directions. Efforts to offset supply shocks on inflation by means of monetary policy alone can lead to unnecessary restraints on economic activity. On the other hand, any attempt to fully offset a supply shock by raising prices shall speed up inflation. This would call for monetary policy tightening in the immediate future and would induce a slowdown in economic growth.
- In case of supply shocks, monetary policy aims to prevent the emergence of secondary effects. The risk of such effects is particularly strong in countries with a relatively short history of low inflation. When analysing the effects of supply shocks, the National Bank of Serbia attempts to properly quantify

headline and core inflation to facilitate differentiation between temporary and permanent shocks.

- Due to a time lag customarily implicated in monetary regulation its effect on current movements in inflation is relatively insignificant. The duration of such lags is not predetermined and depends on structural and institutional changes involved. Any change in the transmission mechanism will entail a careful evaluation of the timing of the effect of inflation-related decisions.
- Monetary policy is implemented in an environment of high uncertainty, which, *inter alia*, means that the inflation projection model used by the National Bank of Serbia could cease to reflect fairly the actual economic developments, as a result of ongoing structural changes in the economy. Hence, in its decision making, the National Bank will take into account all available information, in addition to deviations from the inflation projection.
- Monetary policy will be communicated to the public in an effort to balance the risk factors implied by the inflation corridor.
- Any assessment of the degree of monetary policy restrictiveness should take into account not only real interest rates but the real exchange rate as well.

Owing to the implementation of the NBS Monetary Policy Programme, core inflation rate (market-determined prices) was cut from 14.5% in 2005 and 5.9% in 2006 to 3.8% as measured in the first 10 months of 2007. We estimate with a high degree of statistical significance that core inflation will settle around 4.5% year-on-year at end-2007, *i.e.* below 4% on average for the entire year.

Headline inflation is expected to reach 6.5% year-on-year at the end of 2007, which is mainly attributed to drought effects and growth in regulated prices and world oil prices.

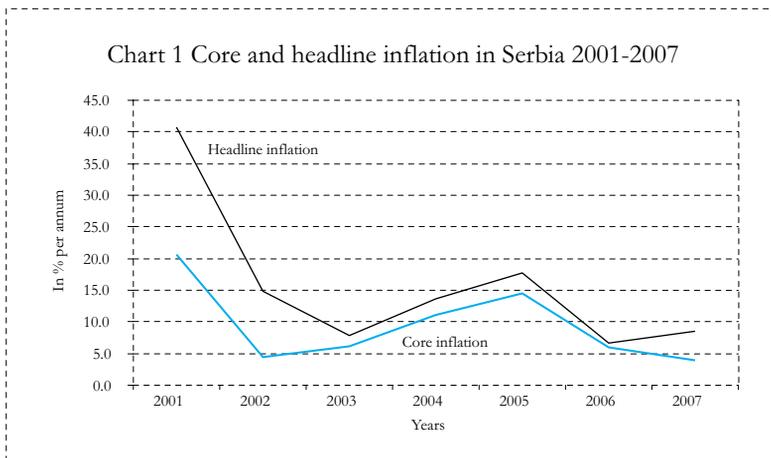
Since the NBS aims to formally adopt inflation targeting in the near future to increase transparency of its monetary policy and to enhance communication with the public, it has decided to prepare and publish quarterly inflation reports as its main channel for communicating with the public. This report shall provide information

on the main developments in the economy that affect the decisions of the Monetary Policy Committee and the activities of the National Bank of Serbia.

Inflation report contains information on the current and expected inflation, analysis of underlying macroeconomic developments, explanation of the rationale behind the decisions of the Monetary Policy Committee and an assessment of the monetary policy efficiency as implemented during the previous quarter.

Integral parts of this report are inflation projections for at least four quarters in advance, assumptions on which such projection is based and an analysis of the basic risks involved in the achievement of the inflation target.

Access to such information shall enable the public to have better understanding of the monetary policy implemented by the central bank and its commitment to achieving inflation objective. Moreover, it shall play a role in curtailing inflationary expectations and maintaining price stability, which is the basic task of the NBS as defined by the Law.



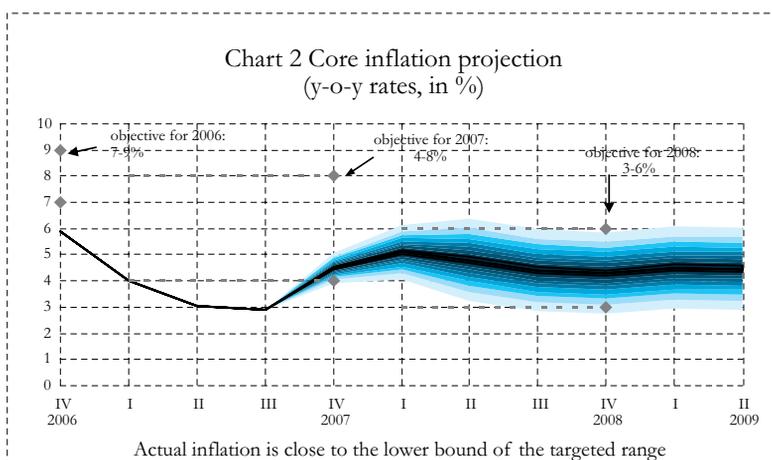
It is certain that the National Bank of Serbia will achieve its core inflation target set for the year 2007 (4-8%). As acknowledged in the recent IMF mission statement, the monetary policy has performed

well despite a number of inflationary shocks, such as agricultural shock and the increase in oil prices, fiscal developments and high rise in wages.

The main feature of movements in prices in Q3 2007 is the effect of the seasonally unexpected low supply (and high growth in prices) of agricultural products which, together with the effect of the increase in world prices of oil outweighed disinflationary effects of the nominal appreciation of the dinar and the appreciation gap of the real exchange rate. As a result, core inflation more than doubled in Q2 2007 while, after declining for two consecutive years, year-on-year core inflation recorded an increase to 3.3%.

Monetary policy retained its restrictive character in 2007 primarily as a result of the real appreciation of the exchange rate for the dinar.

GDP output and foreign trade performance retained relatively high growth rates in 2007. Economic slowdown in Q3 2007 was induced by unfavourable weather conditions and not by tightened monetary policy. Weather related decline in agricultural production led to a consequent decline in industrial output.

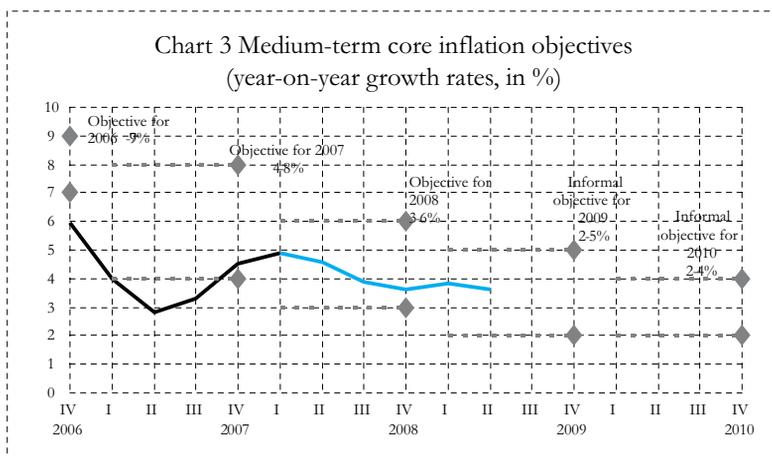


We estimate that Q4 2007 core inflation will fall relative to Q3 and its end-2007 central projection will settle closer to the lower bound of the target range, i.e. 4.5%. Key factors expected to induce

an increase in core inflation in Q4 are similar to those prevailing in Q3 (drought and the increase in world prices of crude oil). On the other hand, Q3 nominal appreciation of the dinar leading to lower import prices and increased appreciation gap of the real exchange rate shall have a disinflationary effect in the period ahead.

End-2008 core inflation will range between 2.7% and 5.9% while central projection is placed around 4.3%. We expect that the year-on-year increase in core inflation throughout the year 2008 will remain within the targeted range of 3-6%. Such projection presupposes moderate relaxation of monetary policy in the period ahead, which began by a 25 basis points cut in the key policy rate in November 2007. The relaxation is needed in order to rein in disinflationary pressures emanating from the nominal appreciation of the exchange rate and the appreciation gap of the real exchange rate for the dinar. Monetary policy relaxation could fail to materialize should it be assessed that fiscal movements are likely to induce some inflationary effects.

Central projection places headline inflation in 2008 at around 6.0%, assuming the projected growth in regulated prices (as projected by the Ministry of Finance). Major risk to the achievement of such projection may come from excessive demand resulting from movements in prices of oil and agricultural products.



In order to timely prepare for EU accession, medium-term inflation projection envisages lowering of core inflation to 2-4% in 2010. A switch from projecting the RPI index to projecting the CPI inflation index has also been planned.

Monetary policy of the National Bank of Serbia is forward looking and its decisions will be based on inflation projections. When the projected rate of inflation falls short of or exceeds the objective range, both the level of interest rates and the monetary policy stance are reviewed. The National Bank of Serbia will use all available information and apply an adequate mix of monetary policy instruments. Based on monetary developments and inflation projection, the National Bank of Serbia can decide to revise the key policy rate to a level compatible with maintaining core inflation within the projected range. In November 2007, NBS 2W repo rate came to 9.5% (p.a.).

As defined in detail in the Monetary Policy Programme of the National Bank of Serbia in 2007, the NBS uses its interest rate policy to influence foreign exchange supply and demand in the foreign exchange market.

The exchange rate of the dinar will be formed freely, with reference to supply and demand in the foreign exchange market.

The NBS will channel changes in the exchange rate of the dinar towards the accomplishment of the set objective, while retaining the right to intervene in the event of significant oscillations in the foreign exchange market that could threaten medium-term sustainability of the country's external position.

The new framework defines the following three instances in which the National Bank of Serbia may intervene in the foreign exchange market: (1) to limit daily oscillations, but not resisting cumulative pressure over a longer period, (2) to contain potential threats to financial and price stability (after the potential of influencing inflation through changing the key policy rate is exhausted) or to prevent inflation from being lower than planned, and (3) to safeguard an adequate level of international reserves. In addition,

during the transitional period which encompasses the year 2007 (when performance of exchange transactions was transferred to the scope of commercial bank operations), the National Bank of Serbia will intervene in the process of interaction with exchange offices.

The National Bank of Serbia will continue to develop and strengthen market instruments of monetary regulation and to support development of the interbank money market, in order to upgrade the banking sector's liquidity management.

To regulate liquidity of the banking system, the National Bank of Serbia will enable banks to resort more efficiently to its lending and deposit facilities, while using interest rate corridor as a mechanism for managing money market interest rates.

The NBS shall closely observe the lending activity of banks and take adequate prudential and other measures of monetary regulation to prevent any threat to the achievement of the key monetary policy objective.

Key challenges in 2008 shall certainly be the narrowing down of foreign trade and current account deficits of the balance of payment, cutting unemployment and completing the restructuring and privatization of large public enterprises.

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# MONETARY POLICY STRATEGY OF THE NBRM: EXPERIENCES AND OPTIONS

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*Aneta Krstevska\**

## ABSTRACT

The National Bank of the Republic of Macedonia (NBRM) has been implementing an exchange rate targeting strategy for more than a decade and so far it has proved to be very successful. The aim of this paper is to explain briefly the advantages of this strategy and moreover, to put more focus on the analysis for peg sustainability. Also, the paper discusses the effectiveness of interest rate transmission channel in the Macedonian economy. Based on the analysis on peg sustainability and still existing problems in the functioning of the interest rate transmission channel, the main findings are that current monetary policy strategy is still valid and regular monitoring of the environment that is changing dynamically is more than necessary.

## INTRODUCTION

Starting from 1995, the NBRM implements the exchange rate targeting strategy, by using the exchange rate at the beginning towards the German Mark and now against the Euro, as a nominal anchor in the economy. From this time perspective, the implementation of this monetary policy strategy in the Macedonian economy has quite a long history and at the same time a record of positive outcomes.

The main advantage of the peg is that under this strategy it is very clear for the public what the main focus of the Central Bank is, when implementing the monetary policy. Also there is a possibility for daily monitoring of the exchange rate developments which are quite understandable for the broad public.

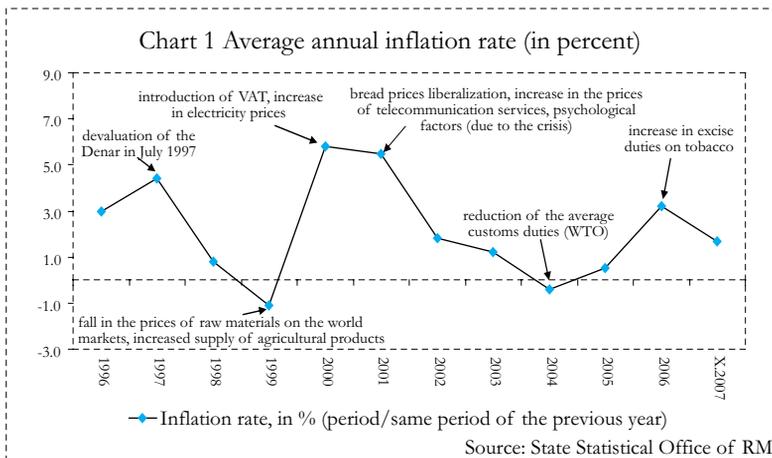
The importance of the stable exchange rate is arising from the main country specifics. Namely, the Macedonian economy is a small and open economy, with relatively high degree of Euroization. Euro is a dominant currency in the overall export and import payments, with EU being the most important trading partner and there is a narrow financial and foreign exchange market. All these features support the peg in the Macedonian economy.

However, the policymakers should be aware of the dynamically changing environment and therefore should always look for confirmative arguments of the current monetary policy stance and moreover, for its sustainability at least on a short to medium run. In this view, this paper explains not only the experience of having a peg, but even more the options and analysis of the peg sustainability. The paper is organized as follows: (1) Inflation, external sector and interest rates in the Macedonian economy; (2) Analysis of the peg sustainability; (3) The effectiveness of the interest rate transmission channel; (4) Conclusions.

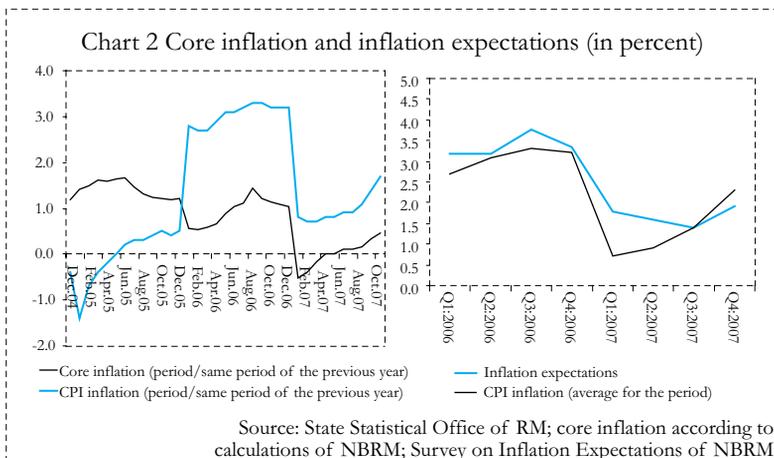
## 1. INFLATION, EXTERNAL SECTOR AND INTEREST RATES IN THE MACEDONIAN ECONOMY

The Macedonian economy has a good inflation record, with an average annual inflation rate of around 2% in the last ten years. After macroeconomic stabilization that took place in the first years of the transition period, starting from 1995 the inflation came down to one digit level and remains relatively low. Inflation was mainly determined by supply side factors and systemic changes in the economy. Following the inflation path in Chart 1, the following important inflation factors can be listed for the most significant changes in the average annual inflation rate:

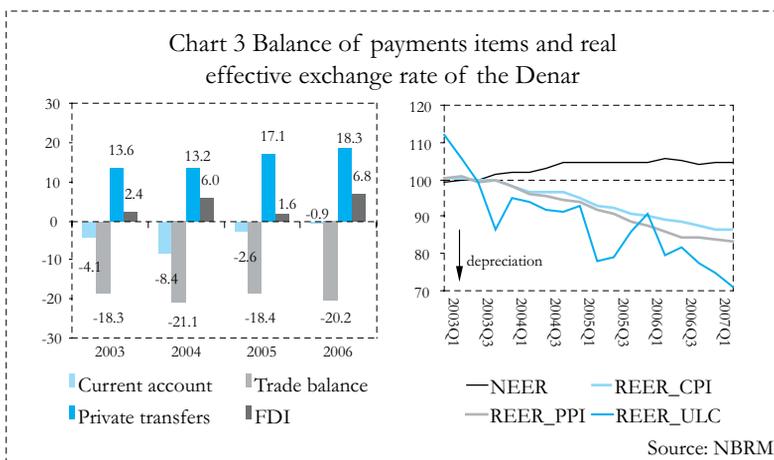
- Higher level of inflation in 1997, when the devaluation (the only one devaluation) of the national currency Denar was done;
- Deflation in 1999, due to fall of world prices of the raw materials and increased domestic supply of the agricultural products;
- Higher level of inflation in 2000, due to introduction of VAT and increase of electricity prices;
- In continuation, the high level of inflation in 2001, due to liberalization of the bread prices, increased prices on telecommunication services, but also the presence of the psychological factors influence during the internal security crisis;
- Deflation in 2004, due to reduction of the average customs duties after the entrance into the WTO;
- Higher rate of inflation in 2006, due to increased excise duties on tobacco, in order to get it in line with the EU regulation.



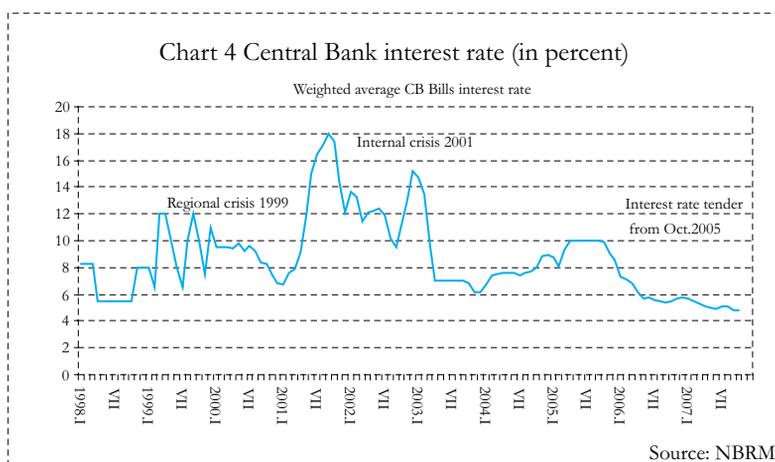
Core inflation (without food and energy) in the last couple of years has been relatively more stable, having in mind the factors that determined the overall price index. In addition, inflation expectations were quite in line with the actual inflation developments, meaning that actual inflation has been relatively predictable and close to the expected one.



With de facto fixed exchange rate in place, the external sector performances are of crucial importance. The current account balance of the Macedonian economy improved significantly in the last years, reaching a level of current account deficit of less than 1% of GDP in 2006. The main reasons for this improvement are private transfer inflows and higher foreign direct and portfolio investments. Trade deficit over these years was relatively high, at a level of around 20% of GDP, but to a large extent it was compensated by private transfers. The real effective exchange rate of the Denar has a depreciating trend, considering the lower domestic prices relative to trading partners, in favour of the price competitiveness of the economy.



Under exchange rate peg, the monetary variables are subordinated to the peg as an intermediate objective of monetary policy - maintenance of the stable exchange rate in order to keep price stability in the economy. Chart 4 shows that NBRM in the past faced several episodes, in which it had to increase the interest rate on the main monetary policy instrument - Central Bank bills, in order to protect the exchange rate stability (during the regional crisis in 1999 and the internal crisis in 2001). In the last couple of years, after the switch towards interest rate tender from October 2005 onwards, there is a declining trend of the central bank reference interest rate and therefore gradual squeezing of the interest rate differential.



## 2. ANALYSIS OF THE PEG SUSTAINABILITY

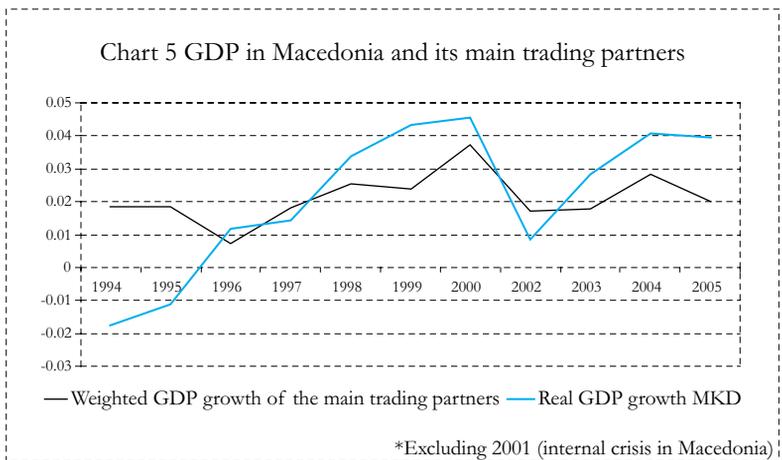
In general, the exchange rate targeting strategy so far has proved itself as suitable for the Macedonian economy and its implementation has been quite successful. However, considering the changes in the transition process, the current and future challenges in the process of convergence towards more developed economies and globalization tendencies, monetary authorities are facing the need for regular assessment of the peg sustainability. The assessment of the existing monetary policy strategy is actually an issue that somehow is usual for the central banks anyway, but even more in a case when there is a risk for more essential changes in the environment.

The analysis of the peg sustainability<sup>1</sup> presented in this paper incorporates six groups of criteria aimed to assess the current stance of the exchange rate regime. These groups of criteria are presented further on.

a) Trade and economic integration criteria

Within trade and economic integration criteria, the following indicators are taken into analysis:

- Openness of the economy - the Macedonian economy is a highly open economy, with an average share of external trade of 84% to GDP in the period 1993-1998 and even more in the period 1999-2000 when this ratio was 98%. The increasing openness of the economy is in the favour of maintaining a stable exchange rate;
- External trade in Euro - around 70% of the external trade is done in Euro. This big portion of the payments in Euro, which is the anchor currency, is stressing the importance of the exchange rate of the domestic currency against the Euro, that is actually one of the main reasons for choosing the exchange rate targeting strategy;
- Importance of the economic cycle of the main trading partners - there is a positive correlation of 0.6 between GDP developments in Macedonia and the main trading partners (Germany, Greece, Italy and Bulgaria), indicating high dependence on the trading partners' economies.



Having in mind these criteria, the main message is that the Macedonian economy has been registering strong trade and economic integration, which is in favour of maintaining the stable exchange rate.

b) Financial integration criteria

Financial integration is measured through the following criteria:

- Stock exchange turnover - the turnover on Macedonian stock exchange is relatively small, composing around 3% of GDP in the period 2003-2005, although it is increasing. The intensified trading in the last years to a large extent is due to the increased interest of nonresidents for investing in domestic securities, especially in shares of domestic companies, which reflects a positive expectation about their perspective;
- Monetization in economy - the level of monetization is measured through the share of broad money to GDP and in the period 1998-2005 it was around 28%, reflecting still relatively low monetization in the economy.

These indicators are pointing out a low financial integration, which allows for keeping a fixed exchange rate.

c) Macroeconomic stabilization criteria

The assessment about potential risks for macroeconomic stabilization is analyzed in this way:

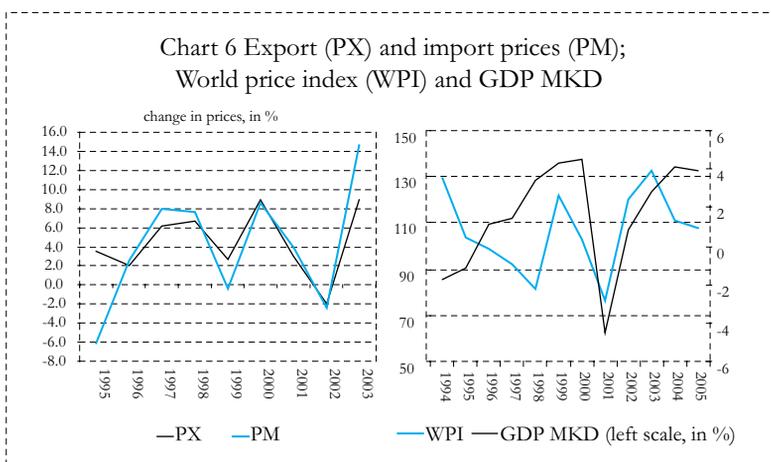
- The relationship between capital and trade flows - in the last years when the Macedonian economy has been registering more intensive inflows based on foreign direct and portfolio investments and during the process of gradual liberalization of the capital account, the overall capital flows within the capital and financial account are increasing relative to the trade flows;
- The importance of the nominal and real shocks - nominal shocks in the Macedonian economy seem to be important due to volatile money supply, but also risk from real shocks is present, considering the high openness of the economy.

The existing risks on nominal and real shocks are in favour of keeping the fixed exchange rate, but the increasing capital mobility indicates the opposite.

d) Diversification and terms of trade criteria

This group incorporates the following criteria:

- Volatility of export and import deflators - the ratio between export and import deflator volatility in the Macedonian economy is relatively low, due to imported inputs in the exported products (usually the same group of products is present on the import side and after processing on the export side too, but with higher value added). Therefore, changes of the world prices affect both the export and import;
- Export diversification - in the overall export structure, there is a relatively high share of primary products; indicating low export diversification;
- Dependence on the world prices - there is a positive correlation coefficient of 0.4 between the Macedonian economy GDP and the world price of the main exported goods, which is an evidence for low production diversification and dependence of the economic performances on the world market developments.



The last two criteria confirm the trade and production concentration of the economy and therefore benefits from the exchange rate flexibility.

e) Criteria for credibility/need for nominal anchor

As already explained in the beginning, the Macedonian economy has quite an impressive inflation record with an average inflation in the last decade of around 2%. In the last ten years there is no month with an annual inflation over 10%, which is taken as a benchmark in the analysis. Having inflation performance in mind, and confirming strong credibility in the monetary policy, obviously there is no effective need of nominal anchor for stabilization of the inflation expectations in the economy.

f) Fear of floating/balance sheet effect criteria

The last group includes the following criteria:

- Level of Euroization - the level of Euroization is measured through three indicators: the share of foreign currency deposits in the money supply is on average around 50%, the share of foreign or indexed debt to total domestic debt is around 90%, and the share of gross private debt to total external debt is around 60%. Based on these indicators, the main conclusion is that the Macedonian economy has a relatively high level of Euroization;
- Relationship between the exchange rate and economic activity - having in mind a fixed exchange rate for quite a long period of time, for this purpose the relationship between nominal effective exchange rate and GDP has been taken into account, but no strong correlation is found.

Based on these criteria, we confirmed a strong potential balance sheet effect mainly because of the high Euroization level in the economy, which supports the fixed exchange rate regime.

### 3. THE EFFECTIVENESS OF THE INTEREST RATE TRANSMISSION CHANNEL

The NBRM has been historically relying mainly on the exchange rate transmission channel as being the only effective one, although always trying to follow the changes in the effectiveness of the other channels. As far as the interest rate transmission channel is concerned, there is an improving trend although quite slow. In the period 1997-2005 a positive correlation of 0.33 is found between reference interest rate of the NBRM (interest rate on the Central Bank bills) and the average weighted lending interest rate of the banking sector. This positive relationship is mainly arising from the period 2000-2003 when correlation was even higher (0.44), but however it was not the case in 2004, which gives an indication for the interest rate transmission channel as still not fully operational. The interest rate pass-through from the Central Bank interest rate to the banks' lending interest rate is estimated at 0.1 with a time lag of a month (Krstevska, 2007).

*Table 1 Correlation matrix*

1997-2005	DCBI	DLIR	DDIR	Abbreviations: CBI-Central Bank interest rate LIR-Lending interest rate DIR-Deposit interest rate D-difference
DCBI	1	0.332865	-0.00202	
DLIR	0.332865	1	0.139176	
DDIR	-0.00202	0.139176	1	
2000-2003	DCBI	DLIR	DDIR	
DCBI	1	0.440716	0.001577	
DLIR	0.440716	1	0.341846	
DDIR	0.001577	0.341846	1	

Analyzing the interest rate transmission channel, one should have in mind that the Macedonian banking system is in a position of excess liquidity. Banks do not borrow from the Central Bank, but invest in its short-term securities. In the last couple of years

the banking competition proved to be a very important factor for the banks' interest rates, which resulted with a declining trend of the lending interest rates and even increased deposit interest rates in 2007 (meanwhile, influenced by the increase of the interest rates in the international markets).

#### 4. CONCLUSIONS

The Euro peg proved to be an appropriate choice for monetary policy strategy for the Macedonian economy, which has been implementing successfully for quite a long period of time.

The analysis on peg sustainability incorporates a lot of indicators, out of which only three are against the peg: low export and output diversification and capital flows intensification. Benign inflation history is the only criterion that indicates no further need for the peg. On the other hand, according to most criteria (12), the peg is still valid for the Macedonian economy. From the operational viewpoint, only slow improvement in the functioning of interest rate channel is registered, meaning that the exchange rate channel is still the most effective one.

Looking forward, the dynamics of capital flows and the development of the financial markets will be probably the most important factors influencing the monetary policy implementation and its transmission mechanism.

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\* Aneta Krstevska, Director, Research Department, National Bank of the Republic of Macedonia.

<sup>1</sup>The analysis is based on the IMF Working Paper no.54/2006: Husain A., "To Peg or Not to Peg: A Template for Assessing the Nobler". For the analysis for Macedonia, the author would like to express special thanks to Sultanija Bojceva Terzijan, Research Department, NBRM.



# EVOLUTION AND ADOPTION OF THE BANK OF ALBANIA'S MONETARY POLICY: A FORWARD-LOOKING VISION AND A CALL TO BE PRE-EMPTIVE

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*Ardian Fullani\**

## ABSTRACT

JEL Classification:

Keywords: Monetary Policy, Inflation Targeting, Albania

## 1. INTRODUCTION

The first design and implementation of monetary policy in Albania dates back in 1992. Today, 17 years later, substantial changes of the Albanian economy and the evolution of economic thought call for an open debate on the nature and objectives of monetary policy. In this aspect, it is necessary to analyze past developments in order to identify the changes and assess the effectiveness of the current regime in view of its dominant characteristics.

Recently, the world economy has been experiencing a period of decreasing inflation. This is often recognized as one of the positive effects of globalization. However, it is evident that during the last couple of decades, central banks all over the world have been particularly focused on achieving and maintaining price stability. The most successful world practices reveal that current monetary policy aims at price stability, usually expressed as a numerical

target or interval target, under an inflation targeting regime. Monetary policy encompasses forward-looking vision and manages current developments through a strategy for the future. Such a policy focuses on inflation expectations and employs all available information to identify potential risks and challenges with regard to these expectations. Its aim is to keep inflation expectations anchored around the central bank's inflation target. The Bank of Albania (BoA) has applied a monetary policy philosophy similar to that of inflation targeting regime, although it is developed under the umbrella of a monetary targeting regime. The main goal of this discussion paper is to describe the transformation process of monetary policy, and to encourage an open debate with regard to the future nature of monetary policy in Albania. Also, this study discusses the advantages of inflation targeting as the most suitable approach of monetary policy for a small open economy. The analysis based on the Albanian experience confirms that inflation targeting is a suitable regime, which fulfils the conditions for achieving and maintaining the price stability in the long run.

Monetary policy adoption and reform during the transition period may be considered as one of the most successful and effective economic reforms in Albania. Monetary policy has evolved in line with other economic and social developments. The progress of other economic reforms in general, the country's financial and economic situation, the development of markets and free market economy institutions, the increase of specialized knowledge on financial markets, and public education on the free market economy have strongly affected the nature, the adjustments and the effectiveness of monetary policy. The current developments in the capital and financial markets both in Albania and in the region (by region I mean the South Eastern Europe), the slow pace of reforms compared to the other transition countries in the region as well as the political and economic turmoil have negatively impacted the interest of the international capital market investors in Albania. These are also the reasons of the current low level of financial integration of the country. Consequently, the impact of external factors on the Albanian economy has been limited mostly to foreign goods prices. This paper focuses on the changes in the monetary policy determinants such as independence, transparency, type of regime, etc, in order to better

understand their respective contribution to the progress and success of monetary policy.

The transition from a centrally planned economy into an emerging market economy consists of many social, political and economic developments that have framed not only the nature of problems faced by the Albanian economy, but also the nature and degree of success of the BoA's monetary policy. Three are the main periods identified in the BoA's monetary policy. These periods differ not only because of the events and the motivation of monetary policy (by motivation I mean the legal obligation of the BoA's monetary policy to achieve objectives set by macroeconomic programs), but also because of the different nature and philosophy of BoA.

During the first period of economic and political transformation -1992-1996-, Albania established a two-tier banking system. According to the Central Bank Law approved by the Parliament in 1992, the BoA was "the bank of banks" and its main objective was "to maintain the value of the national currency (the Albanian Lek - ALL) both inside and outside the country"<sup>1</sup>. The newly created central bank designed a monetary targeting regime, which relied mainly on direct instruments of monetary control. The citation in the Law of the obligation to maintain the value of the national currency and to implement the monetary policy provides evidence that price stability constituted the main objective for the BoA. In 1996, the main objective of the central bank was redefined as "to achieve and maintain price stability"<sup>2</sup>. Macroeconomic policies were generally sound during this period; however the informal sector started to emerge in its most negative form peaking with the collapse of the pyramid schemes in the early 1997 and the economic and social consequences associating this phenomenon. The year 1997 marks a temporary shift in the development curve. The economic imbalances arising from this shift were abruptly eliminated mainly because the crisis remained out of the banking system. The burst of the financial bubble created by the parallel informal system (pyramid companies) brought about a change in the consumer behaviour. However, it did not affect the public confidence in the financial institutions. During 1997, the legal elements of the BoA independence were improved and established by law. By the end of 1998, BoA restarted to publish

the quantitative target of price stability. In 2000, it decided to apply no longer the credit limit. Eventually, the monetary policy relied on indirect market instruments. The one week Repurchase Agreements (Repo) rate became the most important instrument of open market operations. In 2003<sup>3</sup>, the experts and policy-makers of BoA started to discuss the design and the implementation of an explicit inflation targeting regime<sup>4</sup>. The first serious attempts in this respect were made in 2005. A group of BoA experts started to study the theoretical and practical aspects of this regime, and also conducted the empirical investigation of the monetary policy and economic developments. During the following years, BoA focused on the improvement of technical, analytical, research and quantitative skills of the monetary policy decision-making. Also, it increased transparency and improved the communication with the public. Due to all these improvements, the current BoA monetary policy highly depends on inflation forecasts and estimations of inflationary pressures in addition to the performance of monetary aggregates. Monetary policy decisions are expressed in changes of the key interest rate (one week repo) and are immediately announced to the public.

The current BoA monetary policy is forward-looking. Such a visionary policy does not simply imply a decision-making process driven by inflation expectations or the use of new operational instruments that improve the transmission of monetary policy and maintain inflation and inflation expectations within the targeted level. Such a forward-looking approach also implies ongoing changes and improvements of the regime in order to enable it to overcome the challenges and face the potential threats of the future. The strategic approach of BoA relies on the principle that a central bank should not be waiting for a crisis to occur and only then to adjust or improve its monetary policy rule. This new forward-looking approach requires that monetary policy should be considered an issue for ongoing discussions in order to cope with changes in the nature and characteristics of the economy and also with the future challenges, taking account of their significance to the monetary policy progress.

The main focus of this paper is to identify the optimal monetary policy regime for a small open economy as Albania's. The rest of

the paper is organized in three sections. The first section provides a detailed historical analysis of the adaptation of monetary policy in the context of the social and economic developments. The analysis is based on some institutional factors such as independence, transparency and the decision-making framework. The second section discusses the rationale behind the choice of BoA's visionary monetary policy. The last section concludes the paper with a brief review and provides some recommendations.

## 2. THE ADOPTION AND THE EVOLUTION OF BOA'S MONETARY POLICY

The first active monetary policy in Albania was introduced in 1992, when the modern central bank -BoA- was created as an independent institution. The main function of BoA established by law was the design and implementation of monetary policy. Prior to 1992, the functions of the central bank were performed by the State Bank of Albania (SBA), which operated under a centralized and planned-economy and was accountable to the Council of Ministers or the Ministry of Finance. In the central banking capacity, the SBA's main functions were the issuing of currency, acting as banker and fiscal agent to the government, holding all the country's foreign exchange assets and liabilities, making payments to individuals and non-agricultural state enterprises, collecting all government revenues, granting housing loans to individuals and loans to small businesses. All these functions were in line with the centrally planned budget<sup>5</sup>.

This section describes the evolution of monetary policy in Albania within the framework of social and economic developments. I will attempt to accurately define the nature of monetary policy, its past and current issues, its challenges that motivate the debate over the optimal monetary policy regime and the issues to be solved or which have the highest probability to materialize in the future.

The evolution and the adjustment process of monetary policy in Albania consist of three periods: a) 1992-1996; b) 1997-2001; and c) 2002-2007. These periods are sorted out based on particular economic or social events/shocks, which have strongly impacted the

Albanian economy, and consequently the monetary policy objective, design and implementation.

As previously mentioned, the first period starts in 1992 with the establishment of BoA and ends right before the collapse of pyramid schemes. During this period, BoA conducted a successful monetary policy and managed to achieve and maintain macroeconomic stability.

The second period starts in 1997 with the collapse of pyramid schemes and ends in 2001, right before the massive withdrawal of bank deposits and the severe energy crisis. The collapse of pyramid schemes and the consequent social and economic turmoil led to the destabilization of Albania's economic indicators. At the same time, these events prompted many legal and regulatory changes which strengthened the independence of BoA. The new legal framework enabled the management of monetary policy, which in turn succeeded once again in achieving macroeconomic stability.

The last period that starts in 2002 and ends in 2007, is characterized by ongoing efforts toward the modernization of the monetary policy framework. This process is based on the best international practices and the increased role of the economic research which are dominant factors that guide the monetary policy decision-making. During the last period, the monetary policy has managed to successfully maintain macroeconomic stability without hampering the country's economic growth. The success and the sustainability of results are in line with the increased credibility and reliability of BoA and the effectiveness of its monetary policy. The evolution of concepts, instruments and knowledge has led to a gradual switch from a monetary targeting regime toward an inflation targeting regime, both at practical and operational level of monetary policy.

## 2.1. PERIOD OF 1992-1996

In the beginning of the 90s, the social, economic and political situation in Albania was quite severe. The Albanian economy underwent a total collapse generated by large economic imbalances in both internal and external sectors. The extreme economic hardship

created the impetus for all the political and economic reforms including monetary reforms that were undertaken.

The shift toward a market oriented economy made necessary the reform of the banking system. A two-tier banking system was legally created by the Law no.7559 “On the Bank of Albania” and Law no.7560 “On the Banking System in Albania” approved by the Parliament in April 1992. As previously mentioned, BoA became the central bank, acting as a “bank of banks,” while commercial banks formed the group of savings and crediting financial institutions. The law established that BoA’s main responsibility was to approve and implement the country’s monetary policy; however, it did not establish the design of monetary policy. During this period, the monetary policy was designed and implemented in accordance with the IMF’s technical support programs, and managed to achieve positive results in terms of economic activity enhancement and low inflation.

#### 2.1.1. Macroeconomic conditions and developments outside BoA<sup>6</sup>

The end of the centrally planned economy led to a total economic collapse of the country. Specifically, by the end of 1992, annual inflation reached 236.6 percent, the annual real GDP fell by 9.7 percent, following a decrease by 27.7 percent in the previous year. The unemployment rate was greater than 25 percent. At the same time, the current account deficit reached 66 percentage of GDP and BoA’s gross foreign reserves were sufficient to cover 3 weeks of imports. The exchange rate was administratively depreciated several times during 1992, decreasing from 25 ALL/USD in September 1991 to 110 ALL/USD in July 1992. In the same month, the Albanian authorities abolished the fixed exchange rate regime due to the depletion of foreign reserves and negative external sector balances. The ALL was allowed to float freely against other currencies. This decision was followed by an immediate depreciation of ALL by 220 percent.

During 1992-1996, Albania took major economic, social and political reforms due to high inflation, drastic GDP decline, significant

depreciations of the exchange rate, high current account and trade deficits. Economic reforms were designed in line with the IMF support programs and aimed at creating the bases of the free market economy. In this context, the drafting of a legal framework and the transformation of economic and financial institutions according to the requirements of a free market economy became necessary. This process still goes on.

The key reforms consisted in the privatization of small and medium-sized enterprises, farms, arable lands, the gradual price liberalization, and the establishment of foreign trade. BoA analyses reveal that the privatization and liberalization process provided the conditions for a more efficient allocation of the production among different sectors, and the restructuring of each sector's contribution to the GDP. In the short run, price liberalization was associated with increased inflation due to the large discrepancies between administered prices and prices determined by the market. In the long run however, the dynamics of the free market served as natural stabilizer.

At the same time, the fiscal policy underwent reforms that aimed mainly at balancing the consolidated budget. As a result, the fiscal deficit was reduced from 17.4 percent of GDP in 1992 to 7.6 percent of GDP in 1995. However, one year later the budget deficit accounted for 11.4 percent of GDP, due to increased government expenses and transfers. This period also witnessed the creation of a bonds market - a critical development for the monetary and fiscal policy set-up - with an initial issuance of 3 to 12 month maturity treasury bonds. The sale of government bonds reduced in turn the BoA's financing of budget deficit from 100 percent in 1993 to only 17 percent in 1996. Although, the fiscal policies played a relatively positive role in reducing inflation, they also generated high inflation pressures during the first period, endangering the success of BoA's monetary policy.

During the second period, the establishment of foreign trade and close cooperation with international organizations, such as the International Monetary Fund, the World Bank, the European Bank for Reconstruction and Development, and other national and international agencies facilitated not only the financing of current

monetary needs through donations and favourable foreign loans, but also the renegotiation of the country's foreign debt. The cooperation with such organizations was also very fruitful in terms of getting technical assistance in developing growth strategies for the most important sectors of the Albanian economy. The IMF's *Stand-by* (1992) and *Enhanced Structural Adjustments Facility* (1993-1996) programs played a very special role. These programs promoted strategies for achieving stability through non-inflationary economic growth and balance of payments sustainability. Their contribution was crucial not only in terms of needed IMF loans, but also with regard to the restoration of confidence in the Albanian economy and the design and monitoring of stabilizing economic policies. Such agreements were essential for achieving harmony between fiscal and monetary policies through the anchoring of these policies around quantitative monetary and fiscal targets.<sup>7</sup>

The liberalization and stabilization reforms improved the country's macroeconomic conditions significantly. Annual inflation came down to 6 percent in 1995, while the average annual real GDP growth for the period 1993-1996 was around 10 percent. By the end of this period, the current account deficit had declined to less than 5 percent of GDP, part of which was due to remittances. Furthermore, the gross foreign reserves of the central bank were now sufficient to cover imports of three months and a half. The fiscal expansion of 1996 might have contributed to a decline in the rate of unemployment to 12.4 percent; however, the high budget deficit during the same year was reflected in an increase in the Consumer Price Index (CPI) by 17.4 percentage points, raising questions about the benefits gained by the fiscal expansion.

Informal economy was another feature of the period 1992-1996. It was the main obstacle to the well-functioning of the free market economy. During these first transition years, the Albanian economy experienced a high degree of fiscal evasion, lack of competitiveness and general insecurity. Such a climate was a proper ground for the creation of pyramid schemes, which were unlicensed and uncontrolled by the state. The pyramid schemes offered excessively high interest rates. They competed easily and unfairly the commercial banks and led to big distortion of credit market and financial system. Due to

large capital accumulation, these schemes induced consumption beyond equilibrium levels, distorting the savings-investment ratio and impairing the channelling of capital into real investments. Such schemes overburdened the economy and hampered potential growth. Eventually, the pyramid schemes undermined the effectiveness of monetary policy.

The bloom of pyramid schemes proved the lack of capital market institutions and the malfunctioning of free market structures in the country. It also revealed the public's limited financial and economic knowledge and lack of rational behaviour. The informal "financial institutions" took advantage of the knowledge gap about the financial market and substituted for the formal financial system and its products. In such circumstances the country's banking system was incapable to meet contemporary requirements and generate competitive alternatives: the banking services and financial intermediation were not developed. Apart from the bonds market, which emerged during this period, the inter-bank and the money and capital markets did not exist. Unfortunately, despite the development and the consolidation of the banking market, the money market and capital market are still inexistent in Albania<sup>8</sup>.

The excessively high inflation, the increasing rate of unemployment, the loss of confidence in the effectiveness of economic policies and the domestic currency purchasing power decline led to the rapid dollarization of the Albanian economy. The dollarization remained a dominant characteristic of the Albanian economy. The U.S. dollar was first used in the trade transactions (the wholesale trade) and dominated the households' savings portfolios. Such a high degree of dollarization became a real challenge for BoA in conducting the monetary control and maintaining the price stability.

External environment generated difficulties for the conduct of monetary policy. The structural reforms undertaken under the IMF-supported programs have generally lacked the practical prioritization. The negative performance of key macroeconomic indicators, a deep sense of insecurity due to the structural reforms of economic liberalization, the high inflation, the lack of legal framework and institutional infrastructure, the lack of economic and financial

expertise and limited public knowledge, the lack of reforms in other economic sectors, a yet undeveloped financial system complemented by a parallel informal market, and a high level of dollarization of the economy were the major obstacles to the achievement of monetary policy objectives. The actions of the Bank of Albania taken in this regard and to develop the financial market resembled a play performed in a theatre lacking audience. In general, the progress of reforms was asymmetric.

### 2.1.2. Independence and Transparency of BoA

The central bank independence is an essential component of the monetary policy framework. During the last decades, the independence of the central bank has become one of the most discussed issues in the monetary policy literature. The existing empirical studies strongly support the idea that the central bank independence is an important political tool that allows monetary policy to support long term macroeconomic stability and also, avoid short-term political interests or political cycles. Cukierman et al. (2000) and Maliszewski (2000) conclude that delegating monetary policy making to an independent institution committed to fighting high inflation may restrain the sustainable growth of prices above their socially optimal level. These studies find evidence that the level of central bank independence and the inflation rate are negatively correlated in both developing and transition countries. The authors believe that the central bank independence is more important in maintaining price stability, rather than achieving it. Moreover, the authors conclude that in transition countries the central bank independence has an effect only in later stages of economic liberalization. Therefore, it cannot substitute other stabilizing elements.

Independence has two dimensions; the legal and the real dimension. Many studies have focused on the differences between the two dimensions. The results indicate that a strong difference exists between the two especially in countries with weak legal enforcement as the transition countries are. However, other studies have focused on legal independence, which is considered a most suitable approach of dimension, since the real independence is hard to be measured. In this context, Grilli and Tabellini (1991) divide the central bank

independence into two main components: the political independence and the economic independence. The first component is comprised of certain aspects such as the designation of price stability as the main objective of monetary policy<sup>9</sup>, the relationship between the central bank and the government in designing the monetary policy, and the procedures for the nomination, remuneration and dismissal of the supervisory board members, who are responsible for monetary policy decisions. The second component is basically related to the degree of central bank financing the budget deficit.

Cukierman et al. (2000) develop an indexing method of the legal independence and find that the legal independence coefficient for BoA<sup>10</sup> during the 1992-1996 period was 0.51 (1 corresponds to the highest possible level of independence), ranking Albania slightly above the average of transition countries. This ranking is similar to that in Maliszewski (2000), who uses Grilli and Tabellini's (1991) method of measuring legal independence. The coefficient estimated by Maliszewski for the same period is 10 out of 17, which also ranks Albania near the average of other transition countries.

A closer look at the 1992 law "On the Bank of Albania" reveals that the legal elements, which define the monetary authority independence, are enough just to provide an average level of independence (see Annex 2 for a more detailed examination). This law did not establish either explicitly or exclusively the independence of BoA; also, it did not definitely define price stability as the main objective of the Bank; it did not explicitly recognize the BoA's role as the only responsible and independent body in charge of monetary policy formulation; but it meant all this. Also the procedures of the nomination, remuneration and dismissal of the members of the monetary policy board are considered of an average level.

The economic independence is also estimated to be at an average level, since the law allowed the direct financing of the budget deficit by the central bank. However, direct financing of the budget deficit was not carried out routinely; it was temporary, and in line with market rates. It is important to emphasize that during the first years of this period there was no primary or secondary government securities market. The absence of such markets imposed direct government

financing. The creation of a government securities market reduced the need of BoA's direct financing to 10 percent of the previous year's budget revenues.

The Law no. 8076 "On the Bank of Albania" was approved by the Parliament in February 1996. This law augmented the BoA's legal independence. Political independence was enhanced significantly above the average, mainly because the new law explicitly mentioned the term "independent" (despite the fact that it did not contain a special provision), defined price stability as the primary objective of the Bank of Albania, and clearly stated the central bank's function of monetary policy design and implementation. Also, this law regulated the consolidation of the elements of independence with regard to the nomination procedures, remuneration and the term duration of the supervisory board members - the central bank's monetary policy decision-making council<sup>11</sup>. The economic independence was supplemented in this law through stricter limitations on the fiscal deficit financing by BoA, and eventually established that in 1998 direct financing and financing through the primary market of government securities should be limited up to 2 percent and 4 percent of the preceding year government revenues, respectively. Nevertheless, the law did not establish any limitations for budget deficit financing through secondary government bonds market.

During this period, BoA's legal independence was estimated slightly above the average, compared to similar transition countries. Furthermore, the inclination towards further enhancement of the central bank's independence represents a very positive development, which comes as a result of comprehending its long-term benefits in the framework of institutional changes as imposed by a free market economy. Nonetheless, it is important to acknowledge that often in transition countries legal independence does not always mean real independence. If we refer to real independence, during this period BoA's independence remained at low levels and impeded the effectiveness of monetary policy through public communication.

Under such circumstances the transparency of monetary policy during the period 1992-1996 was not satisfactory<sup>12</sup>. According to an

assessment by Note (2004), based on the methodology constructed by Eijffinger and Geraats (2003), the transparency coefficient was only 2 out of 15 (15 being the highest level of transparency) for the year 1996. There was a lack of transparency in procedures and decisions, while the political and economic and operational transparency was considerably limited. BoA's primary objective of price stability, key economic indicators and operational objectives were included in its annual reports, they were announced or made public very rarely and not accurately.

### 2.1.3. Monetary Policy Framework: Changes and Outcomes

In 1992, BoA's monetary policy was conducted under a monetary targeting rule, combined with a flexible exchange rate regime. Such monetary policy framework represented one of the several reforms envisioned in that time's medium-term economic program and IMF agreements, whose primary goal was the re-establishment of macroeconomic stability and balances.

In fact, monetary policy was assigned the task of reducing inflation and ensuring price stability, while using the moderate growth of broad money as its intermediate objective. The presence of the IMF and the need of policymakers to control the very high inflation of the early transition period guaranteed the inviolability of this target with respect to other possible targets. Therefore, it was fairly simple to reach a compromise on the best monetary policy objective, despite the legal gaps on monetary policy objectives and the inadequacy of the Bank of Albania's real independence.

The choice between monetary targeting and any other form of targeting was mainly conditioned by the unfeasibility of adopting an exchange rate targeting regime. To be more specific, the Bank of Albania's gross foreign reserves were very low, whereas its foreign debt was relatively large, therefore net foreign reserves were negative. As a result, it was practically impossible for the central bank to intervene in the forex market in cases of severe devaluations of the Albanian Lek, in the framework of a fixed or managed exchange rate regime. Moreover, it was deemed that a freely floating exchange rate would be an automatic stabilizer and diminish the high current and

trade account deficits, ensuring equilibrium in the external position in the long run.

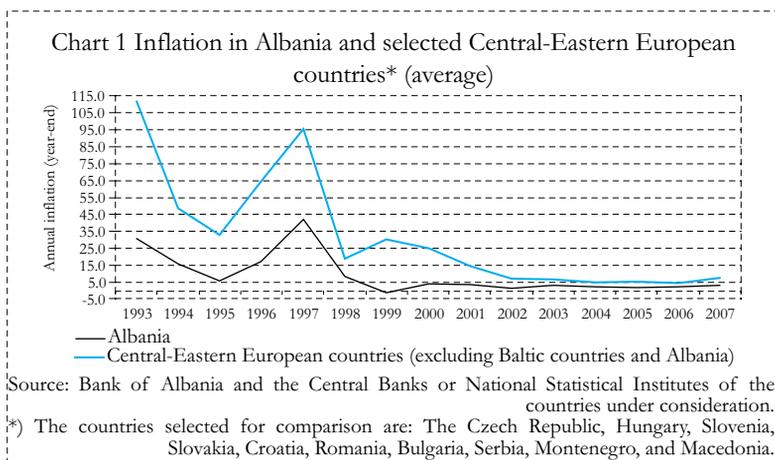
The intermediate objective of BoA was the broad money growth. Monetary policy was designed and implemented based on the quantity theory of money, inflation or GDP growth targets, and the estimation of money velocity. Initially, targets were set on a monthly basis, mostly due to the high level of uncertainty during 1992. Later on, targeting shifted to quarterly basis and finally to annual basis.

It is important to mention that until 1995 the quantitative targets for broad money growth, inflation, and real GDP growth for the consecutive year were published in BoA's annual reports. These objectives were set in line with the Government's Medium-Term Economic Program; they were not set by BoA. In other words, such objectives may be interpreted as objectives of general economic policies, rather than objectives or targets of monetary policy. Since 1995, the central bank's objectives on inflation were published and analyzed at the end of the year, which apparently may have negatively affected the anchoring of public inflation expectations.

In order to achieve its broad money growth objective, the Bank of Albania tried to control the monetary base and the base multiplier on a yearly basis. The monetary base control was carried out within the limitations of a floor for the BoA's net international reserves and a ceiling for its net domestic assets. These two restrictions were operational objectives of the central bank, as defined in the IMF agreements. Additionally, a ceiling for internal government loans was yet another operational objective as determined in the agreements with the IMF, although not a direct objective of the Bank of Albania. The goal of setting a floor on the Bank's net international reserves was to achieve sustainability in the country's external position and to safeguard the exchange rate against volatility and possible speculations. The ceiling on the Bank's net domestic assets served as a pure monetary control instrument, whereas the ceiling on internal government loans was a necessary measure to prevent an excessive fiscal policy and to reduce fiscal domination. The general rationale behind monetary programming was the need to link monetary policy with the balance of payments<sup>13</sup>.

Throughout this period, BoA used direct instruments to implement its monetary policy. The choice of such instruments was dictated by the lack of a functional institutional framework for indirect instruments (in particular the embryonic development of the banking system, and a lack of appropriate instruments to conduct open market operations). More specifically, direct instruments were namely administrative limitations on the maximum amount of credit issued by commercial banks and administrative floors on deposit interest rates. During this period, BoA also used the required reserve instrument, which did not however, seem to play an important role in monetary policy implementation.

The implementation of monetary policy during this first period of transition can be considered as successful in terms of the inflation performance criterion. Year-end inflation declined from 236.6 percent in 1992 to 6 percent in 1995. McNeilly and Schiesser (1998) emphasize that “Unlike the experience of most transition countries, where price liberalization was accompanied by continuously high inflation, the price increase in Albania was quickly tackled..... [In general], the bulk of price increases during 1992-1995 can be attributed to price liberalization and the increased administered prices. [While] the rapid reduction of base inflation is confirmed by the estimates of trimmed average...”<sup>14</sup> Chart 1 illustrates the trends of annual inflation rate over the period 1993-2007 for Albania and for some Central and Eastern European countries. The line which



depicts the inflation trend for Albanian shows a rapid reduction of inflation and maintenance of low-level inflation during this period.

The success in reducing inflation was really impressive, especially in the context of Albania's social and economic conditions mentioned earlier in this paper. The role of monetary policy in this regard was essential. However, it is important to acknowledge the contribution of other policies undertaken to promote production and competitiveness, or the steps taken towards fiscal discipline. Inconsistent fiscal developments are estimated to have had a significant impact on price levels. For example, the increase in the budget deficit as a percentage of the GDP by 3.8 percentage points in 1996 was accompanied by an increase in annual inflation of 11.4 percentage points over that of the previous year. During the first period, although within legal boundaries, the pressure exercised by budget deficit financing was a crucial determinant of monetary base expansion.

Nevertheless, the monetary policy framework needed substantial improvements. During 1992-1996, we notice that the actual growth of broad money was considerably higher than its objective, whereas ex-post inflation was generally below BoA's target (see Chart 5). This discrepancy raises questions on the degree of monetary policy effectiveness under a monetary targeting regime. The achievement of goals with regard to the final objective for inflation, when the intermediate objective remained unattained, could be explained by some of the following reasons:

- a) These objectives have not been set accurately and in harmony with each other;
- b) The monetary aggregates have not been sustainable; and
- c) The aggregates' capability to influence inflation – as compared to other possible factors – has been relatively limited, which implies that monetary aggregates did not contain sufficient information to serve as inflation control intermediate nominal anchors.

After the initial development of the banking system and with the formalization of treasury bonds instruments, the opportunity to

relinquish direct instrument, and resort to indirect ones – known as market instruments - was created. In fact, the shift to indirect market instruments was not only feasible, but also necessary. First of all, over time banks develop ways that evade, and/or greatly reduce the effectiveness of direct instruments. Second, the use of direct instruments was impairing the further development of commercial banks, hindering competitiveness, inter-bank market development and financial intermediation improvement. Furthermore, the use of direct instruments obstructed the efficient allocation of funds, as guided by market principles. In this context, Alexander, Balino and Enoch (1995) conclude that direct instruments often orient capital flows towards the unregulated or informal financial markets; while indirect instruments encourage financial intermediation through the formal financial sector. Due to these reasons, any delay in the implementation of indirect instruments would diminish the importance of the central bank's role in the development of the financial system and the use of its monetary policy to orient the economy towards the desired direction.

## 2.2. PERIOD OF 1997 – 2001

The tense social and political developments and the systemic bankruptcy of pyramid schemes in the beginning of 1997 had a very negative impact on the Albanian economy and undermined the success of undertaken reforms. The general economic and political crisis heavily affected the public confidence in the banking system, even though the economic turmoil originated outside the formal financial sector. During the second period, the approval of the new law “On the Bank of Albania” was another important moment for the monetary policy. The amended law enhanced the legal independence of the BoA by providing legal grounds to further consolidate the central bank's policies in fulfilling the objectives set by law. Gradually, BoA managed to shift from direct instruments to indirect ones - a necessary step to energize its monetary policy, - and also took steps forward toward an enhanced transparency with the public, by starting to publish the quantitative inflation objective for the following year.

### 2.2.1. Macroeconomic Conditions and Developments Outside BoA

The macroeconomic situation in Albania deteriorated due to the collapse of the pyramid schemes and the social and political tension that followed in early 1997. The crisis led to a drastic reduction of economic activity and brought back the anxiety and social insecurity in the country. With regard to the fiscal sector, the significant decline in government revenues led to the increase in the budget deficit as a share of GDP, which eventually had to be financed by the BoA, hence exerting additional monetary pressure on inflation (see Appendix 3). At the same time, the collapse of the pyramid schemes adversely affected public confidence in the banking system, mostly due to limited ability of the public to distinguish between the quality of the pyramid firms and the status of commercial banks. Consequently, the monetary policy transmission was faced with a new obstacle - the loss of public confidence - that deserved special attention in the future.

All these external factors had a critical impact on the increase of inflationary pressures and on the distortion of macroeconomic balances. At the end of 1997, annual inflation was 42.1 percent, real GDP suffered an immediate decrease of 10.8 percent and the unemployment rate rose to 14.9 percent. The severe economic contraction was accompanied by the budget deficit deepening, which jumped to 13.2 percent of GDP. With regard to the external sector, the current account deficit scored a record high of 11.75 percent of GDP, while the central bank's net foreign assets were increased so as to dispose enough foreign reserves for safeguarding the domestic currency.

However, economic shocks were temporary and were relatively quickly alleviated during the following year. Despite the numerous problems, the Albanian economy did not undergo substantial structural changes; instead, it managed to quickly and effectively respond to the BoA's stabilizing policies, such as the interest rates increase and forex markets interventions. Obviously, the role of the IMF agreements and other stabilizing reforms following the agreement played a significant role in the economic recovery. The first

agreement with the IMF that followed the pyramid schemes collapse was the “Emergency Post Conflict Assistance” (1997-1998) and the second one was called “Enhanced Structural Adjustment Facility - 2” (1998-2000), which was transformed into “Poverty Reduction and Growth Facility” during its last year. On one hand, the adjusted type agreement focused on stabilizing policies for a non-inflationary growth and external position sustainability. On the other hand, the agreement also included tangible poverty reduction policies.

One of the basic requirements of the first agreement, which practically meant fiscal policy change, was the increase of Value Added Tax from 12.5 percent to 20 percent in 1997. Such a tax was the main contributor to government revenues and an important element of final prices. Therefore, its increase might have caused a short term isolated rise in the level of prices. However, the positive effects of the agreement – increased budget revenues, reduced need for budget deficit direct financing from the central bank and increased level of fiscal policy discipline – contributed to fiscal dominance reduction and consequently to inflation control and stability in the long run.

By the end of 1998, annual inflation was down to 8.7 percent, real GDP grew by 9 percentage points, current account deficit sharply declined to 5.7 percent of GDP and the fiscal sector highly improved. Nevertheless, the economic reforms did not have an immediate effect on unemployment, which that year reached 17.8 percent. The year 1999 was hit by the Kosovo war and massive Kosovar refugees coming to Albania. It has been estimated that population in Albania temporarily increased by 15 percent at that time. However, this shock was successfully dealt with, without aggravating the small Albanian economy and its frail economic balances, mainly through generous international aid in goods and foreign currency assets. Despite the minor worsening of some macroeconomic indicators, such as unemployment, fiscal deficit and current account, the year 1999 is to be remembered as a deflationary year (1.04 percent) and with the highest annual real GDP growth - around 13.5 percent.

The following years witnessed a stable real GDP growth from 6 to 7 percent. However, the estimates indicate a significant improvement of the unemployment rate, only after 2001, when it dropped to 16.4

percent. Average wages in the public sector were 60 percent higher in 2001 as compared to 1998.

Following a great depreciation during the turmoil of 1997, the Albanian Lek (ALL) experienced a strong appreciation in the years ahead. The ALL appreciated against the currencies of Albania's main trading partners by over 30 percent by the end of 2001. As a result, the exchange rate's contribution to easing inflationary pressures, particularly for tradable goods was of paramount importance. Peeters (2005) argues that until that time, the exchange rate channel was the main monetary policy transmission channel. This conclusion is also advocated by the findings of Tanku, Vika, Gjermeni, (2007). The empirical results suggest that about one-third of the ALL exchange rate fluctuations was reflected in consumer price changes after 6 to 9 months. Yet, the constant appreciation of the ALL and the independent inflation performance once the macroeconomic situation was fairly stable indicate a fading exchange rate channel in favour of new channels driven by the domestic markets dynamics after 2000.

### 2.2.2. Independence and Transparency

The Law no. 8269 "On the Bank of Albania", which was approved in December 1997, improved and enhanced the political independence of BoA significantly, whereas the progress on the central bank's economic independence was still unclear. As a matter of fact, the consolidation of political independence made two steps forward and one step backward. The law established explicitly the BoA's political independence and recognized the central bank's responsibility for designing, approving and implementing the monetary policy. On the other hand, the law also established that the governor of BoA be proposed by the Chairman of the Council of Ministers – the Prime Minister. The central bank's economic independence incurred some changes, such as the new ceiling on direct budget deficit financing to 5 percent of government revenues during the three preceding years, and the ceiling on financing through primary or secondary government bonds markets in the same levels of direct financing, unless the primary objective of price stability is jeopardized.

In general, the BoA's transparency during the period 1997-2001 was partly improved. The most improved aspect was the political transparency while other aspects did not witness any substantial development. The most important modifications relate to the reformulation of the primary objective to achieve and maintain price stability, the explicit announcement of the quantitative definition of price stability and its identification as the BoA's primary objective<sup>15</sup>. For the first time during this period, BoA published the medium-term development strategy - a document that summarizes the central bank's vision on the objectives, the nature and instruments of monetary policy and its path towards all potential directions of development.

### 2.2.3 Monetary Policy Framework: Changes and Results

#### *Changes*

Notwithstanding the legal definition of maintaining price stability, the Law does not establish the price index, the quantitative objective and the legal obligation to publish this objective, however granting the BoA this right. In addition, the law does not provide for the central bank's accountability in case it misses the target. Consequently, setting the objective and its achievement was just a commitment of BoA. For the first time during this period, the monetary policy framework included an element of inflation targeting regime – the publication of the final quantitative inflation target. However, the new framework remained within the old regime, as long as the law did not establish an official accountability framework and the official intermediate objective was the growth of broad money<sup>16</sup>.

Changes in the law of 1997 augmented the monetary policy independence as its clearly defined objective to achieve and maintain price stability soon began to be quantitatively determined. The inflation objective for the year 1999 was the reduction of inflation to around 7 percent; whereas for the following years it was aimed at keeping inflation within a band of 2-4 percent. Until 2001, the inflation target was defined as a point target of the annual (December) CPI headline inflation. In 2001, this objective was reformulated as the annualized monthly CPI inflation rate.

A quantitative definition of the objective aimed at inflation stability, through communicating to the public the central bank's commitment to anchoring inflation and inflation expectations around low positive levels. On the other hand, the target was favourable in terms of allowing a greater GDP growth as compared to developed Eurozone countries. At the same time, such a target allowed for the natural convergence of Albania's macroeconomic indicators with the abovementioned countries.

The monetary policy framework was still featuring the broad money growth as its intermediate target. Similar to the previous period, the intermediate target for broad money was in line with the IMF agreement to set quantitative objectives for the floor on the net foreign assets and for the ceiling on the central bank's net domestic assets, as well as a ceiling on internal government loans. During this period, BoA raised some questions on the adequacy of M3 as an intermediate target for inflation in its medium-term development strategy. The strategy identifies the lack of a causal relation between the intermediate target (broad money growth) and the final objective (inflation rate) of monetary policy. Due to this reason, the BoA announced in the same publication (*The Medium-Term Development Strategy*) its intent to shift to monetary base as its intermediate objective (rather than the broad money M3). Having direct control over the monetary base constituted a strong motivation for this shift. Nevertheless, the theoretical motivation remains unsettled. Theoretically speaking, monetary policy can use the monetary base and manipulate the money velocity in order to control the broad money growth. Consequently, the monetary base transmission channel passes through broad money growth. For as long as the correlation between the broad money growth and inflation remains weak, the monetary base intermediate target would not be any more useful. Possibly, this was the reason why this change did not materialize in the design and implementation of monetary policy. The growth of broad money served as an intermediate target for the whole period.

During this period, the expected adjustments with regard to the central bank's monetary policy instruments were finally materialized: the shift from direct instruments to indirect market instruments. The

credit restrictions for the private sector on the two largest quasi-bankrupt state banks during the 1997 turmoil limited their credit activity to merely invest their reserves in government treasury bonds. The rest of the private banks were too small to meet the credit needs of the economy. As a result, controlling aggregate demand through credit ceilings was not as effective as it used to be. The first step was to reduce the role of administered quantification of the maximum credit allowed for each bank - an instrument that was completely abolished in November 1999. Similarly, the administered decrease of interest rates by BoA in response to low inflation during 1999-2000 was not followed by a decrease in commercial banks' deposit interest rates. The lack of response by commercial banks to follow the BoA decision called for the need to reformulate the operational framework of monetary policy.

In September 2000, BoA's Supervisory Council decided to use the one-week repurchase agreement interest rate as the main indirect instrument to manage the liquidity in the banking system and to steer interest rates in economy. The monetary policy decisions continued to rely on monetary indicators. The volatility of the previous period's monetary indicators estimated in the current period as compared to the intermediate objective of broad money growth (as determined in the monetary program) determined the need and direction of the BoA's intervention. At the same time, monetary policy responded to large volatilities or speculative changes in the exchange rate. Empirical studies of BoA conclude that during that time the inflation pressure transmission was very high.<sup>17</sup> Eventually, BoA's interventions in forex markets were a very essential element of keeping confidence in the domestic currency and accordingly, of maintaining the long term price stability.

### *Results*

Fortunately, the social and economic instability of 1997 did not last for long, and the country's economic activity recovered very quickly. The return of economic stability was mainly due to the fact that the crisis did not affect the banking sector and did not undermine the public confidence in the banking sector. Another important factor that affected the restoration of macroeconomic stability was the renewal of the agreements with the IMF, which

compelled authorities to undertake coordinated stabilizing policies, in particular in terms of fiscal consolidation.

Furthermore, BoA proved to be successful in short-term interest rates management as a response to the crisis of 1997. Initially, policies to increase the floor interest rates on bank deposits led to an increase of the domestic currency's spread against foreign currencies, and curbed further dollarization of the economy. Moreover, they promoted private savings deposits in the banking system and reduced cash circulation outside the banking system. Later the new indirect market instruments, such as the one-week repurchase agreements created the opportunity for further development of the banking sector, enhancement of competition among commercial banks, a gradual expansion of financial intermediation, and development of lending practices based on the risk-return ratio.

In general, the monetary policy during this period achieved satisfactory results and managed to control and maintain inflation at lower levels. However, keeping the broad money growth as an intermediate target to control inflation did not attest to a well-managed relationship. Similar to the previous period, the broad money performance often exhibited discrepancies or deviations between ex-post values and targets. It was necessary to carefully evaluate the adequacy of intermediate objectives from a money demand sustainability point of view, based on the correlation between changes in monetary aggregates and the inflation rate, as well as based on the information contained by monetary aggregates on inflation developments.

Once inflation was stabilized in one digit levels, the inflation objective remained the minimization of its fluctuations and deviations from the target. Further improvements of monetary policy decision-making could not be attainable without better statistics, empirical estimations of monetary policy transmission channels, and further research on the price formation process. These issues were crucial in motivating the choice of broad money growth as an intermediate objective for achieving price stability within the publicly announced quantitative intervals.

Moreover, the success of indirect instruments depended on the development of financial markets (mainly the inter-bank market, money market and the government bonds secondary markets), and on the public's education on monetary policy matters.

### 2.3. PERIOD OF 2002-2007

During this period, the Albanian economy was hit by several internal and external shocks. In 2002 the economy faced two serious crises: first, a massive deposit withdrawal and second, a severe electricity shortage. The latter appeared again by the end of the period. However, both crises were transitory and not as severe as the previous crises. This period was also characterized by the rapid growth of the banking activity, mainly due to an increase in the number of banks, privatization and foreign investment in this sector, as well as a consequent increase in competition particularly in the area of credit to the private sector.

The year 2002 proved that the one week Repo rate could be an effective instrument in the implementation of monetary policy. An increase in the Repo rate was transmitted to an increase in the deposits interest rate, soaking up liquidity in the banking system and therefore, controlling the inflationary pressures on prices. In the upcoming years, BoA focused on taking important steps toward the gradual adoption of an explicit inflation targeting regime.

#### 2.3.1 Macroeconomic Situation and Developments in the Banking Sector

A shake of public confidence in the banking system during March and April 2002 resulted in massive withdrawals of deposits, especially from the two largest banks and in the cities hardest hit by the 1997 unrest. Currency outside banks increased quickly by 15 percent, exerting strong inflationary pressure on prices. In the absence of an underlying cause, the panic was a clear sign of the information asymmetry in the banking market, a sign that the public's perception could be easily manipulated by the misinterpretation of cautionary measures taken to protect the deposits. Ultimately,

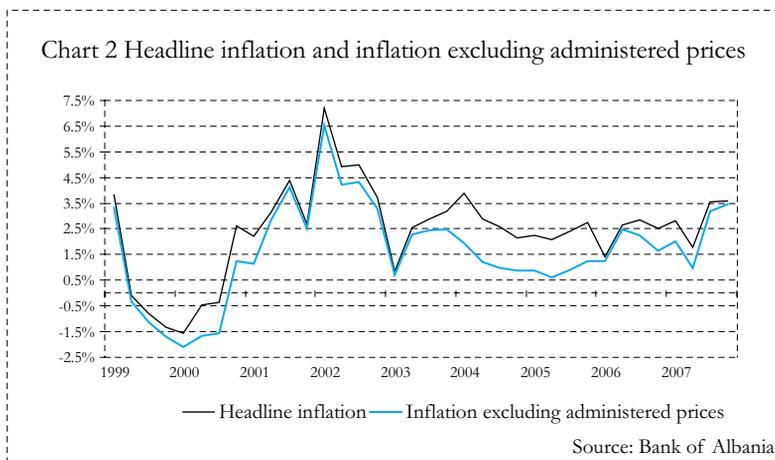
the crisis was caused by the hasty and biased decisions taken by the authorities, the lack of market communication to explain the nature and purpose of measures and the time mismanagement to communicate to the public. The year 2002 had in store another shock for the Albanian economy. A dire shortage in the electric power supply created an unfavourable climate for businesses, hampering the growth rate of economic activity. The causes of this shock lay in the structural failures in the production and distribution of electric power. It was for the same reasons that a similar crisis occurred in 2006 and 2007.

By the mid of 2002 shocks, the ALL effective exchange rate lost approximately 8.9 percent of its value prior to the deposit withdrawals. The ALL devaluation and the increase of currency outside banks led to a considerable increase in consumer prices. BoA's intervention in response to these developments managed to achieve a re-evaluation of the ALL and a decline in inflation. Average annual inflation reached 5.1 percent, whereas annualized inflation for December 2002 fell below the target of the central bank. Such a result indicates that monetary policy overshot, demonstrating the need for a decision making process based on a solid understanding of the transmission mechanism of monetary policy. Real GDP growth slowed down to 4.2 percent compared to an average above 7 percent for the three preceding years. The current account deficit as a percentage of GDP also increased, with a 2.11 percentage points and reached to 9.76 percent of GDP. Data from the labour market however show a certain overall optimism for the economy as the unemployment rate witnessed a slight decline to 15.8 percent. At the same time, government reforms aiming at consolidating fiscal policy, managed to achieve a significant 1.8 percentage point reduction in the budget deficit, lowering the deficit to 6.2 percent of GDP.

During the 2003-2007 period, the Albanian economy witnessed a positive performance, achieving relatively stable macroeconomic indicators and making progressive steps toward the development of the financial system. Real GDP grew constantly within the 5-6 percent interval, fuelled mainly by the real growth in the private sector, banking and crediting. Meanwhile, the gradual decline of the budget deficit to 2.3 percent of GDP for 2006 contributed to a

maintenance of inflation at low levels. Consumer prices increased at an average of 2.6 percent per year, while unemployment continued its downward trend. The steady economic growth, the price stability and the considerable increase in wages suggest that this period experienced a productivity growth.

Inflationary pressures during the third period, though minor, were primarily caused by changes in administered prices, especially in the electricity price as well as an increase in the marginal costs of production resulting from the insufficient electric power supply. Chart 2 indicates the performance of headline inflation compared to inflation excluding administered prices and shows that repeated jumps in administered prices have contributed continuously and substantially to the increase in the official inflation rate, particularly from mid-2003 and on.



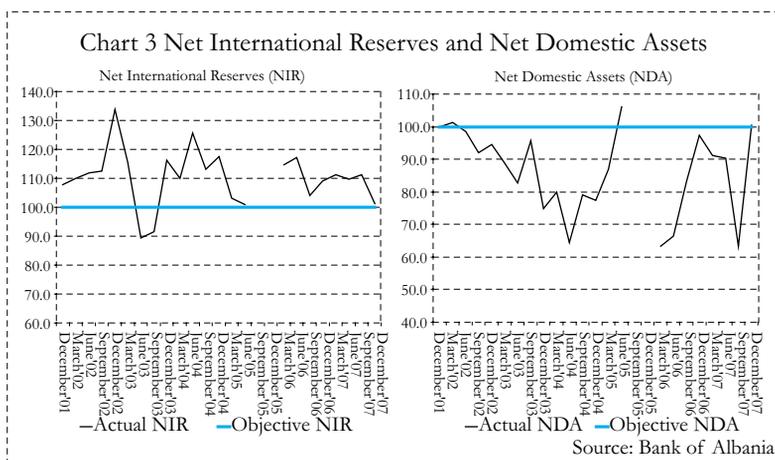
The increase of foreign import prices after 2003 has been significant and has exerted inflationary pressures on prices, whereas the nominal effective exchange rate has experienced gradual appreciation, somewhat moderating the external inflationary pressures. The volatile exchange rate has provided a cushion for dampening the inflationary pressures deriving from foreign prices. Nevertheless, empirical findings by Vika (2005) and Tanku, Vika and Gjermeni (2007) show that after the achievement of economic stability, the

correlation between the exchange rate and consumer prices in Albania has been quite weak. The previous exchange rate effects on inflation is likely to have been replaced by that of consumer prices developments abroad. Empirical models used by the central bank to forecast inflation estimate that import prices determine domestic inflation to a significant degree. As a result, developments in large international markets, and particularly in Albania's main trading partners, Italy and Greece, are expected to influence developments in the comparatively smaller Albanian economy. The effect of foreign prices has been particularly strong toward the end of the period 2002-2007, due to price hikes in food and energy in the global markets.

The foreign sector has always been the focus of the Albanian authorities, although comparable to the neighbouring countries. The current account deficit has fluctuated around 8 percent of GDP in average during 2002-2007, straining the sustainability of the current account. The high demand for imported goods and services has to a large extent been covered by an agreeable flow of emigrants' remittances to their families in Albania. An empirical study by TANKU et al. (2007) on current account sustainability and its relationship to remittances concludes that the current account is weakly sustainable in the long run<sup>18</sup>. A general conclusion is that structural reforms and economic policies for restructuring the current account are necessary for ensuring its long run sustainability.

On the other hand, the macroeconomic indicators of the end of the third period reflected an overall positive and satisfactory economic situation. The institutional cooperation with the IMF has served to achieve and maintain economic stability through various programs, such as the Poverty Reduction and Growth Facility (PRGF) for 2002-2005 and the subsequent Poverty Reduction and Growth Facility and Extended Fund Facility (PRGF & EFF) for 2006-2008. In fact, the last agreement with the Fund anticipated a loan composition of favourable rates for half the loan amount and market rates for the remaining half. This change in terms was based on positive assessments by the Fund of obvious improvements in the country's macroeconomic stability, economic growth and the increase of the income per capita.

As explained earlier in the paper, the programs with the IMF required the fulfilment of the following criteria: 1) a level of net international reserves (NIR) of BoA not lower than an objective floor; 2) a level of net domestic assets (NDA) of BoA not higher than an objective ceiling; 3) a level of net credit to the government (NCG) not higher than an objective ceiling. The first two criteria concerns and should be guaranteed directly by the monetary authority, whereas the third criteria mainly concerns and should be guaranteed by the government, not the monetary authority directly. The fulfilment of these criteria is required and checked during March and September of each year. The charts below provide information regarding the fulfilment of the first two criteria during December 2001 – December 2007, with the exception of the period in-between the two agreements during late 2005 and early 2006. The actual NIR as a percentage of objective NIR and actual NDA as a percentage of objective NDA are provided in the respective charts. According to the charts, these criteria were fulfilled, with the exception of only one instance regarding the net international reserves in September 2003. In several cases, their fulfilment has necessitated the market intervention of the Bank of Albania.



Apart from sporadic supply shocks, inflationary pressures have been stable as a result of rapid aggregate demand growth, particularly after 2004. The risk of economic overheating has been prompted by the rapid growth of crediting. The expansion of the banking

sector in the first half of the period 2002-2007 brought about an increase in banking assets at an impressively rapid pace, playing an important part in economic developments. Banking assets grew at their historically fastest rate of 133.2 percent for the whole period, a growth rate twice as high as the cumulative growth of the nominal GDP for the same period. Banking system assets rose to 75.9 percent of GDP in 2007, displaying convergence with that same ratio for Central-Eastern European countries<sup>19</sup>. Such expansion resulted from an increase in competition and greater geographical expansion of banking products and services. It was stimulated by the adoption of indirect control instruments and accelerated after the privatization of the largest bank in the system in 2004.

The fierce competition between banks was reflected in the sudden boom in banking loans to the economy. The total loan amount for 2007 was 10.3 times higher than in 2001, expanding to 29.4 percent of GDP from a mere 4.8 percent in 2001. This growth has been largely controlled and has shown no visible signs of negative developments, if one looks at the small ratio of non-performing loans to total loans for 2007. Despite the satisfactory growth during this period, the penetration of banking loans in the Albanian economy remains behind the 49 percent loan to GDP ratio average for Central-Eastern European countries<sup>20</sup>. Muhlberger (2007) estimates the equilibrium level for outstanding loans to the private sector as percentages of GDP in some Southeast European countries, in case of a convergence with that in the Euro area. According to his estimates, this equilibrium level for Albania should be almost twice as high as the current level, leading him to the conclusion that the current process is one of increasing convergence. However, it remains clear that this rapid growth of credit to the economy must be monitored carefully, keeping in mind the inflationary risks involved and the risks to the country's financial stability that may result from non-performing loans.

Despite the rapid growth of the banking sector in spatial terms and in terms of instruments, there are still constraints to the development of the financial sector in Albania. The financial market is shallow; the financial system is composed primarily by the banking system, which accounts for about 97 percent of total assets

in the financial system, while the non-bank financial segment is highly underdeveloped. More specifically, the activity of insurance and private pension funds has been extremely limited throughout the period, experiencing some initial growth only in the last two years. At the same time, if we are to exclude the government bonds market, a formal stock exchange and securities market is virtually inexistent.

Other irregularities continue to be present in the inter-bank money market. Since its conception, the inter-bank market has been marked by excess liquidity and hence a small volume of transactions. Often, the banks' behaviour in the money market and in the secondary government securities' market displays deformities and lack of rationality and efficiency. The low transaction volume in the secondary government bonds market is in fact a product of the structure inherited from the primary market.

This situation leads one to conclude that banks operate in the market with the goal of increasing their market share rather than maximizing profits. So far this behaviour has been supported by the extraordinary profits received from banking activity due to the high price of financial intermediation and the high returns from loans to the Albanian government. Such return rates, mainly a result of the asymmetric behaviour of the government vis-à-vis expenditure and borrowing, have been an opportunity cost for the economy. Accordingly, ALL-denominated loans have been very costly, prompting the growth of loans in foreign currency. The continuous appreciation of the ALL during this period of time has also aided the growth of foreign currency-denominated loans. As a result, decision making in the private sector has had little connection with monetary policy decisions. Empirical studies carried out by the Bank of Albania show that the banking loan transmission channel has not functioned during this period<sup>21</sup>. Generally speaking, the orientation of banking activity toward increasing market share and the favouring of loans denominated in foreign currency has impeded the transmission of the key interest rate changes to other interest rates in the short run.

### 2.3.2. Independence and Transparency of BoA

The amended Law in 2002 improved the legal independence of central bank further. Upon the amended Law, the proposal of the BoA Governor, which was previously a Prime Minister's competence, attributed to the President of the Republic. This amendment was crucial in terms of enhancing the political independence of the central bank. As a result, the consolidation of the democratic and institutional culture over the years and the improved law enforcement seem to have provided their contribution to the convergence between the legal and the actual independence during the last period.

The BoA has been paying an ever-increasing attention to enhancing public communication and transparency. The high central bank's transparency is believed to increase accountability in monetary policy decision-making and facilitate the materialization of their effects on the economy. Accountability enhances as a result of the confrontation with higher response from the financial markets and the public; while the efficiency is improved through the economic agents' better understanding of the economic situation and future prospects, the reasons beyond the monetary policy decisions and their long-term trend and as a result of higher credibility in the central bank. These factors may strongly impact the steering and anchoring of economic agents' long-term expectations rationally and accurately. The role of these expectations is crucial in setting wages in economy, setting long-term interest rates and further in the savings-consumption ratio. Chortareas et al. (2002, 2003) provides empirical evidence that higher transparency reduces the average inflation and lowers the sacrifice ratio.

Geraats (2000, 2002, 2004) describes transparency in terms of the level of monetary policy-related information available to the public and in terms of reducing the information asymmetries between the central bank and the public. Winkler (2000) provides a more comprehensive definition of transparency, namely the degree of genuine understanding of the monetary policy process and decisions by the public. In an effort to measure the transparency according to the first description, Eijffinger and Geraats (2003, 2005) propose the construction of an index based on the assessment

of five transparency components: political transparency, economic transparency, procedural transparency, policy transparency and operational transparency.

Political transparency refers to the public understanding of the central bank's objectives, including a prioritization and specification of the objectives in quantitative terms. Economic transparency is related to the publication of the economic data the central bank uses and of the models used for economic forecasts. Procedural transparency refers to the way monetary policy decisions are taken. Policy transparency implies the prompt announcement of the policy decisions. Besides, it involves also giving an explanation of the decision and providing a policy inclination for the future. Operational transparency refers to the provision of information in terms of the success of the implementation of the monetary policy actions in achieving the operational and primary objectives.

The BoA is assessed to have enhanced the economic transparency, procedural transparency and the policy transparency. With respect to the first kind of transparency, in the recent years the quality of published empirical analysis has improved substantially. In addition, the BoA opinion of the nature and side of inflationary pressures, its expectations and the development trends of other economic indicators has been released in the form of press statements.

With respect to the second, transparency has enhanced through the explanation of the monetary policy decision-making. More specifically, by:

- a) Publishing the Monetary Policy Document at the beginning of each year and the BoA's operational framework and the instruments employed by the central bank;
- b) Improving the Monetary Policy Report;
- a) Disclosing the calendar of the BoA Supervisory Council meetings dedicated to monetary policy decision-making.

With regard to policy transparency, the monetary policy decisions are now announced promptly. They are followed by the explanations grounding the decision and the expected tendencies in the future. In the

event the Supervisory Council decides to change the key interest rate, the decision is communicated through a press conference of the BoA Governor. The further enhancement of transparency in the future requires the disclosure of inflation forecast results, the release of the minutes and the voting in the monetary policy decision-making meetings.

The increasing BoA communication with the public and various stakeholders during the third period has played another important role in increasing the transparency. It has been achieved not only through the increased frequency and improvement of the publications as referred to above, but also by developing alternative approaches to educational communication which has increased the public interest in the BoA publications. Accordingly, the BoA has extended its communication through conferences and seminars, workshops dealing with various topics of interest and dedicated to various stakeholders, educational programmes dedicated to different financial agents, media, students and their professors etc.

### 2.3.3. Monetary policy framework: Changes and results

#### *Changes*

During the last period, the nature and the decision-making process of monetary policy have been reformulated. However, these changes have not yet been launched publicly as we believe they need to undergo cautious testing and further consolidation.

As a matter of fact, monetary policy decisions at BoA are no longer exclusively governed by the performance and forecast of monetary aggregates as intermediate targets, but also by forecasted inflation, its deviation from the announced quantitative target, as well as potential inflationary pressures. Technically speaking, the decision-making council considers a relatively large range of indicators to forecast inflation and assess inflationary pressures. These indicators are first analyzed in terms of a general understanding of the inflation formation process, and then dissected in terms of understanding of the monetary policy transmission mechanism. Therefore, recently, monetary policy decision-making is progressively based on a much richer information base, enabled by an improvement of the technical and analytical framework (as explained shortly below).

In addition, BoA during its public communication emphasizes the quantitative inflation target and its successful attempts to anchor inflation expectations around the target, somehow concealing its intermediate objective of broad money growth and its operational objectives. From this perspective, the monetary policy framework in Albania is mostly a two-pillar framework – similar to the European Central Bank’s – or a hidden inflation targeting regime, which is suggested to have been the Deutsche Bundesbank’s monetary policy framework and the key to its success (Svensson, 2008). This conclusion is supported by the fact that in the current agreement with the IMF, the intermediate target for broad money growth is adjusted to fit monetary policy decision-making to inflation expectations. The paper by Blejer et al. (2001) on Brazil shows that this is the IMF’s strategy to adapt the monetary program into an inflation targeting framework. Therefore, the adjustment of the broad money objective in line with an inflation expectations based monetary policy reveals that the current regime’s characteristics are very similar to an inflation targeting one. Despite the monetary policy’s operational framework, the current regime does not meet all the requirements of an explicit inflation targeting regime, as it does not include a formal accountability framework in case of failing the inflation target.

The quantitative inflation target was redefined from a targeted band of 2-4 percent, to the target of 3 +/-1 percentage points in 2006. The new reformulation aims at eliminating possible deviations in understanding the ceiling limit of the previous inflation definition as the converging figure for the inflation target, clarifying this way that inflation is anchored around 3 percent. On the other hand, the new inflation target definition provides the necessary flexibility for monetary policy, similar to the previous definition, to tolerate for inflation deviations, especially when a strict 3 percent target would require unnecessary and high interest rates’ fluctuations, leading to high economic activity costs.

The gradual groundwork for shifting to an explicit inflation targeting regime is focused on the evaluation and achievement of the necessary preconditions for the successful adoption of such regime. Economic literature identifies several key preconditions<sup>22</sup>, such as: explicit legal mandate for price stability; high independence of the

central bank; high public and financial market's confidence in the central bank; effective communication and transparency with financial markets and the public; well-developed, rational and efficient financial markets; full coordination between monetary and fiscal policies and prevention of fiscal domination; low levels of inflation and its anchored expectations; quality economic statistics, readily available; satisfactory technical and analytical infrastructure at the central bank. We can assess that some of these conditions are already fulfilled. For example, the main objective of price stability is explicitly defined in law, BoA's independence can be regarded as satisfactory, inflation and inflation expectations are anchored at low levels<sup>23</sup>.

BoA is focused on two directions: first, to further improve public confidence in the central bank by increasing transparency and public communication; second, to further improve the operational efficiency of the monetary policy transmission mechanism through encouraging further development of the banking system, particularly the inter-bank money market and the government (primary and secondary) securities markets. Fullani (2006, 2007 and 2007b) summarizes the current problems in the Albanian financial markets and explains the importance of promoting the development of financial markets for a complete and more efficient transmission of monetary policy decisions<sup>24</sup>. The operational policies of BoA have targeted the reduction of excess liquidity and the continuous improvement of its management. In addition, they have aimed at meeting the commercial banks' needs for liquidity in the inter-bank market.

In this respect, BoA has recently drafted a bill on repurchase agreements among commercial banks. To better guide the inter-bank market and its participants (banks), in the beginning of 2007, BoA started to publish the offered and bid Tirana inter-bank rates (TIBOR and TRIBID). At the same time, it is agreed upon regulatory reforms to expand the number of investors that directly participate in primary markets government bond auctions/bids and to prevent possible monopolistic power and other anomalies observed in the government securities markets.

Significant efforts are made to further consolidate the whole monetary policy decision-making framework, especially in terms

of strengthening and improving the technical, analytical and research infrastructure of the central bank. In this regard, two new advisory bodies were established within BoA: a) the Committee for the Implementation of Monetary Policy, in 2005, as the highest technical-consulting body for monetary policy, and b) Inflation Targeting Implementation Taskforce, in 2006. At the same time, there have been significant improvements in building econometric models for assessing the monetary policy transmission mechanism and price formation mechanism. Concurrently, BoA started to produce proxies for missing statistical data. The monetary policy decision-making process is based on information retrieved from inflation and economic activity expectations' surveys for consumers, businesses and banks<sup>25</sup>. These decisions tend to be pre-emptive and are supported by inflation forecasting models, and thorough analyses of other real and monetary indicators.

### *Results*

During the 2002-2007 period, the monetary policy has been successful in anchoring inflation and its expectations at low levels, and has maintained inflation within the announced target. The 2002 experience revealed more effective core and short-term interest rates in attracting back a substantial part of the withdrawn deposits, and controlling monetary shocks on inflation. Moreover, the 2006-2007 period attested to a prudent monetary policy vis-à-vis the strong pressures exerted by the food and energy prices abroad, the prolonged energy supply crisis and the demand-side pressures as a result of the rapid growth of credit<sup>26</sup>. The policy-makers' tranquillity and careful judgement of future trends resulted successful in keeping the annual inflation within the objective.

On the other hand, the actual broad money growth re-deviated away from its objective, confirming in this way its failure as an intermediate target for monetary policy. However, the last deviations might have partly resulted from the changes in monetary policy framework (as explained earlier), which has actually targeted forecasted inflation as an intermediate objective. In any case, although an old topic, the adequacy of broad money growth as an intermediate objective requires further thorough discussions.

The new monetary policy framework may have imposed changes in the transmission mechanism itself during this period. Various studies, such as Peeters (2005), Tanku, Vika and Gjermani. (2007) and Istrefi and Semi (2007) provide evidence for a weaker exchange rate pass-through to domestic prices. Such a trend began in 1999 when the Bank of Albania re-announced its quantitative target for inflation and the continuously proclaimed commitment of the announced objective. Likewise, it is deemed that such continuous commitment of the central bank has enabled inflation expectations anchoring and a more effective monetary policy transmission mechanism, mostly through public communication. Consequently, as argued by Mihaljek and Klau (2006), the exchange rate does no longer serve as a reference point for inflation expectations, thus reducing the importance of the exchange rate transmission channel. This role is now covered by the quantitative definition of the inflation target and the publication of inflation pressures' assessments.

During the last three years, the BoA has invested its human e financial resources in improving the technical, analytical and research expertise for the monetary policy decision-making process. The research activity within the central bank has been oriented to comparative studies and empirical inflation models, as well as to the monetary policy transmission mechanism. This process is central to the assessment of the feasibility of adopting an explicit inflation targeting regime in Albania<sup>27</sup>. The results have enhanced the BoA's expertise in better understanding the structure and functioning of the Albanian economy, as well as quantifying the inflation formation process and the monetary policy transmission mechanism based on empirical studies. All these models have helped in forecasting inflation and targeting these forecasts, which implies changing the core interest rate in case of discrepancies between the forecasted and targeted inflation. The characteristics of the current monetary policy regime are similar to an explicit inflation targeting one.

### 3. CHALLENGES AND VISION FOR THE FUTURE MONETARY POLICY – THE CALL TO BE PRE-EMPTIVE

The analysis shows that the BoA monetary policy has gone through a changing process in line with economic and financial market development. In general, the monetary policy has managed to successfully control economic and political business cycles, and guarantee price stability without hampering economic growth.

In light of such favourable conditions, BoA encouraged discussions on the future monetary policy regime. International practices show that central banks have generally changed their monetary policy regime when faced with crises or serious problems: as is the case of New Zealand in the beginning of the 90s, the Latin American countries in the 80s and 90s, and recently the Turkish experience. Therefore, at first glance the debate spurred by BoA does not seem to be well-motivated, especially if we refer to the satisfactory results of monetary policy during the third part of the period 2002-2007. Is this the right time for a central bank to start debating on monetary policy regimes? The Albanian experience resembles a comfortable travelling by an old but lavish bus, which is reliable and driven safely. Why then should this vehicle be replaced by a flying carpet which does not seem to have a visible driving system?

This change is necessary to improve the formulation and implementation of the Bank of Albania monetary policy, as well as to enhance its independence and transparency. Notwithstanding the aforementioned achievements, monetary policy independence and transparency may remain obscure if not based on a clear monetary policy regulatory and operational framework and on a clear time frame (calendar) for its implementation. Transparency and independence are one single process. None can occur in the absence of the other or of a dialogue with the public. Independence is a process of changes and adaptation, which is consolidated alongside structural reforms, economic and financial changes and the European integration following with the reforms.

The above analysis of the nature and progress of monetary policy reveals two important conclusions:

First, monetary policy success has been reassured by anchors determined in the program with the IMF, which has guaranteed responsible behaviour as a fiscal agent. This arrangement has imposed further the continuous reduction of the budget deficit and has virtually eliminated the risk of fiscal domination. The current status quo will be guaranteed, as long as fiscal and monetary policies will be coordinated in the IMF program's framework. Consequently, the prolongation of the program is crucial to ensure the achievement of monetary policy objectives.

Second, broad money, which is the main pillar of the monetary regime, does not contain reliable information on expected developments in prices and inflation in the Albanian economy. The achieved results, especially in recent years, are due to the changes made in BoA's monetary policy design and implementation during the last period.

These conclusions show that a monetary targeting regime does not provide an adequate framework for the design and implementation of monetary policy. Therefore, during the last two years (since 2005) there has been a general consensus within BoA's staff that an inflation targeting regime (IT) is the most appropriate regime for monetary policy design and implementation. This accord is based on our research results, our knowledge on current and expected economic developments, and monetary policy analyses, which show that inflation targeting is a more suitable solution as compared to other regimes (monetary targeting and exchange rate targeting). We believe that such regime will be the future framework of monetary policy at BoA. This preference for the IT regime also builds on BoA's successful experience in the last three years. It is clear already that the current regime for monetary policy design and implementation includes a great number of elements pertaining to inflation targeting, and this hidden inflation targeting has been efficient and effective in administering the monetary conditions and economic activity.

The last three years' discussion materials on the nature and future of monetary policy have motivated the change of the regime with

the need to increase monetary policy transparency (Fullani 2005, Hoda 2005) and the need to use more information in the monetary policy decision-making process (Kolasi and Themeli, 2006). The abovementioned studies have addressed the current monetary policy through a monetary targeting approach; they focus on general conclusions on the monetary transmission mechanism, ignoring monetary policy results. In general, the decision to adopt the inflation targeting regime has been conditioned (influenced) by the nature of concerns that have affected and are expected to affect monetary policy in the future and is based on the best recommendations provided by the theory and the global experience. This section aims at elaborating on the motivation behind the BoA's choice.

*Discussion Topic: Is it adequate and optimal to use the growth rate of broad money as the sole intermediate target of monetary policy?*

Why not money? There is a general consensus on Friedman's conclusion that "inflation is always and everywhere a monetary phenomenon". Such a conclusion is somewhat enlightening for economics and monetary policy. It implies that inflation control can be carried out through money supply control. Institutionally speaking, BoA's monetary policy during the last 15 years has been based on this approach. Basically, during this whole period, within the IMF's programs' framework, BoA determined the rate of broad money growth as its only intermediate objective for monetary policy, trying to achieve low inflation through broad money growth, according to a predetermined ratio. Such regime relies on two fundamental elements: a) money demand sustainability, which implies that money demand parameters are known, and time consistent; and b) the assumption that changes in money demand fairly explain changes in the inflation rate. This monetary policy framework, known as monetary targeting, has often experienced serious difficulties, and even failures in its implementation<sup>28</sup>.

Until the 80s, the monetary targeting regime was a standard monetary policy implementation approach. After this period, money demand was no longer consistent. As a result of the changes in money demand parameters, demand became unpredictable; therefore the implementation of monetary targeting regime became extremely

difficult. Consequently, after the 80s a considerable number of central banks abandoned the use of broad money growth rate as their sole intermediate objective, deeming it as non-optimal. This regime is also criticized in terms of the weak correlation between monetary aggregates and inflation, especially in cases of low inflation. Correlation between monetary aggregates and inflation is stronger in the long-term, whereas the practical implementation of monetary policy is short-to-medium term based. Thus, there exists an inherent discrepancy between the monetary policy objective and the type of correlation in time. In general terms, these criticisms are built around the lack of information in monetary aggregates to forecast inflation in the short and medium term. Nevertheless, broad money control remains the most influential element of monetary policy. The European Central Bank has adopted a two-pillar regime, following the performances of both economic and monetary indicators. For a more thorough debate, refer to Woodford (2006) and Issing (2006).

Some of the central banks have adopted an inflation targeting regime, having forecasted inflation as their only intermediate objective.

In the case of Albania, empirical studies<sup>29</sup> suggest that money demand is sustainable in the long run. However, this conclusion is not as comfortable for the Bank of Albania, as long as money is not a good predictor of inflationary developments in the short run. Furthermore, the fast paced development of publicly available financial instruments and the central bank's policies to develop and deepen the financial markets, the policies to reduce the use of cash in economy, might lead to structural changes that would affect money demand stability – an already experienced phenomenon in other countries.

The successful outcomes of monetary policy -in particular during the last period-, although achieved within a monetary targeting framework, have mostly resulted from astute interventions in interest rates, driven by expected inflation developments. The contribution of money in monetary policy decision-making mainly consists in an historical analysis of past supporting developments, especially during the third period 2002-2007. Chart 5 and table 2 show deviations

in opposite directions between M3 growth objectives and its actual values and inflation rate objectives and its actual values. This conclusion is supported by Luçi and Ibrahim (2003), and Kolasi and Themeli (2006).

In addition, during the last couple of years there have been high fluctuations of M3 growth rate versus relatively low fluctuations of the inflation rate, thus making it difficult to use the publication of the M3 growth objective to communicate monetary policy and BoA's objectives in the short term. Furthermore, the empirical models of inflation forecasting show that money does not have high explanatory power for inflation; the M3 monetary aggregate's coefficient has a very low impact on inflation in these models.

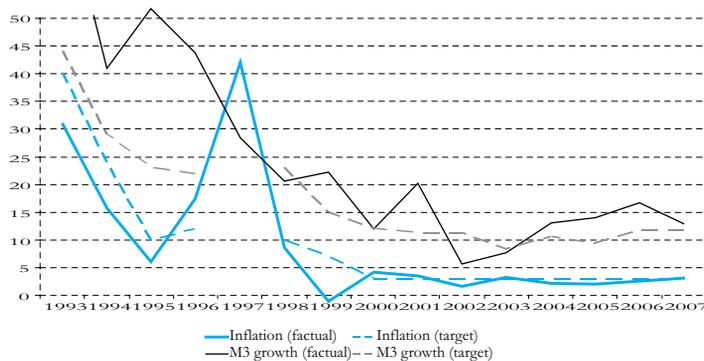
For all these reasons, monetary targeting is not a reliable instrument to control and anchor the public and financial institutions' inflation expectations. An inflation targeting regime is not dependent on the stability of the correlation between money and inflation, which makes such regime preferable to monetary targeting. Consequently, what remains to be done is to formalize the inflation targeting regime. Shifting from broad money as the intermediate monetary policy objective, this regime guarantees a decision-making process based on comprehensive information and a process which involves the entire Bank of Albania and not only the Monetary Policy Department in an institutional debate.

The shift to a new regime does not exclude the role of broad money in the monetary policy decision-making. The results of theoretical and empirical research on Albania show that broad money may play an important role in determining the inflation trends in the long-term. From this viewpoint, the inflation targeting regime will continue to rely on the information deriving from the monetary indicators, in particular for long-term periods, in the form of a two-pillar system similar to the one adopted by the European Central Bank. This approach will also ensure a smoother period of shifting from one system to another.

Table 2 Broad money - inflation relationship

Year	Deviation of actual CPI from the target	Deviation of actual M3 growth from the target
1993	-9.1 (percentage points)	28.80 (percentage points)
1994	-8.2	12.03
1995	-4	28.82
1996	5.4	21.84
1997	n/a	n/a
1998	-1.31	-2.36
1999	-8.04	7.27
2000	1.21	-0.07
2001	0.53	8.88
2002	-1.32	-5.63
2003	0.29	-0.78
2004	-0.79	2.51
2005	-1	4.56
2006	-0.44	4.85
2007	0.1	0.99
	Correlation coefficient	-0.33

Chart 4 Factual inflation versus target and factual M3 growth versus target



Source: Bank of Albania

*Discussion Topic: Is the adoption of an explicit inflation targeting framework a way to reinforce monetary policy transmission through the public's better understanding of such policy and the consolidation of the inflation expectations channel?*

Recognizing the role of expectations was an important step for monetary policy (Mishkin 2007). Not only is it beneficial in terms of the qualitative information expectations contain – vital for monetary policy decision-making –, but also in terms of enabling monetary policy to direct the private sector's expectations towards its targets. The central role of the private sector's expectations for the achievement of policy objectives requires that monetary policy and its targets become part of the public's conversations and be considered in micro level decision-making. Consequently, it is important that the information that comes out of the central bank be included in the individual decision-making and that such information contain a clear, easily understandable message for the public sector.

The announcement of the inflation target under an inflation targeting regime contains easily understandable public information that is directly connected with micro level decision-making. The role of communication in anchoring inflation expectations is discussed in the papers of Mishkin and Schmid-Hehel (2001, 2007), Johnson (2002) and Fatas, Mihov and Rose (2007). While, Van der Cruijssen and Demertzis (2005) provide empirical evidence that high transparency makes inflation expectations in the private sector less sensitive to past inflation.

These conclusions are based on the fact that the central bank's objective is important public information, distributed simultaneously to all agents, which becomes part of the information flow that forms inflation expectations. In this way, through a simple and well-interpretable objective, monetary policy assures coordination of inflation expectations not only between the central bank and private agents, but also among private agents themselves. As such, public information – the inflation objective in our case – plays a double role: first, the distribution of important information and second, serves as focal points for beliefs (Morris and Shin, 2002). The authors are trying to say that despite the individually formed

inflation expectations of the private sector, public information – as an inflation objective – guarantees coordination among these individual opinions in the private sector.

From this perspective, explicit inflation targeting – by determining a final quantitative inflation target and by using inflation forecasts as intermediate targets, instead of the broad money growth rate – gives a lot of advantages in anchoring inflation expectations. This feature of forecasted inflation guarantees the inclusion of this information in the private sector’s decision-making, deviating from potential misinterpretations and lack of coordination, caused by monetary targets.

The rapid public assimilation of monetary policy and its increased impact in anchoring inflation expectations contributes to the reinforcement of monetary policy transmission. This conclusion fits Woodford’s (2005) definition of monetary policy as “expectations management”<sup>30</sup>. To put it in simpler words, usually the transmission of monetary policy decisions gets easier and quicker through the communication of intermediate objectives, which are directly linked to the final objective. While monetary targets might seem too abstract and subtle to the public, inflation is a phenomenon that economic agents experience and respond very quickly. Thus, they are much sensitive and open to use information coming from or related to inflation. Forecasted inflation offers quicker and understandable information to the public, with regard to price stability, decision and possible future decisions. This makes communication easier and understandable, generating response to the change in monetary conditions.

In the case of BoA, the implementation of the inflation targeting strategy and the communication of monetary policy through the inflation objective for the next 12 months, has sparked a particular interest on monetary policy and the role of BoA in managing the economic activity. The monetary policy report publication and BoA’s opinion on inflationary risks based on inflation forecasts of the bank itself, has taken the public’s relation with monetary policy to another level. The current inflation targeting policy, adopted in the last three years, has contributed to the creation of a new monetary

policy transmission channel – the communication channel. The strength of such a channel is determined by the relatively successful performance of monetary policy in achieving price stability. The policy should transmit its message to the public in the best and simplest possible way. From this perspective, inflation targeting has more advantages as compared to monetary targeting. It makes the target more understandable, more measurable and more firmly anchored.

The last period testifies that the public associates better with an inflation targeting regime and responds better to monetary policy signals, as compared to the case of monetary targeting.

*Discussion Topic: Does the adoption of explicit inflation targeting represent a substantial contribution in coordinating and stabilizing monetary and fiscal policy?*

Stabilizing prices and other economic activity indicators inevitably requires constant improvement towards the coordination of monetary and fiscal policies and their reciprocal stabilization. In mainstream economic literature it is widely accepted that an unregulated fiscal policy, regardless of the monetary policy regime, is a threat to monetary policy success in achieving price stability. Fiscal policy in Albania determined the inflation waves that hit the country in the first two periods of the transition. Fiscal accountability, consolidation and coordination with regard to monetary policy independence have assured price stability during the last period. The growing political and economic independence of the Bank of Albania has been accompanied by the reduction of fiscal domination. Despite the continuous improvement, fiscal policy has a defining role in developments in the monetary field. The above analysis of economic developments emphasizes that the current situation contains two important elements that guarantee the continuation of this independence and the implementation of the government's economic program without causing fiscal domination: 1. The agreement with the IMF, which sets quantitative limits on fiscal policies that include government spending and the level of internal government funding; 2. A healthy relationship with a responsible fiscal agent, who shares with the central bank the same

concerns about inflation. Will these two elements be strong anchors in the long-term?

The monetary program, harmonized with the IMF agreements, determines broad money growth, sets ceiling restrictions for BoA's net domestic assets, and also ceiling restrictions on the net government loan. Increasing expenditures beyond these limits has a direct impact on the rates and amount of currency in circulation and/or interest rates in the economy and, consequently, leads to monetary conditions alterations. Such effects may be present even if the target budget expenditures is consistent with the determined fiscal rule but the fiscal calendar is not respected or does not coincide with the borrowing calendar. Such an indirect impact of fiscal policy on monetary conditions occurs through the transmission into the economy of the government securities' interest rates changes.

Treasury bonds and government bonds are the only tradable investments in the capital and financial markets in Albania, that is the interest rates of these securities serve as reference rates for economic agents. This is especially true for the banking system where investments in government securities make up the bulk of banks' assets. Therefore, the return of these investments represents an opportunity cost against crediting the economy in ALL and as such it represents a reference loan interest rate. Generally speaking, the announced ALL credit interest rates are defined as an extra margin over the rates of return on Treasury bonds; likewise, those in foreign currency are expressed as an extra margin over the Libor or Euribor rate. This phenomenon has been part of the monetary policy statements and the Annual Reports of BoA, and it is supported by the central bank's empirical studies. These studies suggest that the economic variables respond better to developments in these interest rates, which represent an opportunity cost for investments of the financial system in domestic currency<sup>31</sup>.

The current agreement with the IMF expires in January 2009. In absence of a new agreement, in January 2009 for the first time since the beginning of the transition period, there will be no instrument to impose the commitment of fiscal policy in respecting the coherence of the monetary policy objectives<sup>32</sup>. Consequently, the expiration

of the agreement eliminates an instrument that has provided fiscal policy anchoring for 15 years. Despite the current good relations between BoA and the fiscal authority and mutual understanding for the importance of maintaining price stability, political business cycles and lax fiscal discipline remain a potential risk for price stability in the long term. From this perspective, BoA deems as necessary to find new instruments that will enable and encourage a responsible fiscal policy as a guarantee for the maintenance of price stability in the future.

Economic literature in general, sees inflation targeting as a cure for the problem of time inconsistency in the implementation of monetary policy, where strong financial discipline is an important prerequisite of its success. However, some economic literature suggests that the nature of the regime – inflation targeting in this case - might determine a more responsible behaviour of the fiscal policy as well, in addition to monetary policy. Mishkin (2004) argues that inflation targeting can promote a more responsible fiscal behaviour “because inflation targeting commits the government to keeping inflation low, it can be argued that inflation targeting can help promote fiscal and financial reforms because it now becomes clear that the government must support these reforms if the inflation targeting regime is to be successful.” Mishkin also argues that a commitment to inflation control by the government makes it harder for the government to advocate loose fiscal policy because it is clearly inconsistent with the inflation target. Such an opinion makes the IT regime as a stimulus for maintaining fiscal discipline.

According to Luçi (2006), economic literature argues that setting a quantitative price stability target, publishing it and agreeing on it, represents the best anchor for coordinating and stabilizing monetary and fiscal policies, as well as for the coordination of other economic agents and financial markets. The conclusion that inflation targeting requires a common consensus of fiscal and monetary policy, and/or public agreement with inflation objectives of the central bank’s monetary policy provides an anchoring institution for fiscal policy. Such institution synchronizes short-term fiscal behaviour with long-term objectives and makes fiscal policy accountable for inflation aberrations away from the target, as a result of loose fiscal policy.

In this context, explicit inflation targeting can play an important role through turning forecasted inflation into an inflation target and intermediate constraint and through identifying scenarios that, *ceteris paribus*, affect inflation and diverge it away from the quantitative declared target. Thus, the coordination and stabilization of monetary and fiscal policies would not just be guided by (perhaps somewhat fictitious) monetary restrictions; it would be guided by limitations on inflationary pressures generated by them. Consequently, unnecessary barriers would be eliminated in cases when various developments, despite exceeding monetary restrictions, do not pose any risks on the forecasted inflation. While, on the other hand, necessary barriers would be materialized, which despite within monetary restrictions, may pose risks on the forecasted inflation. Therefore, anchoring inflation expectations is useful in anchoring of fiscal policy, or rather, in addressing the fiscal policy's time consistency<sup>33</sup> problem and in achieving independence of monetary policy from fiscal dominance. This is an additional reason for choosing inflation targeting as the next monetary policy regime.

#### 4. SUMMARY AND CONCLUSIONS

The monetary policy in Albania became active in 1992, as steps towards a free market economy put forth by the structural reforms adopted. The establishment of a two-tier banking system and the transformation of the BoA in "the bank of banks" gave the latter the right and obligation to manage the monetary developments in the Albanian economy in view of maintaining price stability. The BoA development and the social, political and economic evolution over the transition period have consolidated this mandate both *de jure* and *de facto*, in the form of a primary and final objective of monetary policy.

During the period 1992-1996, the monetary policy had to cope with many issues, such as the galloping inflation of early transition, the drastic decline of economic activity, the depreciation of ALL in the forex market and the lack of free market institutions; the lack of instruments and money and capital markets, the very high level of informality and fiscal evasion. The high degree of dollarization

of the economy – mainly present in large transactions and savings and poor public knowledge on economics and finance in free markets hampered the full functioning of the monetary transmission mechanism. In addition, the lack and delay in economic and financial statistics and the limited know-how and expertise on the quantification of the main monetary transmission channels hindered the design of a coherent monetary policy. Altogether, these developments determined the nature and functioning of the BoA monetary policy. Despite the BoA and other authorities' efforts to tackle the above mentioned problems, many of those issues were still persistent during the period 1997-2001. In addition, such difficulties set up a favourable environment for the flourishing and growth of the pyramid schemes, whose failure at the beginning of 1997 aggravated the macroeconomic balances. Even during 2002-2007, some of the issues mentioned above were present. Over this period, the monetary policy was facing a particularly severe situation, due to the massive withdrawal of deposits and the unprecedented electricity supply crisis in 2002, global markets food and fuel prices' increase beyond expectations, and the pronounced reappearance of the energy supply crisis in 2007.

The structural reforms have supported the monetary policy to reach its primary long-term objective. For instance, the early price liberalization and the privatization of agricultural land and small enterprises are estimated to have helped in reducing inflation in the long term to 6 percent in 1995. However, it is important to underline that administered prices still represent an issue which often pose risks of inflation deviations away from the short term target and second-round effects risks.

During the first phase of transition, there was considerable pressure on monetary policy coming from a high fiscal deficit and the lack of instruments and government securities' markets. The fiscal expansion of 1996, which resulted in high inflation, proves how influential fiscal policy can be in the monetary policy implementation. In this context, the long-term reforms with regard to the fiscal policy constraint, the organization of a government securities market and the limitation on BoA's direct and indirect financing of the budget deficit have significantly facilitated the

monetary policy implementation in the following periods. Some other crucial factors that helped reduce and maintain low levels of inflation were the appreciation of the domestic currency, the non-inflationary import prices (with the exception of isolated episodes like the second half of 2007) and the lack of inflationary pressures from wages and the labour market.

The gradual enhancement of BoA's independence can be regarded as another crucial factor in keeping inflation at low levels and decreasing it after the crisis of 1997. The legal independence of BoA, both political and economic, is satisfactory not only per se, but also as compared with other transition countries. Meanwhile, further consolidation of law enforcement over time, has contributed to the full convergence of legal independence with the real independence. On the other hand, the enhancement of the BoA's transparency, especially in recent years, seems to have affected the anchoring of inflation expectations through reinforcing the monetary policy transmission mechanism. Nevertheless, we can conclude that there are still non-exploited areas to further increase transparency.

Our experience confirms that the success of monetary policy is determined by the ability of the authorities to anchor the economic policies and their objectives to the achievement of the macroeconomic balance in the long run. Furthermore, the agreements with the IMF have been of particular importance in this context. The performance criteria adopted in these agreements have been important anchors for harmonizing the fiscal and monetary policy objectives towards macroeconomic balances and have discouraged behaviours motivated by short-term interests and objectives.

Initially, monetary policy framework was based on direct administrative instruments and the broad money growth as the only intermediate target. Such choice of monetary policy regime was conditioned by the economic reality, where the lack of institutional framework, the embryonic development of the banking system and the lack of inter-bank money markets and securities markets did not allow for indirect market instruments; whereas the drastic decline of foreign reserve instruments did not allow for choosing the exchange rate as a primary monetary policy objective. Indirect instruments

were: ceiling limits for the outstanding credit of each bank, and floor limits for deposit interest rates of commercial banks.

Further on, such framework started to manifest several problems, mostly due to the loss of effectiveness of direct instruments, which prevented competitiveness enhancement in the banking system and adversely endorsed the credit funds channelling into informal markets. Statistical data on the real economy and monetary data indicate that the inflation rates were below the respective target, while the broad money growth was higher than the target. To respond to the negative phenomena set forth above, the BoA gradually replaced direct instruments with indirect ones, completely switching to the latter in 2000. However, monetary policy continued to rely on monetary targeting regime focusing on the growth of broad money.

The target achievement was generally not conditioned by the meeting of the intermediate targets, putting into question their informative and determining role in the consumer price formation process in economy. The shift to indirect instruments for the monetary policy management allowed the gradual shift from the only intermediate target - M3 growth.

Under these conditions, in 2005, the BoA was involved in a debate regarding the change of the monetary policy regime. The central bank made several steps to improve the technical, analytical and research skills at the BoA. Special emphasis was placed on improving the assessment and quantification of the monetary policy transmission channels, the inflation formation process; the improvement of the statistical information, investing on the assessment of new indicators and empirical models for forecasting inflation as well as the macro effects of shocks on the Albanian economy.

The process that commenced in 2005 is based on the philosophy that monetary policy should be the precursor to expected developments, not only in decision-making but also in conceptualizing the appropriate regime. A responsible central bank should not be driven by crises to encourage debate for changing monetary policy regime. The central bank should assess in a timely fashion the effects of economic, political and social changes in order to respond to

any expected changes timely and efficiently. This philosophy has motivated the debate for the change of the monetary policy regime within the Bank of Albania.

Gradually, these changes enabled the inclusion of inflation forecasting and inflation expectations in the monetary policy decision-making. The latter does not only rely on the monetary aggregates but also on the inflation forecast as an intermediate objective. Currently, the BoA's monetary policy resembles an implicit inflation targeting regime. The economic agents' behavioural analysis of the prevailing current features and the expected changes in economy indicate that the monetary regime has lost its effectiveness with respect to price stability. Transparent communication with the public and the need to anchor inflation expectations of other economic agents and the maintenance of monetary policy independence make inflation targeting a natural solution for monetary policy design and implementation, subject to the attaining the primary goal: to achieve and maintain price stability.

## APPENDIX 1: CONCEPTS AND DEFINITIONS NEEDED TO DISTINGUISH BETWEEN DIFFERENT MONETARY POLICY FRAMEWORKS WITHIN A PRICE STABILITY MANDATE

Economic literature dealing with the nature of the monetary policy regime indicates that the key concepts used to distinguish between different targeting frameworks within a price stability mandate are based on:

- Whether the central bank uses a quantitative definition for inflation (price stability) target and whether this goal is officially and publicly announced;
  - What intermediate targets the bank actually relies on and what intermediate targets are actually officially and publicly announced.
- 1) In the case when the central bank uses a quantitative objective for inflation and publicly announces that, and it actually uses the inflation forecast as an intermediate objective and publicly announces that, then the framework is one of explicit inflation targeting.
  - 2) In the case when the central bank uses a quantitative objective for inflation and publicly announces that, but it does not actually use the inflation forecast as an intermediate objective using instead monetary aggregates or the exchange rate, and announces that, then the framework is one of implicit inflation targeting.
  - 3) In the case when the central bank uses a quantitative objective for inflation and publicly announces that, and it does in fact use the inflation forecast as an intermediate objective but does not announce that, then the framework is one of hidden inflation targeting. In this situation, the definition implies that the central bank actually operates under an explicit inflation targeting framework, but its public stance is one of implicit inflation targeting.

In addition, we must bear in mind that another important condition for adopting one of the aforementioned inflation targeting frameworks is the adoption of a formal accountability framework for the central bank in the occasion when the quantitative target for inflation is not reached.

- 4) In the case when the central bank does not actually use a quantitative objective for inflation and does not announce that, and it does not actually use the inflation forecast as an intermediate objective using instead monetary aggregates or the exchange rate, and announces that, then the framework is one of monetary targeting or exchange rate targeting, respectively.
- 5) In the case when the central bank uses two intermediate objectives equally, we call this a two-pillar framework.

## APPENDIX 2: BANK OF ALBANIA TRANSPARENCY

	1992-1996	1997-2001	2002-2007
Political Transparency (maximum 2)	0.5	2	2
- Formal Objectives	0.5	1	1
- Quantitative targets	0	1	1
Economic Transparency (maximum 3)	1	1	1.5
- Economic Data	1	1	1
- Policy Models	0	0	0
- Central Bank Forecasts	0	0	0.5
Procedural Transparency (maximum 2)	0	0	1
- Explicit Strategy	0	0	1
- Minutes and Voting Records	0	0	0
Policy Transparency (maximum 3)	0	0	2.5
- Prompt Announcement	0	0	1
- Policy Explanation	0	0	1
- Policy inclination	0	0	0.5
Operational Transparency (maximum 2)	1		2
- (Non-)Achievement of operational targets and explanations if not	0.5		1
- (Non-)Achievement of final targets and explanations if not	0.5		1
TOTAL (maximum 12)	2.5		9

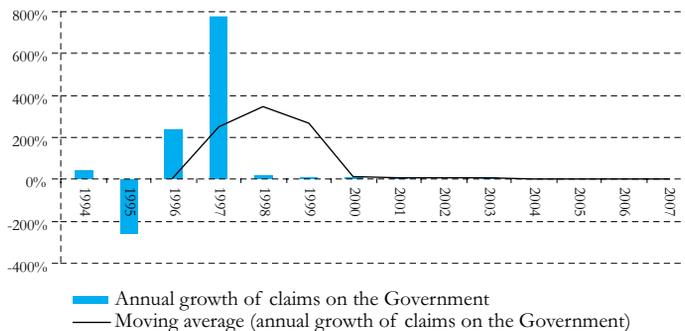
### *Box 1 Monetary Approach to Balance of Payments*

*In general, a macroeconomic program with the IMF is based on quantitative conditions. These restrictions aim at anchoring economic policies (fiscal and monetary) to secure macroeconomic stability in the long run. The level of commitment to these restrictions determines the economic aid disbursement and the continuation of the accord with the IMF, consistent with the agreement illustrated in the economic program. Restrictions are expressed as quantitative targets on monetary expansion indicators. More specifically, restrictions consist in floor limits on net international reserves (NIR) of the monetary authority and ceiling limits on its net domestic assets (NDA). Furthermore, within the NDA there is a distinction between the government and the economy in general, which is translated into a ceiling limit for the net credit to the government in order to reduce/eliminate fiscal domination and its adverse effects. The program is based on the "Monetary Approach to Balance of Payments". According to this theory, the primary objective of the program is to guarantee the long run sustainability of the external sector of the economy (or current account deficit). The underlying assumption of this theory is that money demand is a significant, sustainable and fairly predictable macroeconomic variable. Initially, the program determines the NIR objective, in order to guarantee long run external sector equilibriums. Accordingly, a floor limit for NIR, a ceiling limit for NDA is determined, assuming perfect information on the money velocity. The restriction on NDA is further classified as explained above. As long as the actual level of NIR does not significantly deviate from the objective, the ceiling limit on NDA does not allow monetary expansion. This would keep under control monetary developments and would not allow them to exert pressure on the external sector and/or on prices.*

*This framework assumes that the NIR objective does not necessarily contradict the achievement of the inflation objective. At the same time, the program does not necessarily guarantee that the NDA objectives and the central banks' objectives are in concert with each other.*

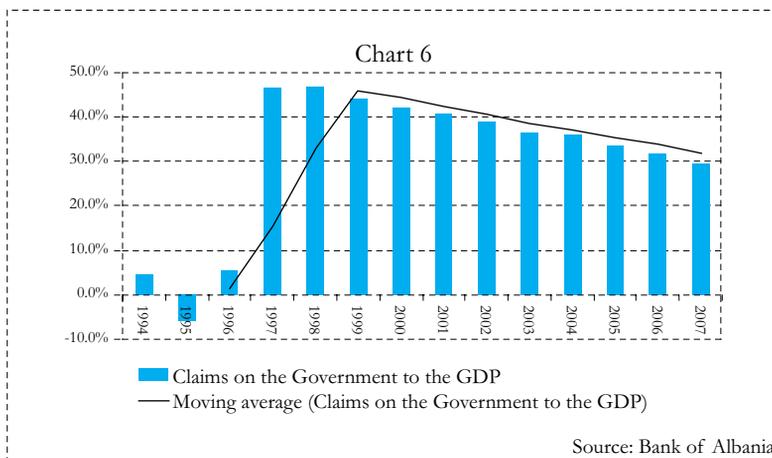
## APPENDIX 2: DOMESTIC CREDIT

Chart 5



Source: Bank of Albania

Chart 6



Source: Bank of Albania

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## ENDNOTES

\* Ardian Fullani is the Governor of the Bank of Albania. Note: This paper is a longer and revised version of the material presented at the 7th Conference of the Bank of Albania on "Monetary Policy Strategies in Small Economies", December 2007

<sup>1</sup> Law no. 7559, dated 22/04/1992 "On the Bank of Albania".

<sup>2</sup> Law no. 8076, dated 22/02/1996 "On the Bank of Albania".

<sup>3</sup> See "The Bank of Albania's Medium Term Development Strategy 2003-2006".

<sup>4</sup> Appendix 1 provides detailed explanations of terms and concepts used in this paper in order to distinguish among the targeting monetary policy regimes.

<sup>5</sup> For a more detailed and complete explanation on the central bank's activity prior to 1992, refer to the publication "The history of the Albanian Central Bank" (2003)

<sup>6</sup> Refer to the Annual Reports of the Bank of Albania and Economic Outlook Reports for a detailed description of the country's macroeconomic indicators during the recent years.

<sup>7</sup> Refer to Box 1 for more information on the IMF programs.

<sup>8</sup> For more information on the current issues characterizing the financial market development refer to Fullani 2007.a.

<sup>9</sup> The economic literature converges toward the conclusion that central banks can only have a nominal effect on indicators in the long run. There is also broad consensus that central banks can maximize their long run contribution by guaranteeing the price stability, which is in fact the best way to contribute to long run economic growth and employment. Hence, the independence of the central bank is achieved when price stability is sanctioned by law, shielding thus the monetary authority from pressures to promote economic growth and employment in the short run.

<sup>10</sup> The Bank of Albania's legal independence has been sanctioned since the 1992 Law.

<sup>11</sup> Refer to Appendix 2 for further information on independence.

<sup>12</sup> Appendix 3 provides further information on the Bank of Albania's transparency.

<sup>13</sup> For more details on the model, refer to Box 2.3.

<sup>14</sup> McNeilly, Caryl J. and Schiesser-Gachnang, Doris (1998), "Reducing Inflation: Lessons from Albania's Early Success", IMF Working Paper no. 98/78, May 1998

<sup>15</sup> The reformulation and clarification of the BoA's primary objective was introduced since 1996. However, there has not been a substantial impact on the general characteristics of the period 1992-1996.

<sup>16</sup> Discussions of the law from the inflation targeting regime viewpoint are solely motivated by the interest to make theoretical classifications. In practice, the Bank of Albania has in no cases expressed any interests in implementing or considering adopting the inflation targeting regime as an alternative of monetary targeting.

<sup>17</sup> Refer to previous sections for literature review.

<sup>18</sup> Refer to Xhepa and Mancellari (2003) and Tanku, Rucaj and Frashëri (2007) for more information.

<sup>19</sup> Statistics published by EcoWin and The Economist Intelligence Unit report that the total assets of banks in six Central-Eastern European countries have varied between 70-72% of GDP in 2000-2006.

<sup>20</sup> The report refers to EcoWin data for 2006.

<sup>21</sup> Refer to Vika (2006) for more information.

<sup>22</sup> The preconditions differ from each other in terms of their importance to inflation targeting regimes. Therefore, in some countries, the absence of some of the preconditions has not impaired the success of inflation targeting. Moreover, some of them are also important in other monetary policy regimes, but their fulfillment is of particular weight in inflation targeting regimes.

<sup>23</sup> For a thorough discussion of these preconditions refer to "Round Table 2, Inflation Targeting" and "Preconditions for Inflation Targeting in Albania" Open Forum.

<sup>24</sup> For a more substantial theoretical and practical discussion on the importance of financial markets with regard to monetary policy implementation, refer to "Monetary

Policy Implementation at Different Stages of Market Development”, Laurens, B.J., et al, IMF, 2005.

<sup>25</sup> For a more detailed description refer to “Round Table 2, Inflation Targeting”.

<sup>26</sup> See the press conferences of the Governor of the Bank of Albania, 2006-2007.

<sup>27</sup> A full summary of this entire process has been published in two individual volumes from the Bank of Albania: “Round Table, Inflation Targeting 2” (2007) and “Preconditions for Inflation Targeting in Albania” (2006).

<sup>28</sup> Bundesbank also, which many consider a case of success in the monetary targeting regime, others such Svensson (2008) argue that it has in fact implemented a hidden inflation targeting regime.

<sup>29</sup> See Tanku (2006).

<sup>30</sup> Woodford, Michael (2005), “Central Bank Communication and Policy Effectiveness”.

<sup>31</sup> See Dushku, Kota and Jakab (2007).

<sup>32</sup> The upgrade of Albania’s status in classification from a transition economy to a developing one does not justify the existence of a new program of the PRGF type. However, it does not exclude the possibility for signing a program of a Stand-By type if required by the Albanian government.

<sup>33</sup> The term “time inconsistency” is used to describe a situation when the central bank changes the preference with respect to the final objective of economic policy (in this case of fiscal policy) in different time periods. This phenomenon may materialize in the inconsistency or contradiction between short and long-term objectives or between the declared and actual targets of economic authorities (in this case of the government) in formulating and implementing the economic policies in general and fiscal policy in particular.

# MONETARY POLICY: INSTITUTIONAL AND OPERATIONAL FRAMEWORK TOWARD A FORWARD LOOKING REGIME

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## ABSTRACT

Monetary policy at the BoA has evolved to approach itself in line with contemporary frameworks that meet most elements promoting efficiency and effectiveness. In this paper, we make an attempt to outline the introduction of new aspects as well as improvements to the current set up. In the past two years, The Bank of Albania has arranged two Forums, in December 2005 and 2006, in order to assess the conditions for a formal revision of its institutional and operational procedures of monetary policy. In addition, these Forums have contributed to escalate and institutionalize the BoA's efforts to promote financial development and infrastructure as well as improve its operational and institutional framework for a more effective monetary policy. In this year's meeting, we come up with an overall outline of the tasks completed, mostly proposed and elaborated in the last two forums, and a general assessment of the most required conditions towards a fully-fledged IT regime for Albania.

## INTRODUCTION

The literature on central banking and monetary policy provides a thorough review on policy framework design and policy objectives

over the past. While the objectives have changed from money value to exchange rate and price stability, the policy and instruments have shifted from quantitative and overall variables towards qualitative and market oriented ones. The ultimate objective of monetary policy, to contribute to society's welfare over the medium-term, has required measurable, reliable and effective economic variables on high frequency. Until the '90s, most central banks have focused on stabilizing one or more of economic growth, financial volatility and/or price increases. After the '90s the role of monetary policy on prioritizing price stability as a main objective of monetary policy has been increasingly on consensus.

Inflation is a monetary phenomenon and money is considered neutral to real variables over the medium term. As such, monetary policy is supposed to promote society welfare through maintaining price stability. Central banks have relied on three main regimes to fulfil their objective, a monetary regime, exchange rate regime and direct (forecasted) inflation regime. The three have in common an intermediate variable or target to influence the ultimate objective of inflation and an instrumental (operational) independence. Though not all central banks enjoy legal target autonomy exclusively towards price stability, most central banks have put a priority to it. In addition, almost all central banks have had instrumental independence to fulfil their main objective. The mix of those elements, the main objective, presence or lack of target as well as instrumental autonomy (independence) have all defined central bank regime and performance.

The Bank of Albania has been operating a monetary regime since 1993, initially due to a lack of foreign reserves and lack of, or underdeveloped financial system and market economy. Over the years, the economy has shifted towards a market-oriented structure, as the presence of public sector in providing goods has diminished and the financial system has been the front-runner. In line with such developments, the Law on the Bank of Albania has been revised in 1997 and the Bank of Albania has further pushed for improvements of its internal operational procedures. It published a target for inflation within 2-4 per cent and it shifted from direct towards indirect instruments in 2000. Indeed, the intention to maintain

inflation close to 3 per cent had been made clear since 1998. In past years, the BoA has been referred to as a lite inflation targeter mostly due to its publication of a numeric target for inflation and to its independent operational framework through a base interest rate in the economy aiming at the target fulfilment (Stone, 2003). Trying to explain the negative correlation between lack of central bank independence and price stability, Cukierman (2001) has included Albania as a case among other transitional countries that confirms such a relationship.

Monetary policy at the BoA has evolved to approach itself in line with a contemporary framework that meets most elements promoting efficiency and effectiveness. In this paper, we have outlined the introduction of new elements as well as improvement of the current set up. In the past two years, the Bank of Albania has arranged two Forums, in December 2005 and 2006, in order to assess the conditions for a formal revision of its institutional and operational procedures of monetary policy. In addition, these Forums have contributed to escalate and institutionalize BoA's efforts to promote the development of the financial sector and its infrastructure, as well as to improve its own operational and institutional framework for a more effective monetary policy. In this year's meeting we come up with an overall outline of the tasks completed, mostly proposed in the last two forums, and a general assessment of the most required conditions towards a fully-fledged IT regime for Albania.

While some of the changes in this framework are a requirement for a more effective monetary policy, notwithstanding the regime, others are typical IT requirements. That makes a distinction between elements initiated to promote monetary policy performance in general and those that are definite requirements for a typical IT regime:

- a clear legal mandate to maintain price stability as a main objective, that comes with: *(i)* institutional independence *(ii)* a performance and accountability framework of objective fulfilment;
- a public numeric target for the inflation rate;
- a monetary policy framework, aiming at fulfilling its main objective, underpinning the evaluation of inflation expectations

- and forecasts, based on a broad range of economic and financial/monetary information;
- improved monetary policy communication and continuous survey of market reaction in terms of expectations, as additional means of monetary transmission mechanism.

## I. INSTITUTIONAL FRAMEWORK

### I.1 CENTRAL BANK MANDATE AND ACCOUNTABILITY

Central banking best practices foresee the institutional endorsement of providing macroeconomic stability under the central bank jurisdiction. While the ultimate objective of central bank policies is to promote society's economic welfare, it does so through ensuring price stability in the economy and financial efficacy of the monetary intermediation network. Clearly, price stability has become a prior objective and the policy set in the central bank hand for achieving its objective is mainly identified with monetary policy.

Avoiding double objectives for one single instrument, monetary policy is a benefit in setting a priority for price stability as the main objective. Our view has gone beyond the mere priority of price stability, recognizing that the publication of a numeric objective for inflation does help to minimize *time inconsistency setback* inherent in monetary policymaking. It promotes its effectiveness in at least three ways:

- The publication of a numeric objective for inflation is equivalent to a public mandate to focus monetary policy towards price stability. Announcing an inflation numeric target as a means to fulfilling the price stability objective, clearly communicates to the households, agents and institutions that other variables like exchange rate, unemployment or economic growth are not a priority of monetary policy over the long run. It highlights the consensus that central bank money, in itself, cannot improve the welfare of the society over the medium to long run.
- A numeric target for inflation provides a basis for communication with the market agents, who promote the effectiveness of

monetary policy transmission. As such, the communication of achieving the inflation target becomes a means for transparency and accountability towards the public (*see Transparency and Accountability*).

- Central bank institutional commitment to a numeric inflation target enhances de-facto independence of central bank in conducting monetary policy.
- *Prior objective of Bank of Albania*

The current institutional framework has the priority of price stability incorporated in the legal framework of the central bank<sup>1</sup> (Lybek, 2005). Such a definition underscores the autonomy of the central bank in regard with the target. As the Law clearly stipulates the priority of the goal, to maintain price stability, it charges the bank with a high degree of responsibility in terms of fulfilling the objective. The Bank of Albania has the autonomy to set the target itself, while the Law also assumes full authority on the use of its instruments, thus granting instrument independence to Bank of Albania. The latter, instrument independence, assumes a role for the central bank to resolve time-inconsistency problem inherent in the use of monetary policy instruments.

Under such a legal framework, Bank of Albania's responsibility rests on two aspects:

- The Bank of Albania is accountable for fulfilling the target it determines, as the Law defines.
- The Bank of Albania is liable to ensure that the target it has determined is consistent to the price stability objective that the bank is legally in charge of.

The second aspect internalizes the expertise and the experience of the central bank on handling the target in line with the objective of delivering price stability in the economy. It internalizes the advantage that rests on the banks access to compiling and analyzing pertinent information, and the potential for special expertise in assessing the output gap.

The Bank of Albania will consider price stability the main priority of monetary policy, in line with the legal basis, and a cornerstone of its institutional framework. As currently standing, the Law has provided sufficient target autonomy for the Bank of Albania (Lybek, 2005; Gogu et al, 2006). It provides sufficient room to adopt a possible IT regime and avoid time-inconsistency issue inherent in monetary policymaking. The new Law, to be revised before 2010, might consider further clarification of its subsidiary objectives, including the pre-eminence of medium-term financial stability towards economic growth<sup>2</sup>. Over the medium term, price stability will be the best contribution of monetary policy to long-term macroeconomic prosperity. Delivering price stability to economy enhances the BoA's pledge for a stable financial system as a basis for continuous economic growth and development.

- *Central bank - Institutional and instrumental independence*

The institutional framework requires sufficient formal as well as de-facto independence in order to conduct a sound monetary policy consistent with its main objective, without prejudice to the monetary policy regime.

- In terms of institutional management, central bank independence is expressed through a seven-year term mandate of the Governor and other members of Supervisory Council.
- The law grants exclusive right on the choice and use of monetary policy instruments, providing de-jure instrumental independence to avoid time-inconsistent behaviour on the conduct of monetary policy. On this basis, central bank assumes operational and policy independence, including the setting of base interest rate.

The instrumental and institutional independence have become two cornerstone requirements to promote an independent monetary policy. Notwithstanding the high degree of formal independence granted to the central bank, the credibility of the central bank towards the public is an important determinant of the cost of maintaining close to or bringing inflation back to target. As such, the cost of fulfilling the objective is very much dependent on the real independence of the central bank with regard to households, firms and domestic or international financial institutions.

There are two potential threats to central bank credibility that the Bank of Albania needs to resolve over the medium term in order to successfully implement a fully-fledged IT.

- The removal of direct or indirect deficit financing by the central bank, foreseen in the current Law

Under the current legal framework, the Bank of Albania is allowed, at her own discretion, to finance the deficit at an amount equivalent to 5 % of the average fiscal revenues for the latest three years. The revision of the BoA Law, foreseen for no later than in 2010, assumes synchronizing the Law in line with the Status of European System of Central Banks (and the Treaty Establishing the European Union). One of the amendments consists in removing the right to finance budget deficit in order to improve the real independence of the central bank<sup>3</sup>.

- Minimizing the dominance of fiscal policy in the financial system and consecutively, in monetary policy decision making

In the absence of direct deficit financing by central bank, the intermediation role of the banking system has been dominated by the public sector demand for money to finance the deficit. The greater role of public sector demand and the underdeveloped banking system over the past several years has led to a crowding out effect, financing fiscal deficit instead of extending credit to the private sector (*see I.2 Macroeconomic Stability*). Its effect in financial and money markets diminishes the efficiency of monetary policy. While, banking system has developed fast over the last few years, the dominant role of domestic borrowing in domestic money market still hinders the efficiency of the transmission mechanism of monetary policy. Though, in the past few years, fast growth in credit market to private sector in domestic currency has slightly reduced the fiscal share, its role in money market short- and medium-term equilibrium remains dominant.

- *Transparency and Accountability*

Current framework on transparency is based on the ongoing work and experience of Bank of Albania, through gradual introduction of

additional elements of transparency. The outline of a basic set-up for additional transparency was presented in the Open Forum in 2005, and was further elaborated as a strategy in December 2006. There have been several elements of transparency in place since 2006:

- A clear central bank mandate on maintaining price stability and the publication of a numeric target that guides communication on monetary policy stance has been a basic building block of transparency (*see Prior objective of Bank of Albania*)<sup>4</sup>.
- On the decision-making and operational phase, the BoA has applied press releases for Supervisory Council (SC) decisions on monetary policy. One year ago, the BoA has introduced the arrangement of press conferences to announce changes in the monetary policy stance -through change in base interest rate- by SC.
- Besides arguments that support the SC decision on monetary policy, press releases or conferences include an evaluation of the inflation risk in the economy and main threats to the target in the future.

The feedback received in the two forums of the last two years has shaped the path the Bank of Albania has moved through in terms of transparency this year. During 2007, the Bank of Albania has moved a step further towards a more transparent institution and monetary policy conduct.

- Since 2006, the BoA publishes the dates for the year forward in which SC meets to discuss monetary policy. Four of these meetings are exclusively dedicated to monetary policy discussions and decision-making. During 2007, SC has met to solely discuss and decide on monetary policy respectively. Press releases and press conferences in case base rate has changed, have taken place immediately after the meetings.
- During 2007, quarterly Monetary Policy Reports have substituted the monthly and quarterly reports. The structure of the reporting and its focus have shifted further towards inflation analysis. The current structure allows a deeper analysis of inflation developments and real sector indicators that affect the inflation perspective.

- In its press releases, as well as in its Monetary Policy Reports, the BoA explains the sources for inflation deviation from the target. It attempts to provide a full picture of the arguments for inflation deviations from the target. Such a move is strongly supported by verbal hints of potential future base interest rates movements to express the view of SC on its future stance. Both forms of communication, explaining the deviations and providing possible views on how SC potentially sees future monetary policy stance, will ensure maintaining and further promoting the central bank credibility.
- In the fourth quarter of this year, the BoA has published the Business Confidence Index (BCI) and the Consumer Confidence Index (CCI). Prior to that, the BoA had published only the methodology and an evaluation of their reliability in order to promote the public understanding and absorption on these two indices.
- At the end of 2006, the BoA approved a new regulation that aimed at disclosing the rules and procedures behind the foreign exchange operations in the domestic market.

In the timeframe towards a fully fledged IT, the BoA will seek to implement several features, aiming at further improving the communication with the public and increasing transparency of the monetary policy conduct:

- Publishing inflation forecasts in the periodic reports. While the BoA has published in its forums several of its working papers, further refinements of these models are taking place. Over the intended period towards fully fledged IT, the BoA foresees to start publishing a graphical presentation of inflation forecasts. As the inflation forecasting models receive further refinement and their reliability improves, the BoA will consider publishing inflation forecasts in numeric values or fan charts based on one of its models for the forward time horizon.
- In addition, the BoA will publish a macroeconomic model as a general framework of the main macro developments for the period ahead. The model intends to communicate to the public the general overview of indicators that will influence real activity and the sources for potential inflationary pressure.

- Implementation of other elements of the Communication Strategy will aim at anchoring inflation expectations and improving the Bank of Albania credibility over the medium term. Further implementation of the Communication Strategy should aim at anchoring inflation expectations, while maintaining actual inflation in line with the target will remain a long-term support for the credibility of the BoA.

## I.2 MACROECONOMIC STABILITY

- *Coordination of Monetary Policy and Fiscal Policy*

The real independence of central bank in conducting monetary policy does require a developed financial system. The legal basis is a necessary but not sufficient aspect of real independence. Underdeveloped financial systems cannot completely absorb fiscal policy operations. As such, fiscal domination in financial market conveys its effects to monetary policy transmission mechanism, frustrating its objective of price stability.

Fiscal dominance takes place in certain conditions. In most cases, circumstances for fiscal dominance arise when (Masson, 1998):

- (i) Direct fiscal deficit takes place by the central bank or banking system. In these cases either commercial banks, or other actors of financial system, afford deficit financing in terms of size.
- (ii) It assumes dependence of *seignorage* as a means of supporting development and growth policies.
- (iii) Financial system and markets are underdeveloped to fully support debt raised by public or private sector.
- (iv) Serving unsustainable public debt becomes a source for fiscal dominance and instability in financial markets.

The prohibition of fiscal deficit financing by the central bank will require a more effective management of fiscal account. Financial costs of a temporary expanding domestic fiscal borrowing, due to quick increasing interest rates, would spread out costs on overall

domestic debt, raising questions on short-term macroeconomic performance.

- Coordination of monetary and fiscal policy foresees the gearing of these policies towards fulfilling the Maastricht Performance Criteria in a long-term perspective. Currently, the coordination role is integrated in the PRGF / EFF agreement among Ministry of Finance, the Bank of Albania and IMF. The agreement assumes a domestic borrowing at benchmark level that pledges the continuity of the fiscal discipline of the last several years. On a medium to long run, such a role will be inherited to the Stabilization and Association Agreement (SAA). The main frame for coordination will be based on the chapter on monetary issues according to *Acquis Communautaire*, which foresees a gradual convergence of fiscal indicators towards 3 % budget deficit and 60 % debt ratio.

Over the long term, there is a coordination role inherent in SAA, while short to medium term expansionary fiscal policies or fiscal account mismanagements do spill over on monetary policy performance for a small economy. The risk is incorporated in higher interest rates and higher opportunity cost for the trade off balance between price stability and overall macroeconomic stability that monetary policy faces. Averting the macroeconomic costs through coordination of fiscal policy and monetary policy in the short term will remain a challenge<sup>5</sup>.

- As an additional measure, the BoA looks forward to the further development of the financial system as a means of diminishing the dominant role of fiscal policy on monetary policy performance (see *I.3 Financial System Development*).
- *Exchange rate*

An effective monetary policy aiming at delivering price stability requires macroeconomic environment in line with fundamentals in order to endorse its discretion towards the main objective. In a small open economy, monetary policy that adopts interest rate as a main instrument (or implicitly money supply) to achieve price stability,

has to allow flexible exchange rate to adjust to external account developments, relative productivity changes and other external shocks.

- The Bank of Albania will assume a freely floating exchange rate in line with the fundamentals of the economy. The equilibrium of these fundamentals (price, external and financial stability) will be under the influence of monetary policy (indirect) instruments, mainly base rate.

The presence of potential Balassa-Samuelson (BS) effects in the economy may drive exchange rate over the medium term towards gradual appreciation or depreciation. Olters (2005) makes a tentative evaluation of the BS effects in Albania. According to him, there is evidence that the BS effects have affected the exchange rate movements over the last few years. Partially, BS effects should be absorbed by a higher inflation target of BoA vis-à-vis the inflation target for Eurozone<sup>6</sup>.

- Over the medium term, the BoA intends to apply its policies towards maintaining credibility in terms of current account sustainability. In a developing economy, ensuring a level of international reserves consistent to comparable standards for other developing small economies will be part of policies to preserve external stability in a long-term perspective<sup>7</sup>.
- A considerable degree of dollarization in the financial system raises additional challenges for monetary policy and financial stability. About 70% of credit portfolio and around 45% of total deposits in banking system is denominated in foreign currency<sup>8</sup>. The BoA will address issues related to financial dollarization of the economy through strict and prudent supervision in order to keep it immune from shocks (*I.3 Financial System Development*).

### 1.3 FINANCIAL SYSTEM DEVELOPMENT

Unconsolidated financial systems and the absence of capital markets overstate the effects of fiscal deficits on monetary policy performance. The banking sector makes up about 90% of the financial

system and is still the main source of deficit financing. As such, its intermediation function in the economy has been overshadowed by its support of public demand for money, and so has been its role in the transmission mechanism of monetary policy. Over the last couple of years, the crowding out effect has diminished due to a fast growing banking system and higher share of households in deficit financing. Yet, there is a strong need for further deepening the financial system beyond banking network. Before such enlargement of the system takes place, the Bank of Albania has undertaken several measures to enhance the stability of bank and non-bank financial institutions.

In 2006, the Bank of Albania initiated several measures:

- New Banking Law approved at the end of 2006 has become effective this year. The Law requires banks to raise their capital provisioning for credit to the private sector. Due to high credit growth rates to private sector, mostly denominated in foreign currency, the Bank of Albania has implemented tougher regulatory framework for the lending activity of commercial banks. The newly revised framework, since the end of 2006, intends to improve the quality indicators of the loan portfolio for the whole system.

In addition, the BoA is in the process of drafting new measures for the foreign currency credit that aim at raising the prudence by the banks on crediting the private sector in foreign currency. The measure aims mainly at maintaining /improving credit portfolio quality and bringing credit growth rates towards long-term equilibrium rates.

On a macro level, the measures will spill over towards smoothening implicit exchange rate risk on the banking system. Higher costs in financing the private sector in foreign currency usually further develop the domestic currency credit market.

- During 2007, microcredit institutions licensing has been integrated under the authority of the BoA, certified as non-bank financial institutions and supervised by the Supervision Department of the BoA.
- The new delivery versus payment system has been introduced

to enhance the efficiency of the payment system and reduce transaction costs in the banking system.

- On the operational side, the BoA has revised its operational framework of its function as a lender of last resort. The new regulatory framework on repurchase agreements foresees the transfer of collateral from the borrowing commercial banks to the BoA ownership. It aims at fostering interbank market and reducing operational risk of the BoA in the market. In addition, the new Credit Information Bureau set-up within the BoA will be effective in the beginning of 2008.

- *Measures to Foster Financial Development*

Further measures aiming at financial development should continue as other aspects of institutional and operational improve for a fully-fledged IT regime. The improvement of the financial system is a keystone towards improving the monetary transmission mechanism and minimizing fiscal dominance on monetary policy operations. Those measures will aim at broadening and further deepening the financial system.

- The BoA is also involved in fostering the development of secondary market for government securities. In addition, further financial market deepening should continue through maturity extension for securities. The BoA will cooperate to promote the access of non-bank agents in government securities market of longer than one year.
- In coordination with the Ministry of Finance, the BoA intends to amend the treasury-bill auctions at once per week, in order to encourage secondary market development for these securities.
- Further financial system development calls for enlargement of non-bank financial system. The BoA, in collaboration with Financial Supervision Authority, should seek to foster the introduction of pension and investment funds as additional intermediaries of a growing financial market.
- Regulatory framework should cover contamination risks in the region. Host-to-host supervision should be further promoted in order to mitigate risk concentration on the banking system. Cooperation agreements with regional and other central banks

should allow for a broader supervision of foreign banks and minimization of risks to regional contamination.

## II. OPERATIONAL FRAMEWORK: IMPLEMENTATION SET-UP

### II.1 DEFINING THE OPERATIONAL REQUIREMENTS

Implementation of a fully-fledged IT regime requires a fine balance between the main objective and the instruments in order to produce positive spill over effects towards other -secondary- objectives of the central bank. The operational framework assumes the definition of a numeric target that is consistent with price stability, the adoption of an intermediate objective that fulfils several criteria and the implementation of operational instruments that are related to the intermediate objective. In addition, the operational framework requires well-defined transparent relations among the three, making them as a whole monetary policy transmission mechanism.

- *A public numeric target for inflation*

The Bank of Albania has quantified the achievement of price stability as an annual growth of general price level in the economy of around 3 per cent. The target assumes a tolerance band of about +/- 1 percentage point around the point target. The definition was revised from a band target of 2-4 percent to a point target of 3 per cent in 2006 in order to raise the role of the target in shaping the expectations. The Bank of Albania considers the current set up of the 3% point target an adequate quantitative specification to promote macroeconomic stability.

- The 3 per cent point target is about 1 percentage point higher than the ones of the Albania's trade partners, currently at an advanced stage of development with a fully liberalized market economy.
- Over the last 10 years, the target band of 2-4 has served well to produce domestic and external stability as well as to promote growth in the economy, while public expectations are anchored

close to this target.

- A higher target than the inflation target of 2 per cent for Eurozone assumes to account for the potential effects of BS effects and the rigidities in the economy, while it allows a growth potential for the economy to catch up with other advanced countries.

The current point target clearly communicates the BoA's aim to focus the expectations towards the 3% policy target. The consistency of the monetary policy target and the expectations will diminish potential inconsistency costs inherent in maintaining and bringing inflation in line with its objective.

This specification of a point inflation target, besides anchoring the public's expectation to a single inflation rate by eliminating the upper boundary bias in the case of a band specification, reinforces the BoA's commitment in achieving the inflation target. In addition, it allows a more flexible conduct of monetary policy, especially in the case of short run shocks that are out of the BoA's control. There are time lags, uncertainties, and unexpected shocks in the transmission mechanism of monetary policy that make inflation vary around the target. Overactive monetary policy may produce a more instable economy in terms of other secondary objectives, as the benefits in terms of inflation rate, while not possible, are insignificant at best. The BoA acknowledges those concerns and the need for flexibility in monetary policy conduct through a tolerance interval of +/- 1 percentage point around the point target, a common design among inflation targeters.

- *Price Index of Inflation*

The Bank of Albania will maintain the current use of Consumer Price Index (CPI) as a formal measure for inflation in the economy<sup>9</sup>. The CPI measured by Institute of Statistics in Albania (INSTAT) in charge to produce a general price index for the economy, is the best available measure of living costs in the economy. In addition, the CPI has several other advantages:

- It has the highest frequency and is most familiar to the public,

- It is available at a very short time period after the reference period (at the 8-th of the consecutive month),
- It is not revised,
- It has the authorship of an independent institution, promoting credibility in monetary policy conduct.

However, for the conduct of the monetary policy the BoA has long acknowledged the usefulness of including measures of core inflation in its analyses (Çeliku, 2003). During 2007, this topic gained further attention by the BoA, resulting in a set of different advanced measures of core inflation (Çeliku and Hoxholli, 2007). Even though having headline inflation as a final target of monetary policy, the BoA is considering publishing core measures of inflation available to the public by incorporating them in the quarterly monetary policy report. Such a move assumes higher public understanding about what monetary policy can and cannot do. In addition, it assumes higher bank accountability towards the public.

- *Main policy instrument and policy reactions to shocks*

Inflation targeting regime has been identified as an implementation framework of monetary policy that ensures limited discretion in decision-making. Through a public numeric target, it ensures that monetary policy decision-making body remains responsible and accountable while achieving the target. Yet, the IT framework allows sufficient discretion in the use of its instruments and includes a built-in operational flexibility towards unexpected shocks. Monetary policy flexibility is addressed through a 1-percentage point tolerance interval and a Communication Strategy for the Bank of Albania.

- The main policy instrument of the Bank of Albania will be the base interest rate applied in repurchase agreements. Currently, repo agreements have a weekly frequency. The use of the instrument will maintain the focus towards inflation expectations.
- The Bank of Albania will continuously promote the role of inflation forecasts as an intermediate objective towards a fully-fledged IT regime. As such, inflation forecast of the Bank

of Albania in a medium term horizon will drive monetary policymaking and decision-making with regard to base rate.

- Monetary policy reactions towards supply shocks on inflation and output will be assigned a greater role in terms of communication with the public. In addition, central banks in developing countries put a significant weight on inflation deviations from target. Such a distinction from more advanced countries mirrors the lower stage of development against advanced countries, the short central bank background essential to its experience and the low credibility inherent in relations with central banks operating in developing countries.

Inflation target deviations should carefully evaluated not only in terms of the main objective but as well as in the significant role they play in terms of the Bank of Albania's credibility. Towards a fully-fledged IT, the Bank of Albania will address these deviations in order to build the necessary credibility by:

- Prudent measures in terms of using main instrument, the base rate, in order to contain inflation pressures;
- Communication explaining the arguments for deviations from the target;
- Policies aimed at bringing inflation back in line with the target, as well as the time horizon required.

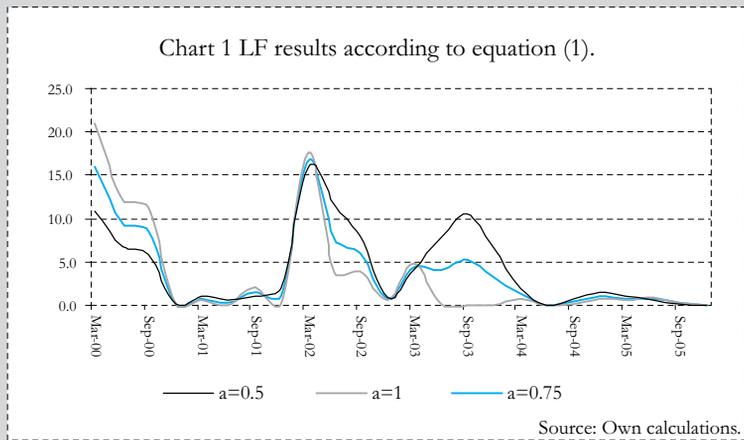
In line with that, before a fully-fledged IT takes place, the BoA should develop the necessary tools and models that provide reliable evaluations of the shocks and their effects in forward inflation and in output gap in the economy. Accordingly, the development of those tools requires reliable statistics from the real sector of the economy.

*Box 1. Secondary Objectives: The weight of economic growth in MP decision-making. A loss function for Monetary Policy.*

The effectiveness of monetary policy is estimated through a minimization Loss Function (LF). The purpose of this function is the orientation of central banks' monetary policy under inflation targeting regime toward a flexible equilibrium. The LF, in the long term, generates an index of weighted sums of inflation and national production deviation toward respective targeted or potential levels. LF function presents the preferences to minimize the variations (losses) of the respective indicators from the targeted levels. The inflation variation is measured by the difference between annual inflation rates with the respective target, beginning from the year 1990. The output objective is the economic potential growth estimated through the H-P filter. The weights of the LS function refer to bank preferences for the deviation of inflation variation and production fluctuation.

$$L_t = \sum_{i=1}^k \text{weight}_i * (\text{variable}_{i,t} - \text{objectiv}_{i,t})^2 \quad L_t = a(\pi_t - \pi_t^*)^2 + (1 - a)(y_t - y_t^*)^2 \quad (1)$$

The weights that are used match cross-panel study results of countries that are under inflation targeting regime (Cecchetti, 1998). The chart shows the results according to the equation by applying three diverse weights for the period 2000-2005. During the year 2001, the losses of the monetary policy slumped to further increase during the banking crises of 2002. At the beginning of the year 2004, losses start to minimize.



Monetary policy becomes complex when the economy is subject to supply side shocks. In this case, inflation rate tends to overshoot the target, while the economic growth tends to undershoot its respective potential trend. In the loss function, the interaction in opposite sides of the inflation rate against the economic growth may generate a net zero effect of supply side shocks. In this perspective, the Loss Function may produce a balancing effect

*depending on the significance of the two variables, inflation, (and inflation expectation anchoring) and short economic growth.*

*The intensity at which monetary policy reacts largely depends on the alpha coefficient of inflation importance against that of economic growth. For developing countries, hard-won credibility imposes a tough stance on inflation. Maintaining inflation within the target over long time-periods becomes the main source of the credibility required to conduct monetary policy.*

## II.1 IMPLEMENTATION OF DECISION-MAKING FRAMEWORK

Implementing the IT regime requires, besides institutional improvements, a rearrangement of procedural structure towards decision-making. An IT regime requires a new intermediate objective and public acknowledgment of its role in monetary policy transmission mechanism. It still requires communicating to the public the flexibility of the central bank towards the main objective and the secondary ones.

- *Forecast tools*

IT regime owes its success partly to the special emphasis it puts on the forward-looking perspective of monetary policy. The IT framework addresses time-inconsistency problems in two aspects. Unlike other regimes, under IT the time horizons for the monetary policy instruments to affect the intermediate and the final target are equivalent. In addition to time horizon, the intermediate target and the final target are quantitatively equivalent and the transmission mechanism affects them through the same channels. In a fully-fledged IT regime, the intermediate target will be forecasted inflation expectation and the final target will be inflation. Forecasted inflation fulfils the criteria as a functional intermediate target:

- Forecasted/expected inflation is closely related to final target of inflation, though development of reliable forecasting tools remains a keystone in implementing fully-fledged IT, not least

- for the sake of credibility,
- Forecasted (expected) inflation is manageable through a policy transmission mechanism,
- Forecasted (expected) inflation is a relevant intermediate indicator for signalling to the central bank and the public the forward policy approach.
- Publishing the forecasted inflation increases central bank transparency and its functionality in terms of communicating central bank assessment of monetary conditions and inflationary pressures.
- *Single Inflation Models*

Forecasting of inflation through models of different frequencies is a continuous process at Bank of Albania. Currently, the 12-month forecasts are being used in decision-making. The Bank of Albania is employing several models in its decision-making practice:

- A monthly model assumes inflation on past values of money, exchange rate and unemployment, while a similar quarterly model adds import prices and mirrors some type of a Phillips curve,
- A similar method is applied towards the groups of CPI basket and weights them to produce an overall forecast for headline inflation,
- A core inflation rate and a core forecast rate is being produced by the BoA staff to assist in bringing up the monetary pressure underlying headline inflation.

Further development towards longer horizon should take place to provide solid and reliable models for longer horizons. It will require additional models and a revision of the CPI basket to increase the representative role of CPI as an inflation measure in line with trends of household expenditures.

- *Macro econometric Model - MP Transmission Mechanism*

The assessment of a full transmission mechanism becomes an essential requirement under a fully-fledged IT. In Albania, the conduct and implementation of monetary policy faces obstacles

due to underdeveloped financial market, partial dollarization, and informal economy leading to unreliable statistics. The issues become of a crucial significance when adopting fully-fledged IT in terms of conducting monetary policy due to unclear transmission channels or unstable forecasts, while high dollarization impedes effectiveness. The Bank of Albania is inclined to work on addressing the issues through institutional and operational measures before a formal IT adoption.

On an institutional level, the Bank of Albania is fully collaborating in further formalizing the private sector transactions through the banking system. The project, adopted in accordance with a broader institutional arrangement, aims at channelling the salary payment and other private sector transactions through the banking system. The project should result in a higher monetization of GDP and a greater role for monetary indicators.

In addition, the BoA's new regulatory framework on foreign currency crediting, aiming at promoting financial stability, is expected to spill over on slowing down dollarization and improving the transmission mechanism effectiveness. Further measures are under way to lead the development process of the financial system (see *I.3 Financial System Development*).

Simultaneously, in the last two years, efforts have been made to progress on assessing a core macroeconomic model and a formal transmission mechanism (Dushku et al 2007; Shijaku et al 2007). Details on the refinements of the model and the work already done will be part of this round.

- *Decision-making process at Bank of Albania*

Under a forward-looking framework, policy monetary stance will focus on forward expected inflation. Similarly, current developments are not subject of present monetary policy actions but to past policy actions. These basic principles underlying IT imply a condition for the success of the regime itself. These basics are built upon the central bank's ability to forecast and release their benefits through banks credibility in terms of stabilizing business cycles in the

economy. As such, inflation rate and its consistency with the target, is not an ultimate objective in itself but a quantitative assessment of the monetary policy success in maintaining a stable economy. Thus, the decision making process within the BoA should have in focus conducting a monetary policy that maintains expected (forecasted) inflation rate in line with the target in a medium term horizon, in order for the economic activity to take place at regular pace.

The decision-making process starts with the assessment of macroeconomic conditions, real sector developments and monetary conditions, to produce a reliable forecast of inflation. On monthly follow-up reports, analysis rely more on monetary and financial data, while the full-scale quarterly reports cover a broader real sector analysis.

*Box 2. Monetary Policy Decision-Making*

*A full-scale report focuses on:*

- a. Analysis of inflationary pressures present in different sectors of economy;*
- b. Assessment of monetary conditions;*
- c. Evaluation of external factors – prices for imported goods and net effect of external account;*
- d. Assessment of aggregate demand and supply;*
- e. Forecasted inflation and underlying assumptions;*
- f. Base rate proposal.*

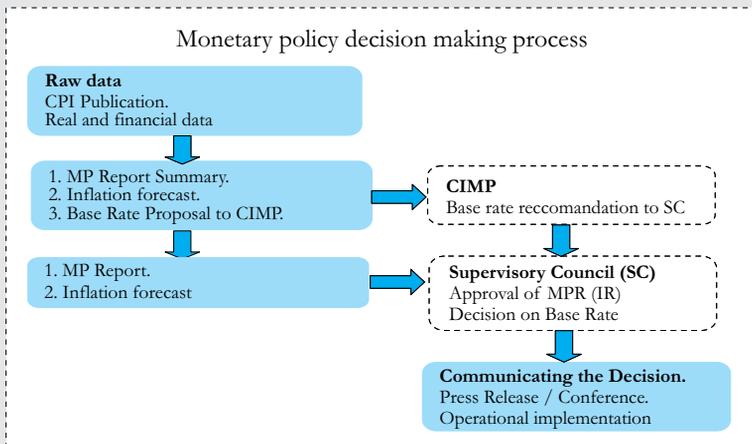
*Phase one. CPI data published by INSTAT and other monetary and real sector data are the input for an overview of the possible base scenario of the economy by the staff. It provides a consistency check of real sector, monetary/financial and survey data to set up a baseline scenario.*

*Phase two. A draft summary is prepared based on sectorial information. The draft summary analysis takes into considerations assumptions and judgment by Monetary Policy Department. The base rate proposal includes a description of the arguments supporting the proposal, a balance of risks the baseline scenario faces and the potential costs of such a deviation. Inflation team produces several forecast scenarios for the decision makers, providing a quantitative assessment of the risks underlying the baseline scenario.*

*Phase three. A week before the SC meeting the draft report goes to the Committee on Implementation of Monetary Policy (CIMP)<sup>10</sup>. The Committee produces recommendations on the overall state of economy and discusses the underlying factors behind the forecasted inflation, as well as takes into account different aspects of the proposed MP stance. CIMP makes its recommendation to SC with respect to the proposed base rate.*

*Phase four. CIMP suggestions and comments on Monetary Policy Report (Inflation Report) are considered in the final draft. The final draft of the report is completed a week before the SC meeting takes place. The report on economy, and inflation forecasts as a part of final report, and the proposal go to SC.*

*Phase five. Supervisory Council assesses the report and the base rate proposal in line with the forecast. Recommendations and suggestions of SC take place in the report. SC votes the proposal and the decision is taken on simple majority vote. Governor's vote is the decisive one in case of a tie. The decision is made public through a press release or a press conference within 24 hours from the end of the meeting. In last two years, The Bank of Albania has arranged for press conferences by the Governor after a base rate change.*



*Supervisory Council meets at least 12 times, on each monthly report. Four of these meetings are completely dedicated to the quarterly reports. The monetary and macroeconomic developments are discussed in depth. The other monthly reports provide a follow-up of the inflationary and monetary conditions in the economy. At the end of each year, SC publishes its agenda for the next year meetings on monetary policy.*

*Box 3. Legal framework for decision-making in central bank.*

*Current Law foresees the right of the Supervisory Council (SC) to set-up committees and delegate tasks and/or competences to them with regard to implementation of monetary policy (Gogu et.al. 2006). In line with this framework, SC has set up a Committee on Implementation of Monetary Policy (CIMP) as an advisory body and has charged this committee with the main task of advising SC with regard to monetary policy stance and implement monetary policy approved by SC.*

*Decision-making process should be addressed in the light of the expected review of the Law on The Bank of Albania before 2010, foreseen in the Stabilization and Association Agreement between Republic of Albania and EU. Still, the arrangement of the decision-making process remains sanctioned in the Constitution of the Republic of Albania. The new Law may consider the role of the SC as a managing body that oversees the decision-making process delegated to a special team specialized on monetary policy by SC itself. The delegating and overseeing powers may be balanced in an effective way to provide for monetary policy decision-making process to receive greater flexibility. Currently the CIMP is an advisory body to SC.*

*In addition, the new law is supposed to include a sanction on removing the deficit financing by the central bank (see Central bank - Institutional and Instrumental - Independence).*

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## ENDNOTES

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<sup>1</sup> Article 1 of the Bank of Albania Law No.8269, date 23.12.1997, states that "... the main objective of The Bank of Albania is to achieve and maintain price stability".

<sup>2</sup> The revision of the Bank of Albania Law in line with the principles of *acquis communautaire* is foreseen in the Association and Stabilization Agreement between Albania and European Union before the year 2010.

<sup>3</sup> National Plan for the Implementation of Association and Stabilization Agreement with EU, June 2006

<sup>4</sup> After the Supervisory Council approval, the BoA publishes "Medium-Term Development Plan of Bank of Albania" for a three-year term as well as a Monetary Policy Document on annual basis, that both communicate to the public the objective, target consistent to that objective and instruments in place for achieving the target.

<sup>5</sup> Domestic financing has been reduced down to an average of 2.5-3.0 % of GDP since 2000, down from about 11 % in 1997.

<sup>6</sup> Inflation models of The Bank of Albania find that exchange rate significantly influences inflation in short to medium term. Other indicators are broad money, import prices, fiscal expenditures and regulated prices (Çeliku et.al, 2006).

<sup>7</sup> As a rule, a developing country is supposed to maintain a level of international reserves equivalent to around 4 months of imports. Currently the level is defined and included in the PRGF/EFF Agreement with the IMF (and Ministry of Finance).

<sup>8</sup> The share of foreign currency deposits to total deposits is on an upward trend. Currently, this ratio stands at about 43 %, up from around 36 % at the end of 2005.

<sup>9</sup> All or most IT central banks have chosen headline inflation as a formal or public measure to target. Yet some countries use a net inflation derivative to account for expected liberalization in some administrated prices, or highly volatile commodity prices (Bernanke et. al. 1999).

<sup>10</sup> Current set up of CIMP: CIMP members are the Governor, the Deputy Governor, Heads of Monetary Policy Department, Research Department, Supervision Department, Financial Stability Department, Legal Department and Deputy Heads of Monetary Policy and Operations Departments.

# COMMENTS ON: INSTITUTIONAL AND OPERATIONAL FRAMEWORK TOWARDS A FORWARD LOOKING REGIME

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*Meir Sokoler\**

## GENERAL

This is an informative paper about the evolution of the framework of monetary policy in Albania. It is only a preliminary draft, so hopefully it could be improved by increasing the focus on what the authors think are the critical changes that need to be made in order to have an effective, fully-pledged Inflation Targeting (IT) regime in Albania.

My comments are organized in three parts. The first two correspond to the two main subdivisions of the paper; the Institutional framework and the Operational framework. I will add a short third part-the international framework.

## 1. INSTITUTIONAL FRAMEWORK

### A) Financial Central Bank Independence

As is evident in the paper, the current legal framework of the Bank of Albania (BoA) gives it a fair amount of legal independence to fulfill its main mission –maintaining price stability. For example judging by the four Mishkin (2004) criteria of the necessary requirements for an

IT regime (page 4 of the paper), Albania stands pretty well. In fact with respect to another important criterion-financial Central Bank independence- the Albanian legal framework is more advanced than in many countries. The BoA law stipulates that in the case the capital of the BoA falls below some critical level, it is the responsibility of the government to inject the necessary capital through a well established clear mechanism. Insuring financial central bank independence is very important for both; protecting better the central bank from the possibility of fiscal dominance and increasing the capacity of the central bank to maintain financial stability.

#### B) Selection of SC members

To improve the institutional framework of the BoA, it will be necessary to change the existing procedure of the SC council. It is very important that members of the SC be selected; a) for their professional expertise, b) their term should not be influenced by the political cycle, c) actual or even seeming conflict of interest should be avoided. This requires a different selection process for choosing SC members than the current one. An alternative selection process could be similar to that proposed in the new Bank Israel (BOI) law which has not yet been adopted. In the proposed law, the government appoints a research committee whose task is to come up with a list of suitable candidate members for the SC. The committee is chaired by a former Supreme Court judge, and two prominent economists or businessmen (e.g. a head of the economic department in the leading Albanian university). The list of proposed candidates for the SC can be approved or rejected by the government, but it can not be a “cherry picking” process. There are several other important issues which need to be dealt with (like the term of members, conflict of interest prevention, causes for dismissal etc) which will not be detailed here for the cause of brevity.

#### C) Increasing Actual Independence

In addition, to improve the legal independence framework of the BoA, no less thought should be given to increasing the actual independence of the BoA. One area which needs particular attention is the relationship between the BoA and the Treasury .This is

particular relevant with respect to issuing and retiring debt .One way of doing so is to institute an accord between the BoA and the Treasury in which the Treasury's debt issues will be essentially for periods of longer than one year and where the BoA will issue its own paper and/or conduct open market operations (repo and outright) for periods shorter than one year. Such an arrangement will greatly reduce the current difficulties of the liquidity management faced by the BoA because of the huge and frequent liquidity injections (withdrawals) due to the issuance (redemptions) of government bills with short maturities.

## 2. OPERATIONAL FRAMEWORK

### A) Financial Market Developments

It is important to develop the financial market for a variety of very good reasons, not the least the increased efficiency of monetary policy operations in a future Albanian IT regime. It is important to remember that changes in the key policy rate (the most important central bank instrument in IT regimes) have by themselves a very small effect on the variables which ultimately affect the goal of the BoA-price stability).Far more important are how changes in the key rate propagate through the financial system and how strongly they affect expectations of future policy changes. In other words, most important role of changes in the policy rate is to steer expectations. The effectiveness on how expectations are steered depends, however, on how developed are the financial markets. Thus, the developing financial markets in Albania will increase considerably the chances of a successful IT regime. In this respect, establishing a funded pension system in Albania will be an important step forward.

Developing the Albanian financial system is of course necessary to improve:

- a) the efficiency of channeling saving to investments;
- b) the economy's resilience to withstand inevitable shocks;
- c) the risk sharing capacity within the economy.

In addition, however, developing financial markets has proven to be important also for political – economic reasons. Developed financial markets, and popularization of finance (e.g. developing a mortgage market) have proven themselves as effective means of curbing short-run-populist policies. In Israel, for example, election spending cycles, common in the past, have disappeared as financial markets deepened. I am confident that the same can be true in Albania.

## B) Data Problems

This is perhaps the most pressing issue in Albania at present. In an IT regime credibility and transparency are essential. An important element in gaining credibility is the continuing advance of professionalism in the management and staff of the BoA. The public expects and trusts the BoA to be the expert which understands how the transmission mechanism (by which monetary policy affects the economy) works and evolves. This requires the BoA to develop continuously analytical and institutional knowledge of the Albanian economy. But it is very difficult and may even be impossible to do so without the appropriate statistical infrastructure, providing relevant and timely data from all sectors of the economy.

Part of the necessary data inputs come from banks and other financial players. The BoA has the means to insure the quality and integrity of these data. This, however, is not the case with respect to data on real activity. Currently the availability of timely hard data on various aspects of real activity (GDP and its components, labor market data, etc.) is badly missing. In additions, the CPI basket is updated infrequently, raising concern of the irrelevancy of the inflation figures in the eyes of the public.

Thus, for countries such as Albania, with serious lacking of a statistical infrastructure, a clear commitment by the government is needed. To improve the quality and integrity of statistics is very important. Infrastructure, such as roads and electricity, is very high these days on the Albanian agenda. It is time to think of having good statistics as another very crucial type of infrastructure. This is important not only for an effective IT regime, but also for the economy as a whole.

### 3. THE INTERNATIONAL FRAMEWORK

Albania is a small European open economy which eventually should be part of the European Union. As such it should continuously gear its institutions and policies to be consistent with the integration role. Striving successfully towards this goal by applying an effective and transparent IT regime is the right direction. Increasing the BoA actual legal independence will add credibility to the convergence process. This is necessary but may not be sufficient. In addition, current practices (e.g. Government bond auctions) need to be reviewed and changed to increase the consistency of the convergence process.

Albania is also characterized by the presence of many foreign banks. Their presence in Albania is positive in many respects for further developing the Albanian banking and financial system. For example, specific human capital skills, which they bring to Albania is of great value. At the same time, it is important to remember that the lending practices of these banks in Albania are often dictated by the considerations of the mother companies abroad which are not always fully aligned with the best interests of the Albanian financial system. A case in point is the wide spread practice of granting Euro linked loans to Albanian businesses and individuals, whose incomes are in Lek and who are thus exposed to currency risk. It is, therefore the responsibility of the BoA to take into account the fact that there is often a divergence of interests between the short-term goals of the parent of the foreign banks present in Albania (often to increase the size of loans denominated in foreign or domestic currency, stressing less profits and currency risks) and the BoA's long-term view of insuring financial stability and reducing to a minimum any potential conflict between price stability and sustained financial stability.

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# MACRO ECONOMETRIC MODEL OF ALBANIA: A FOLLOW UP

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This paper follows up on the previous paper titled “A macro econometric model approach for Albania”. The objective is to present the progress of the macro-model during 2007. Actually, the model is enriched with the supply side and fiscal sector and includes the main channels of the transmission mechanism of the monetary policy. We have applied a new method of disaggregating annual to quarterly data and also some new definition of key variables, such as disposable income. The results indicate that the model is stable, it converges in the long run to its desirable path and it may be suitable for different policy scenarios. On the other hand, the forecast performance of the model was so far not analysed.

## INTRODUCTION

As the Bank of Albania is preparing to launch the Inflation Targeting strategy in the near future, the policy meetings will have to use all of the available information that actual data and econometric evaluation provide. In this context, the macro-econometric model of Albania (MEAM) will be an important part of this process. MEAM is not only useful for giving an overall view of the main linkages and channels of the economy, but also to amount the impact of different shocks that the economy might

be going through and also foretell the possible developments following a given policy choice.

When providing information useful for the monetary policy, one can distinguish between three main periods: actual developments, medium term and long run information. Knowledge of the current economic situation of the country is crucial for assessing future developments which are important for a forward looking monetary policy.<sup>1</sup> A macroeconomic model will be a useful tool in this connection. The actual developments of the economy include both evolutions that will have a long run impact in the economy and also information about current short run developments. In this context, MEAM will be useful because it allows determining the long run relationships of the economy and providing information of these linkages. So as soon as actual information becomes available, the model links it to all the long run relationships of the economy, and also evaluates the short run impact of these developments. Therefore, when the Bank of Albania determines its medium term projects, short term developments will be linked to long run assessments and the model can function as a bridge.

Moreover, MEAM can ensure consistency between important economic variables. Even though the model is not a mechanical tool which provides an answer to every possible scenario, it serves as a reference and a guide for the framework of the economy. It is also useful to assess the possible risks of different policies, and to analyze the response of monetary policy to various shock. When analyzing the policies and the possible risks, we want to look at the results obtained as a consequence of alternative assumptions about the key variables of the economy. Such analyses of the macro variables using different scenarios must be based on a macro model.

In order to have a useful macroeconomic model, it is important to construct a transmission mechanism which can be interpreted and communicated easily for the internal users and also outside the Bank of Albania. The framework of the model should include all the necessary channels of the monetary policy, the various disturbances of the economy and the most important sectors. The

model should be flexible such as when analyzing different shocks, we must be able to change the transmission mechanism as needed. Also, any new investigation on different individual channels or any new information on macroeconomic data that becomes available should become easily part of the macro econometric model. A purely econometric approach which aims at constructing a set of equations to fit the data does not generally result in a useful model. Data series are usually short and subject to structural change while the economy is characterized by a high degree of simultaneity. As a result, the estimated parameters are not fully reliable. Moreover, purely empirically based models do not allow the analysis of different possible scenarios about how the economy works. By summarizing we can conclude that the model should first be estimated so that the single equations have a clear economic interpretation; then make use of all the possible information and knowledge to help parameterize a structural macroeconomic model.

During 2007, we have worked on constructing a macro model which fulfils the above-mentioned needs and gives a good representation of the Albanian economy. The long-term properties of the model can be qualified as neoclassical, i.e. production is determined by the supply of input factors. While in the short run, the model behaves as neokeynesian: production is determined by demand; monetary policy influences interest rates, thus output and employment by changing prices and wages. While making use of the VECM method as the basic econometrical approach, many efforts have been put on calibrating and quantifying the model using our insight on different transmission channels.

However this is an ongoing process. Our work on completing the model and quantifying all the parameters is not finished. MEAM is still in the development process as further information becomes available, and other empirically based analyses are carried out to understand the relationships in the Albanian economy. Nevertheless, MEAM should continue to be an important tool to combine empirical and theoretical insights serving as a valuable instrument for the monetary policy.

## II. DEVELOPMENTS DURING 2007

The first version of MEAM presented at the second Round Table aimed to capture the basic macroeconomic relationships of the economy. The purpose was to show a simple and consistent framework of the Albanian economy, and how basic macroeconomic variables such as real output, inflation, interest rate and exchange rate behave under different scenarios and explain the short term dynamics return to equilibrium. In this first version, a number of limitations were identified. These related both to the estimations and specification of some blocks and equations and also to the quality of the time series used.

The model mainly followed the New Keynesian theory that demand changes affect output. This was also augmented by a Phillips curve that relates inflation rates to unemployment. At this stage the supply side consisted only of the labour market which affected wages and unemployment but not output. Finally, the model also included a rule for setting monetary policy interest rate based on inflation deviations and output gap, which in turn affects interest rates. Concerning the quality of the data, the model made use of statistically interpolated data and proxies for missing variables.

The main tasks during 2007 consisted on estimating and calibrating the model, by adding missing channels and new information, reevaluating the existing ones and improving the database with better interpolation techniques. The new model developed to a more representative tool of the Albanian characteristics and theoretical considerations. The econometric methodology used is the cointegration framework, where the error correction mechanisms are estimated in two steps. First, we estimate the long run relations based on the theory and if needed, parameter restrictions are imposed. The short run equations are estimated individually, taking into account the long run coefficients of the first step. All the equations are backward-looking as long as no expectations are modelled explicitly.

One of the shortcomings of the first version of MEAM was using Linsman interpolation method to disaggregate annual to quarterly data. This method is mainly a mathematical approach and is commonly

used to disaggregate annual data. It typically assumes that the unknown quarterly trend can be conveniently described by a function of time and minimizes the discrepancy between known annual values and quarterly estimated data. In the new version of MEAM we use the method of two steps adjustment as presented by Denton (1971), to disaggregate the series of GDP and consumption. This technique uses other indicators with quarterly frequency to disaggregate annual data to quarterly ones. Index of Total Volume of Sales and Retail Sail Index are used respectively for GDP and consumption. The final quarterly estimates are obtained by minimizing a quadratic loss function that involves the preliminary estimates and that is subject to the aggregation constraint. This method of temporary disaggregation of data uses all the available information in the best possible way and provides a logical relationship of high frequency data to low frequency ones<sup>2</sup>.

Currently the model includes a full supply side of the economy, a well integrated fiscal sector and the main transmission channels. The model is functional, it convergences in the long run and it includes more stabilizers such as the interest rate, labour market, prices, etc. One should emphasis, however, that the linkages between the supply and the demand side are more calibrated than estimated: the output gap's and the NAWRU's effect on price and wage dynamics is rather limited, so far.

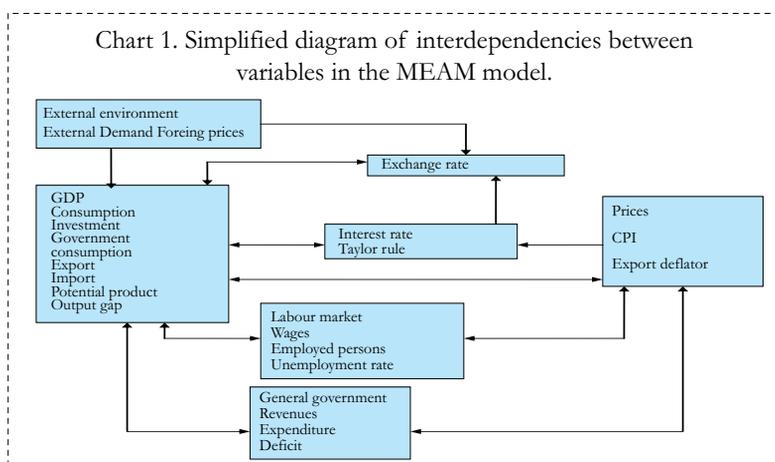
Below we will present the main features of the new version of the model, our new approach to interpolation and proxies for missing variables and some possible scenarios.

### III. THE NEW SCHEME OF TRANSMISSION MECHANISM

The structure of the demand side of the model is basically the same as the previous version. The model is backward-looking, so only adaptive expectations are presented by including current and lagged values of the variables. The current version of the model includes a full supply side which represents a long run approach. The demand side includes the impact of interest rate, exchange rate

and foreign sector in the economy. The model is equipped with a detailed description of the fiscal sector however there is no fiscal rule. Domestic prices are determined endogenously, while foreign prices are exogenous. Taylor rule is supposed to describe the main developments of the monetary policy. And finally, the model also includes exchange rate pass-through given its importance in the Albanian economy.

Chart 1 presents a new and simplified version of the structure of MEAM providing the most important linkages between variables. Below we will give a short description of the main features of the model and the developments during 2007.



The supply block gives the long run path of the model, and is determined by a production function with two inputs, labour and capital. The functional form is a Cobb Douglas. In the long run, potential labour demand is determined by the working age population and Non Accelerating Wage Rate of Unemployment (NAWRU). The demands for production factors are derived assuming cost minimization by firms.

The demand side of the model is relatively standard: Consumption is re-estimated using a new approach for disposable income.

Disposable income is income generated from Gross Domestic Product or Net domestic product subtracting direct and indirect taxes, adding social and health insurance benefits. Disposable income for Albania is calculated as below:

$$YDN = GDP + GTR\_X + REM\_LEK - GHSIC\_R - GDIT\_R - GDT\_R - GO\_R (1)$$

Where, GDP is Gross Domestic Product, GTR\_X is transfers expenditures, REM\_LEK is remittances in Lek, GHSIC\_R is social institutions contribution revenues, GDIT\_R is government indirect tax revenue, GDT\_R government direct tax revenue and GO\_R is other revenues.

Consumption also includes a substitution effect in the short run, as interest rate increases lowers consumption.

Investment (capital demand) is directly affected by interest rate and domestic product in the economy. Export and imports are estimated using the impact of foreign and domestic demand and of relative export and import prices. A full pass-through of exchange rate to export prices in LEK gives an important impact on exports. We have included a new approach to import prices which are defined as weighted average of export prices of the main trade partners of Albania<sup>3</sup>. This new measure allows dividing exchange rate impact on import prices from the impact of foreign prices.

The link between the real and nominal side of the model is described by the price and wage structure. Prices in the economy, as constructed in the model, are mainly driven by the exchange rate pass-through and developments in the labour market. Also, domestic inflation is affected by the output gap. Wages reflect the outcome of a bargaining process, and so they are determined as a function of the levels of productivity and unemployment in the economy.

Fiscal policy is modelled with four revenue items and five expenditure items. The fiscal side has been constructed on the basis of nominal quarterly data, published by Ministry of Finance for the years 1998-2006. We have not included a fiscal rule but we model the

volumes of the general government revenues and expenditures and the resulting deficit debt. One should note, however, that currently fiscal variables only serve as additional variables, they do not have direct impact on wages, employment etc.

Monetary policy is assumed to follow a standard Taylor-rule policy, thus deviations of the inflation rate and actual output from the desired level, will cause changes in the policy of the central bank. The rule is currently backward-looking. Throughout the simulations we held interest rate constant. The new approach of estimating output gap helps in better explaining the dynamic of the repo rate.

Exchange rate is estimated taking into account the combination of uncovered interest rate parity with purchasing power parity. We have assumed a constant risk premium reflected in the unit coefficient of domestic and foreign interest rate. Assuming that exchange rate follows past developments and changes only due to alterations in relative prices and interest rate differentials, we argue that changes will be determined only by these indicators. In future work, we plan to insert a more forward looking monetary policy.

#### IV. SIMULATIONS

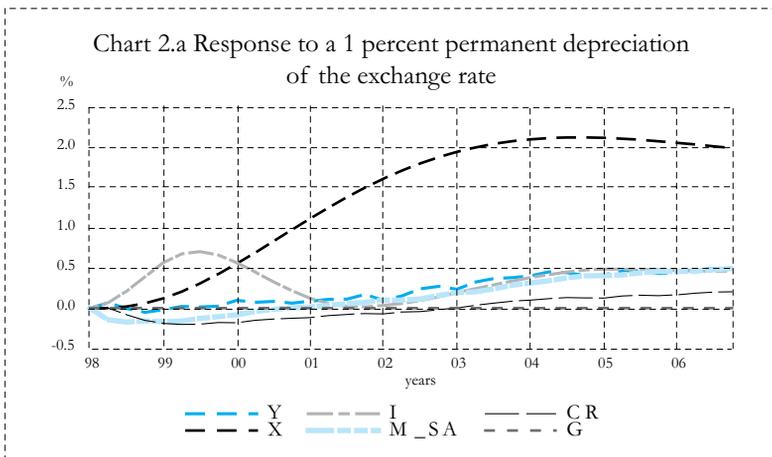
The structure of the model presented above gives the impact of the single equations that we have estimated. However, in order to assess the overall dynamic performance of the model we need to run some simulations which reflect the response of the model to the different shocks that the Albanian economy may face. We carry out four simulations: a permanent depreciation of the exchange rate, a permanent increase in government consumption, a permanent decrease in total factor productivity and a permanent increase in external demand. The simulations were run over a period of ten years (over 1997-2006). We did not incorporate in the model any endogenous policy response, that is, the policy rate and the exchange rate were kept fixed, and there was no fiscal policy reaction considered either.

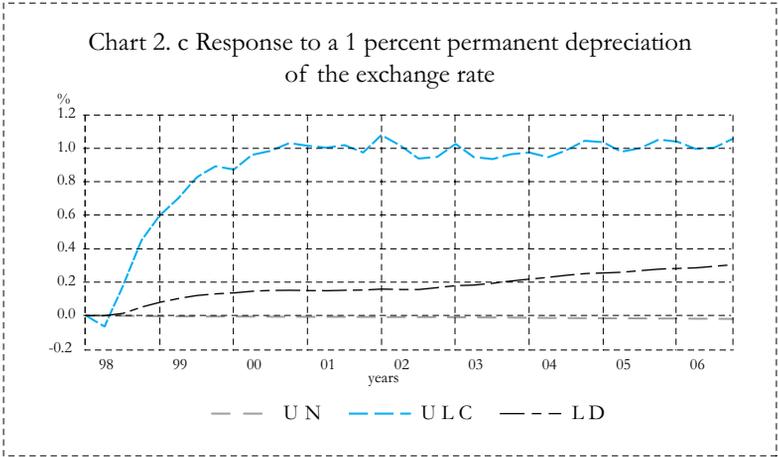
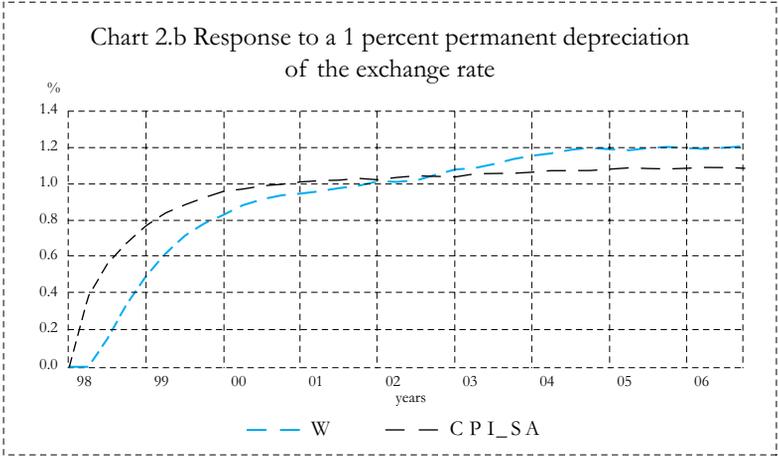
## IV.1 DEPRECIATION OF THE NOMINAL EXCHANGE RATE

### RATE

In this simulation we generate a 1 percent permanent depreciation of the nominal exchange rate against the euro. The effects of this shock in Albanian economy are illustrated in the charts 2.a, 2.b and 2.c.

Depreciation of the nominal exchange rate increases the competitiveness of the domestic producers, but on the other hand higher import prices cause an increase in the CPI and in the nominal wages. Investment also increases in the first year, but government consumption doesn't change, by assumption. During the first three years, a drop in consumption and the slight increase in exports is mostly offset by increase in investments and imports and thus, GDP does not react to the shock in the short run. In the longer run, exports react significantly and the positive consequence on GDP appears after the shock becomes persistent (Chart 2.b). Chart 2.c illustrates that due to the depreciation of the exchange rate, unit labour cost and labour demand increase, but the unemployment rate does not respond to the shock.





#### IV.2 INCREASE IN GOVERNMENT CONSUMPTION

Charts 3.a, 3.b and 3.c present the macroeconomic effects of a 10 percent permanent increase in government expenditures (consumption). This simulation shows that a positive increase in government consumption raises GDP in the first year with 0.9 percent as a primary effect. This positive effect stimulates production and higher investment for all the period of simulation. Nominal wages and prices go up, but prices adjust slower than wages. Higher employment (LD) and nominal wages lead to higher

Chart 3.a Response to 10 percent permanent increase in government consumption

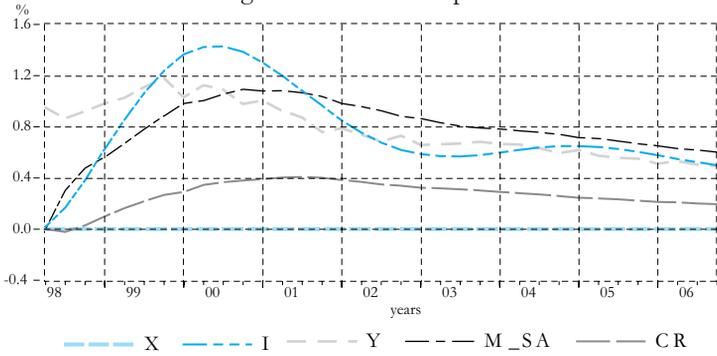


Chart 3.b Response to 10 percent permanent increase in government consumption

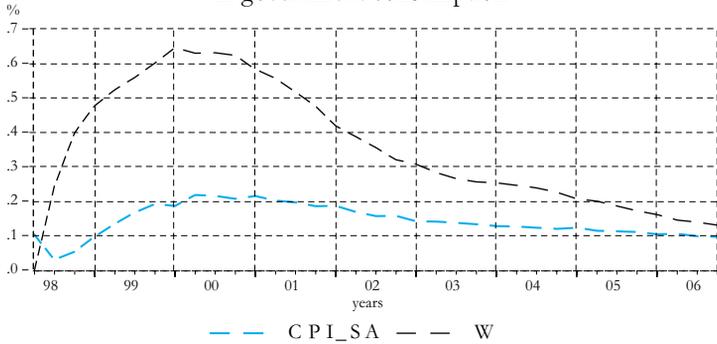
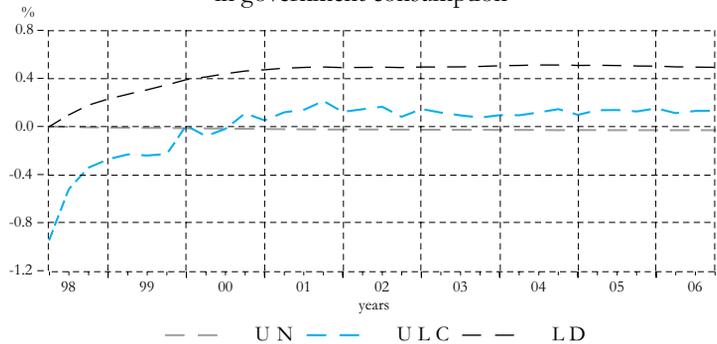


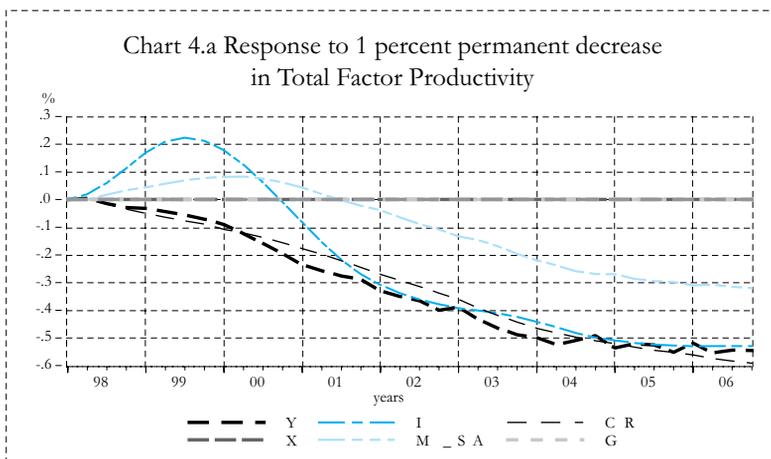
Chart 3.c Response to 10 percent permanent increase in government consumption

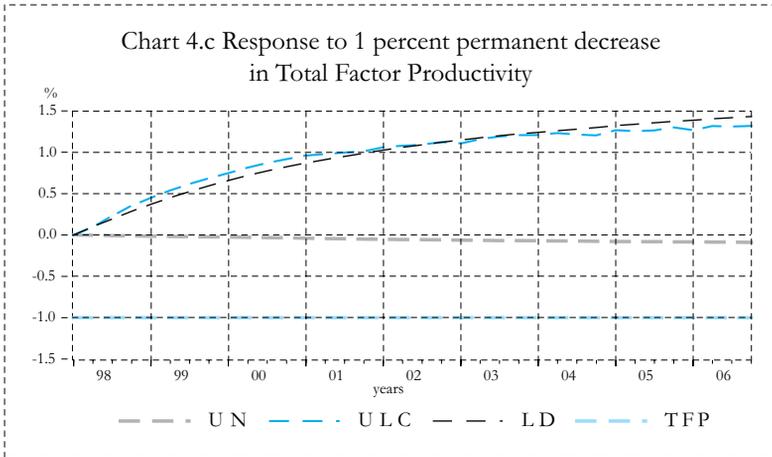
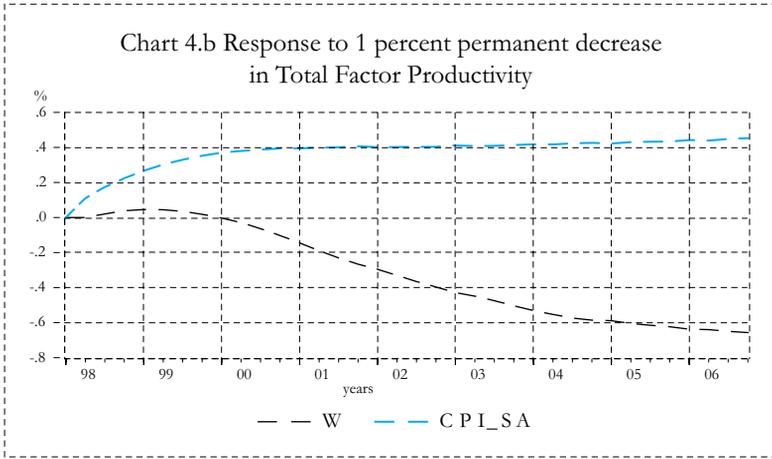


disposable incomes and this will cause consumption to rise. So, in the model non-Ricardian behaviour dominates. Higher domestic demand increases the level of imports, while exports do not react to this shock. The string import reaction makes GDP response fading away, which is expected in a small open economy.

### IV.3 NEGATIVE SUPPLY SHOCK

The permanent negative supply shock results in lower GDP for all the period of simulation. Lower aggregate demand and disposable income cause a decrease in imports and real consumption. Nevertheless we notice that exports increase supported by higher investment (chart 4.a), both due to their large reliance on persistence. Lower production will cause a decrease in nominal wages thus increasing labour demand. Lower real wages resulting in higher employment but lower production, will cause an increase in unit labour cost (chart 4.c). In other words, the substitution effect dominates: a negative supply shock leads to an increase in labour demand. Due to higher domestic cost, there will be an increase in the aggregate price level (chart 4.b).

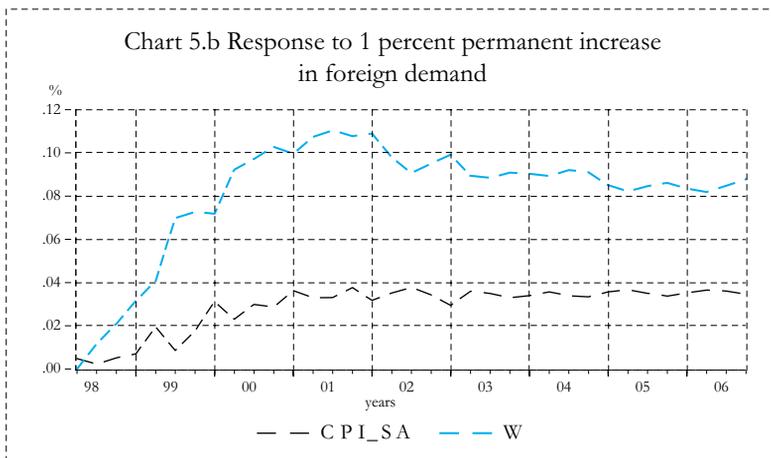
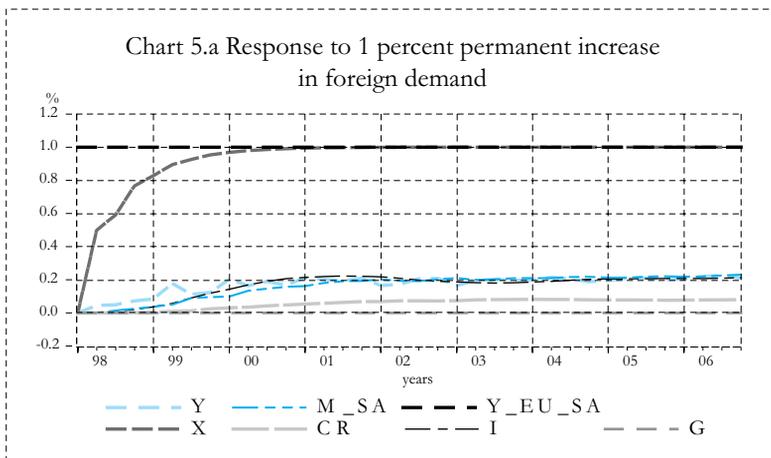


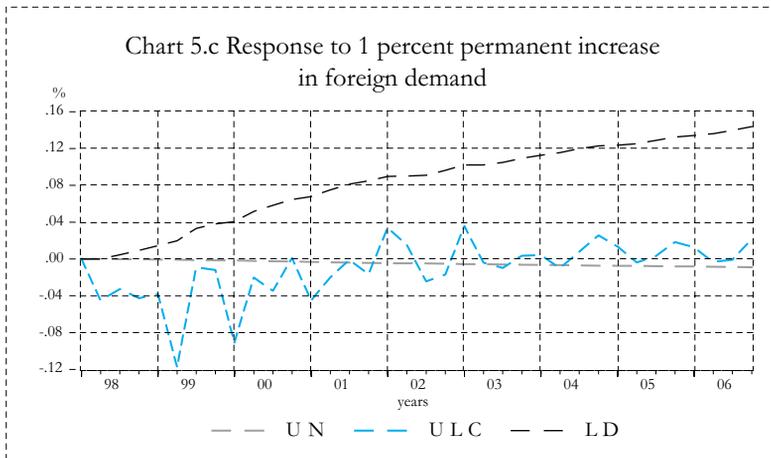


#### IV.4 INCREASE IN WORLD DEMAND

The permanent 1 percent increase in world demand causes an increase of exports by 0.8 percent within the first year (chart 5.a). Given that exports are high import content, higher exports will result in higher imports, so that the net effect on GDP is positive. Higher aggregate demand increases also investments, which are needed to back up the increase in exports. Real disposable income increases causing also an increase in consumption.

On the other side, output gap will increase due to higher demand, and this will drive up the aggregate price level (chart 5.b). The intensified economic activity generates higher labour demand and higher wages; however GDP growth compensates part of that increase so that unit labour cost growth fluctuates around zero (chart 5.c). Given that an increase in production especially exports is supported by higher labour demand, this may indicate a tendency of Albanian production for abroad to be labour intensive.





## CONCLUSIONS

This paper develops the current version of the Macro Econometric Model of Albania (MEAM). The main aim is to present the new scheme of transmission mechanism and the performance of the model as a whole. The impact of different scenarios the Albanian economy might encounter on the macroeconomic variables shows that the model is well developed and provides reasonable results. Therefore, given that the current form of MEAM performs well in running different simulations and scenario analyses, it will be a very appropriate tool for the policymaking at the Bank of Albania in the near future.

Nevertheless, this paper should be considered as a short presentation of the latest version of the model. The process of building the model is ongoing as it is being improved continuously. The main aim is to develop a model which is consistent with the theory in the long run as well as provides a good representation of the Albanian economy. Therefore, future research on different parts of the macro model and new data and developments, will be very useful in providing a good outlook of the macroeconomic channels of the economy.

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## ENDNOTES

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<sup>1</sup> One should note, however, that for policy analysis, more micro founded models with expectations are more useful than the standard macro econometric models, such as the MEAM.

<sup>2</sup> Refer to “Main temporary disaggregating methods”, Dushku (2007)

<sup>3</sup> Refer to “Index of foreign unit values/prices of Albanian imports”, (2007), Risan Shllaku.



## DISCUSSION ON “MACRO ECONOMETRIC MODEL OF ALBANIA”

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First of all I would like to thank you for the chance to come in this nice and useful piece of work.

We heard about a nice piece of work, a modelling work that has been developed in the context of introducing inflation targeting in Albania.

Now a set of questions I want to pose in my discussion. Firstly, I want to ask whether it is a useful tool for forecasting in the Bank of Albania, I mean the forecasting system; and the second is how good the model can be in understanding inflation targeting policy issues and analysing, actually medium term policy issues in inflation targeting?

Now, my answer to the first question is a sound Yes; this is indeed a very nice piece of work and a useful one. My answer to the other one however, is a qualified No. I will try to explain as we go.

So, what the model has:

We essentially heard that the model goes in a good neokeynesian tradition, with output and demand determined and neo-classicals of macro foundations plaid it down, bringing it down to wages, labour and capital formation.

Now, it has national accounts from all three sides, which is very nice and provides for many inter linkages, but at least the government revenue and expenditure write them, provide for, incorporating a lot of input and judgement from other parts of the forecasting system. We also have an interest rate effect on boosting consumption and investment, as well as the exchange rate modified UIP (uncovered interest parity), as we heard. The model is a centrally estimated model, with some calibration. Centrally short-term dynamics are built around longer term theory-based relationships of vector error correction estimations involved as an estimated model. Now, the model is such I think, but it can do very well. It can forecast well. Though the author did not present it, I am pretty much sure that there are sample forecasting properties, and probably short term, other sample forecasting properties would be reasonably good. The model can be useful for getting short-term government expenditure multipliers, which is very useful for many policy analyses that we have in emerging market economies. Often a thing that you want to know: Oh government wants to do this, so what kind of impact can it have? So, some multipliers are always useful to have. And also I think it was very nice, basically a value added on its own, as it has been a very thorough innovative work, overcoming the data challenges that Meyer had been speaking about before, so this is a value added on its own.

What the model is not?

I don't think the model is a very good tool for analysing inflation targeting issues and monetary policy transmission in a typical inflation targeting case. We may not have a typical inflation targeting case, but I am just putting it as it is. Now, why is that? Well, it's essentially because the model doesn't have inflation targeting monetary policy paradigm.

What the model doesn't have? If we change the number of variables, the real variables change too. I don't think that this is a typical inflation targeting paradigm, and I think and I will try to illustrate later in a while that it may give a misleading policy conclusion.

Now, why is that? That's because a steady-state for inflation is defined, but it is not defined in a way inflation targeting models are usually defined. Also, inflations are related to targets and the data that are used for estimation actually affect the steady state of many variables, which is good for forecasting. It gives good forecasting properties, but in my idea it is not good for understanding medium term inflation targeting issues.

Now, crucially at least from what I saw, the monetary policy was not playing any major role in bringing inflation to targets, and that's a major thing that if you want to analyse inflation targeting issues you need to have a very important role of monetary policy in bringing inflation to targets. Now there are no forward-looking expectations, but I don't think this is a major problem, actually only a note and passing.

Now, going to specifics, to equations, I promise only two equations that illustrate key points, what we need to get a good inflation targeting paradigm?

One is the Philips curve, because that's the backbone of the monetary policy paradigm, and that's the backbone of basic understanding of inflation targeting issues. The Philips curve can look anything like this, a standard Philips curve for inflation targeting. So, that would have inflation depending on some past inflation, some inertia. There is some forward looking inflation, simply some inertia forward and backward looking. There may be some imported inflation involved as well, because the economy is open, and there would be some output, output gap, there may be relative prices, in other words there would be some real variables. Typically, there would be output in the most simplified setting.

Now the crucial thing about the Philips curve is that the coefficients have to sum up to one. In other words the equation is to be lineary homogeneous in all inflation elements, and why is that? Well, that's because it provides for the difference between the Philips curve in the short-term and the long-term, and in the short-term we believe that the Philips curve is upward sloping, and in the long-term that's probably not true. I think a prudent stand for the long-term is that

the Philips curve is vertical, but as Massimo said yesterday, it may actually be inversely sloped. But, I am not going that far, I am just sticking to the very basic thing.

Equation like that will give this equation in the log-term, just as simple taking out of the coefficient, and that's what the equation gets in the long term. It says that the real variables are not affected by the number of variables. Output gap is zero, what means that the output is on potential, relative prices are at the level of their long-term trend, so basically it is a vertical Philips Curve. That's what this equation does. It ensures a good monetary paradigm for a model, for understanding inflation targeting issues.

Now the second equation is important for the role of monetary policy actually in inflation targeting. That was all about. That's usually done by this equation, like the Taylor rule has some interest rate reacting, some past interest rate, some interest rate smoothing. There would be a policy neutral level, interest rate tight to long-term fundamentals, and there would be some discrepancy between forecasting inflation and the target. What does this inflation cause in the long term? May be it is surprising or not surprising. What does this equation determine in the long term? It actually does inflation. The policy rule is absolutely essential for any inflation targeting model, because it ensures that inflation is on target, and this rule is about a systematic policy reaction. And that's why it's so important.

Now I will illustrate on two simple charts. One is the chart we already saw in the exchange rate shock in the MEAM model. I want to show you that this is 1 % depreciation of the exchange rate. What we see in the first chart is that the output, that's the blue line here, is actually permanently up by 1 % depreciation. Price level is also up, that's the green line there. Interestingly, inflation is the slope down. What's interesting is that the price reaction increases more than that of the exchange rate. This means that in the long-term there are real impacts of nominal exchange rate change. In other words, the nominal exchange rate has a long-run real effect. In a typical inflation targeting model that could not happen, because normally it can not be depreciated all the time. But you need to ask what kind of shock can bring exchange rate to depreciate by 1 percent. Why, I don't know.

Of course I took a simple model and I simulated a financial market shock and that would bring exchange rate, that's the blue line, 1 percent depreciation, similar as in the model. The response of other variables like inflation and output may differ, depending on where I put this shock. I decided on the financial market shock because I didn't have any other better choice. What is important is that what you see is because of interest rate reaction to this shock. Inflation eventually goes down, back down to target because of the interest rate reaction to this shock, and what's crucial the inflation goes back to the target, and the output after some fluctuations goes back to potential. So there are no long-term real effects of this shock.

How would that picture differ if I chose a different shock than the financial market shock to generate a depreciation of exchange rate by 1 percent? Well, does it matter? Yes and No. It matters for short-term dynamics of these variables definitely, but in the long-term it does not matter. And that's what inflation targeting is about. It doesn't matter where the shock comes from, but the monetary policy has the capacity to bring inflation back. In other words, if I chose whatever kind of a shock in this model, inflation should always be here in the end and output would always be here. That was an example of the issues that have been here.

Now concluding, it's obvious, we have so many models always in central banks for different kind of things, for forecasting policy analyses. So it's not a multi-purpose vehicle. I don't think it's good to have a model that does many things, which is usually very difficult to construct. The way you use them, the right approach is important. And also the models are not necessary for doing good policies in many contexts. But they are very useful and it is very difficult to do policy today without them.

Thank you for your attention!



# THE ROLE OF EXCHANGE RATE IN AN IT FRAMEWORK, WHAT DO WE DO?

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## ABSTRACT

This paper analyses the relationship between exchange rate and inflation in Albania. The first aim is to investigate the impact of exchange rate changes on domestic consumer prices and secondly to throw some light on the importance of currency movements on the conduct of monetary policy. The findings could be useful to policymakers at the central bank before adopting a full-fledged inflation targeting regime.

## I. INTRODUCTION

While Albania commits itself to the exploration of inflation targeting as the next possible regime of monetary policy, we are trying to understand in details the elements of this regime, investigate the relationship and estimate the impact of economic variables on inflation and the course of monetary policy. At the same time it is important to understand the implication of this regime on the other policy variables as well. Among these policy variables the exchange rate is a very important one, with direct effect on inflation and/or inflation expectations. Therefore, the investigation of the relationship between the two is essential in the success of the new

regime. Albanian authorities need to understand the role of exchange rate in the price behaviour and in the mean time design a clear exchange rate policy that deals with foreign currencies flows without intervening with inflation targeting framework.

This research strives to modestly discuss two major issues relating to central bank policy in the inflation targeting. First we want to investigate what is the status of the exchange rate pass-through to inflation and second, comment on how does monetary policy react to changes in the exchange rate. These are two important issues that relate to the pressures that developments in the exchange markets can have on inflation and inflation expectations and on the way that monetary authorities choose to address these pressures. We find that exchange rate has been an important determinant of inflation developments serving in the same time as a shock absorber. Our results also show that the strength of this channel of monetary transmission is reduced during the low and stable inflation period. Surprisingly our results show that monetary policy has responded vigorously to exchange rate changes. This result is puzzling and calls for future research and intensive communication.

The attitude toward inflation stabilization and exchange rate has changed considerably especially during this last decade. In the early 90s many economists argued that developing and transition economies must adopt hard peg regimes as a credible tool of stabilization. Fear of floating, as described in Calvo (1999), and Calvo and Reinhart (2002), provides a strong argument in favour of such regimes. However, many of successful stories of early 90s developed into currency crises later during the decade or in early 2000's, adding to the troubles of inflation and showing that this sort of stabilization might be only short lived. Therefore, in a growing number of cases, economies have tried to address stabilization issues by adopting inflation targeting as the remaining choice (previously monetary targeting has been the model, which has been later replaced by exchange rate targeting). Moreover, they have pared such regime with a free floating exchange rate regime.

This new regime puts forward important policy questions with regard to exchange rate research. Inflation targeting in its final

objective does not change much from other regimes of monetary policy that seek stabilization of the economy by focusing on the price stability, since all regimes adopt price stability as the ultimate goal of their policy. In essence the difference emerges in the choice of the intermediate target, as it changes from exchange rate to money and later to inflation expectations respectively in the exchange rate, monetary and inflation targeting.

In the later case all other variables become important informative variables rather than intermediate goal or policy goals to be achieved. As expected inflation becomes the focus of monetary policy, the central bank renounces its control on money, since it chooses interest rate as the operational tool of monetary policy and exchange rate as “inflation targeting necessary requires nominal exchange rate flexibility” (Mishkin and Savastano 2001). In such circumstances it is important to know how fluctuations on nominal exchange rate will affect expectations and the final target of the monetary policy. Does this new setup have the capacity to develop in an increasing spiral of price instability and depreciation? Economists have tried to answer such questions focusing on the exchange rate pass-through. They have found that this important channel of monetary transmission has reduced substantially after the introduction of inflation targeting. While the link between final objective and exchange rate movements might have lessened, authorities can not completely neglect exchange rate developments.

Given the understanding that choice of the final target is not affected by nominal exchange rate fluctuations, the next logical question is how large of a depreciation/appreciation or fluctuation can be tolerated in the economy? From a central bank point of view, the exchange rate pass-through can introduce itself in three major channels:

1. The effects of the nominal exchange rate changes on real exchange rate changes and inflation pressures that might develop;
2. The effects of the real exchange rate changes on the external position of a country;
3. The collateral effects of nominal exchange rate changes on the balance sheets and aggregate economic activity.

It is obvious that in spite of reduced exchange rate pass-through to inflation, sustained appreciation/depreciation will have impact if not on inflation expectations on other important economic indicators, such as competitiveness, and long-run financial stability with finite effects on the achievement of the monetary policy goal in the long run. Over all, even if nominal exchange rate developments do not exert pressures on inflation expectations, it might depress overall competitiveness, with related effects on output and foreign sector flows. Moreover, in the case of small opened economies exchange rate shocks, fluctuations or sudden depreciation might increase the risk of financial crisis and financial stability as discussed by Mishkin (1996).

All central banks face the same issues when trying to answer the following questions: why do we intervene to protect economy from seasonal fluctuations and speculative attacks? What is a country to do when real appreciation feed into decreased competitiveness? How to react in the case of considerable capital inflows? If intervention is considered should it be sterilized? What are the effects of such sterilization? To summarize, should exchange rate movements become a concern of monetary policy and how to deal with it without interfering with inflation targeting?

Edwards (2007) organizes such discussion in three mayor policy issues related to the inflation targeting and exchange rate regime. He examines the exchange rate pass-through to changes in domestic prices; the impact of inflation targeting on the volatility of exchange rate, and finally the role of exchange rate in the policy rule of an inflation targeting central bank. Empirical research in the first two topics has found that introduction of inflation targeting regime reduces the exchange rate pass-through. Research in the exchange rate volatility has found increase in volatility after paring IT with free floating regime. Meantime many authors find that despite adopting inflation targeting, the monetary policy in many central banks responds to changes in exchange rates. We intend to follow Edwards (2007) and his methodology to discuss the first and the last of the above topics in the case of Albania. The volatility of exchange rate does not constitute an important research topic at the moment, since the Albanian lek has continuously strengthened and reduced its seasonal fluctuations.

Section II of the paper provides a brief discussion of the Albanian monetary and exchange rate policy and developments; section three deals with the exchange rate pass-through; section four will discuss the role of exchange rate in the new setup of monetary policy and section five will conclude with summary and conclusions.

## II. ALBANIAN EXPERIENCE

Albania adopted a floating exchange rate as the best solution for and automatic mechanism to cure its large and growing trade and current account deficits in the early stages of transition and adjust to capital flows. This choice was also constrained by the lack of foreign exchange reserves. At the same time this regime provided room for an independent monetary policy, which relied on quantitative monetary targets and direct instruments of monetary control. In such role its moves have been a good predictor of expected inflation development. Intervention policy was designed such as to protect the foreign exchange market from speculative attacks and/or sudden short lived fluctuations due to particular seasonal developments related to flows of remittances; build up necessary level of foreign reserves; and intervene in the case that the level of exchange rate is not supported by economic fundamentals. These rules clearly stated that the Bank of Albania will not intervene in the foreign exchange market to protect any equilibrium foreign exchange rate or revert its trend. However, despite the clear exchange rate policy the operational setup relied more on discretion rather than rule. The time, size and the direction of intervention reflected the Bank of Albania opinion about foreign exchange market developments<sup>1</sup>. It should be mentioned that none of these market interventions were used for fundamental reasons.

Frequently during this period devaluations feed into inflation, and inflation expectations feed into further devaluation. Tanku (2006) finds that there exist a strong substitution effect and demand for money is very responsive to exchange rate changes. The argument for such behaviour originates at the fear that a drastic depreciation might feed to inflation expectations and vice versa. This fear is

supported by the fact that Albania is a small open economy that imports a considerable amount of its consumption from the rest of the world, which makes Albanian economy subject to fluctuations in the world commodity markets and exchange rates. Moreover, Albanian financial markets are underdeveloped and shallow, with extremely limited investment opportunities. These conditions make foreign currencies a good investment to hedge against domestic fluctuations in prices and output, which is a typical phenomenon for developing countries as described by Bahmani and Tanku (2007). Indeed, exchange rate developments reflected the political social and expectations mood of the Albanian society. In such role its moves have been a good predictor of expected inflation development. This conclusion is supported by several authors who have studied the transmission mechanism for Albania<sup>2</sup>. Therefore, Bank of Albania Annual Reports and Monetary Policy Declarations report that small short-lived foreign exchange interventions were used to restore confidence in the economy and stabilize expectations in this environment. This setup resulted successful in stabilizing inflation and supported a sustained growth during the first decade of transition.

The free floating regime serves well for the same purposes today as well. However, after the sharp devaluations of 1998 and introduction of the new monetary policy setup in 2000 that relies on indirect instruments to achieve a preannounced inflation target, the strong relationship between exchange rates and inflation is vanishing to the naked eye. Since early 2000 exchange rate has appreciated continuously in face of relatively low positive inflation. Such weakening of the exchange rate channel is observed in the works of Petters (2005) and Istrefi and Semi (2007). For the Bank of Albania, it is important to understand whether these developments are reflecting any particular expectations for expected scenarios, and /or a random pattern of behaviour and how have these recent developments affected the pass-through of exchange rate to inflation. The important thing here is to understand the implication that exchange rate developments could bear on price developments in our economy.

### III. EXCHANGE RATE PASS-THROUGH TO INFLATION AND THE SHOCK ABSORBER EFFECT ON THE ALBANIAN ECONOMY.

This part attempts to investigate the exchange rate pass-through to domestic prices and the role of exchange rate as a shock absorber. This becomes an important topic for monetary policy, especially for an IT central bank, since in the case of a powerful pass-through, exchange rate changes will exert pressures on domestic prices and might require authorities response to offset such inflationary consequences of exchange rate changes. In addition a powerful exchange rate pass-through might even call for an exchange rate stability program rather than an IT regime.

Drawing samples form recent history of inflation targeting countries, resent research shows that exchange rate pass-through reduces substantially after the adoption of IT. Campa and Goldberg (2002) research for OECD countries, and Gagnon and Ihring (2004) conclude that the weakening of exchange rate channel is related to changes in the monetary policy and adoption of IT. The common argument behind such findings is that IT provides a good anchor on expectations and reduces inflation and its volatility, breaking in this process the supposedly strong link to exchange rate that exists in the pre IT period due to the reasons described above. This in turn increases the credibility of the regime and generates better anchored expectations, in a continuous process that in each repeated step contributes to the reduction of the pass-through as discussed by Taylor (2000).

Most authors have addressed these issues focusing on the pass-through effect on the aggregated data of CPI based inflation. This method, however, neglects the fact that there is a balancing effect embodied in the exchange rate mechanism, which through adjustments in the real exchange rate should address at least part of the inflationary pressures, by adjusting the spending behaviour and via substitution effects that might take place in the real economy, when certain tradable goods become more expensive due to depreciating local currency or higher foreign prices. Edwards (2007) argues that reduction of the exchange rate pass-through in tradable prices

relative to non-tradable prices is not a development to cheer about, since it might stop the substitution and lead to increase in the price of non-tradable goods. Therefore, the reduction of the exchange rate pass-through is a positive development when it does not prevent it (exchange rate) from playing its role as a shock absorber. When such role is played exchange rate changes will not exert pressure on non-taxable prices and inflation expectations reflected in labour contract negotiations. To summarize "... a nominal exchange rate depreciation will have to generate an increase in real exchange rate, which in itself will generate the expenditure switch effect" Edwards (2006)<sup>3</sup>.

In light of this discussion we first investigate the pass-through effect on headline inflation and then try to estimate the impact on tradable and non-tradable goods separately and use this information to assess the shock absorber effect of exchange rates. To estimate the response of domestic prices to exchange rate movements we follow Edwards (2007) and use a simple econometric model in a way that enables us to capture the short- and long-run effects:

$$\Delta \ln p_t = a + b \cdot \Delta \ln p_{t-1} + c \cdot \Delta \ln p_{t-1}^* + d \cdot \Delta \ln neer_{t-l} + e \cdot DOBJ * \Delta \ln p_{t-1} + f \cdot DOBJ * \Delta \ln neer_{t-l} + u_t \quad (1)$$

Where:

$\Delta$  denotes a change in variables;

$t$  is the current quarter

$l$  shows the number of lags (up to four lags were tried);

$p$  is the domestic consumer/ tradable/ non-tradable<sup>4</sup> price;

$p^*$  represents foreign CPI<sup>5</sup> prices;

$neer$  is the nominal effective exchange rate<sup>6</sup> of lek against currencies of the five major trading partners;

$DOBJ$  is a dummy variable that takes the value of 1 during the period the BoA sets its objective to keep inflation rates within the range of 2 to 4 percent, and zero otherwise;

$u$  is the error term.

Theoretically, all explanatory variables are expected to have a positive relationship with the domestic prices. Parameter  $b$  in front of the past inflation is intended to measure any partial adjustment of domestic inflation to the explanatory variables. The direct pass-through effects of foreign prices and exchange rate to inflation are captured by parameters  $c$  and  $d$ , respectively.

An increase in consumer prices abroad or a depreciation of the lek exchange rates should lead to higher domestic inflation. The more the economy relies on imported finished and intermediate goods and services, the more sensitive domestic prices would be to movements in the exchange rates and producers-currency prices.

Parameter  $d$  in Equation 1 indicates the short-run elasticity of domestic prices with respect to the nominal effective exchange rate of lek. The long-run pass-through, in our empirical model, can be figured by the ratio of  $d$  to one minus parameter  $b$  [ $d / (1-b)$ ].

The analysis of price sensitivity has been extended by including two interactive terms at the end of the model specification. The multiplication of past inflation and the exchange rate with the dummy variable *DOBJ* provide us with insights on whether the central bank's commitment to maintain inflation between 2 to 4 percent has reduced inflation inertia and, secondly, lowered the size of long-run pass-through during this period. In this case, the long-run post-commitment effects are computed as  $(d+f) / (1-b-e)$ .

The model was estimated for the period from 1995Q1 to 2007Q2, using the ordinary least squares method. Unit root tests indicated that the series in levels were non-stationary. To avoid the problem of spurious regression all variables in log levels were transformed in first differences to achieve stationarity. A maximum of four lags were first used for each variable in a parsimonious modelling, and later the statistically insignificant coefficients were gradually dropped till the best fitting model was realized. Also, a dummy variable is added to take into account the structural break of the series in 1997 financial turmoil.

### III.1 ESTIMATION RESULTS

The main objective of the paper is to estimate the relationship between exchange rate changes and developments in domestic prices. Therefore, Table 1 only displays the short-run and long-run exchange rate pass-through coefficients. Next, to further examine the role of the exchange rate as a shock absorber the response of total consumer prices is compared to the effects on tradable and non-tradable subcategories of inflation. Finally, the results demonstrate whether the short-run and long-run pass-through has changed after the Bank of Albania's objectives became more inflationary-focused in late 2000.

*Table 1 Short-run and Long-run Exchange Rate Pass-through, 1995q1:2007q3*

	Short-run Pass-through		Long-run Pass-through	
	Pre-OBJ	Post-OBJ	Pre-OBJ	Post-OBJ
Total CPI prices	0.3376	-0.1995	0.5310	-0.2133
Tradable Prices	0.3561	0.0053	0.6614	0.0062
Non-tradable Prices	0.1859	-0.1544	0.2072	-0.1601

Note: The coefficients are based on the results in Table A1 in the Appendix.

As it is shown, the exchange rate movements used to have a moderate influence on all price indices during the pre-objective period. The response of domestic prices was between one-third and half of the magnitude of exchange rate percentage changes. Also, the strength of the impact appears to have previously gained momentum in the long rather than the short run. This is especially true for the case of tradable and total consumer prices, whose long-run coefficients are nearly two times larger than those of the short-run. Comparison of coefficients for tradable and non-tradable prices supports the hypothesis that exchange rate has acted as a shock absorber.

On the other hand, the results evidence a dramatic decline in the pass-through after the Bank of Albania became more attentive to modest inflation rates. From 2001 to mid-2007 the annual growth rates of consumer prices have averaged around three percent. At the same time, the exchange rate has stabilized and gradually appreciated by fourteen percent against a basket of currencies, hence causing a notable fall in the slope of exchange rate pass-

through. While tradable prices seem to hardly react to exchange rate movements, consumer prices and non-tradable prices show a meaningless response, both in the short and long run as well. The large decline and change in sign of the pass-through parameters suggest that domestic market may in recent years be characterized by “local currency pricing,” where small fluctuations in the value of lek are not associated with price developments.

The estimates in Table A1 indicate sizeable inflation inertia during the period of soaring prices (as shown by the coefficient of  $\text{dlog } P_{-1}$ ). More than one-third of previous inflation would persist in the current rise of consumer and tradable prices (0.36 and 0.46, respectively). In case of non-tradable the price continuation is much smaller and diminutive. Nevertheless, the parameters of the interaction term ( $\text{DOBJ} * \text{dlog } P_{-1}$ ) almost offset the inflation inertia, highlighting a significant minimization of inflation persistence during the post-objective period. Results suggest that the pass-through and persistence have reduced after the introduction of the new policy objective in late 2000.

#### IV. EXCHANGE RATE POLICY UNDER INFLATION TARGETING

The exchange rate issue and its pass-through to inflation have policy implications that extend well beyond inflation. Inflation targeting central banks focus their attention only on expected inflation and use monetary policy to steer these expectations toward some desired level within a predetermined period in time. The final goal is to keep prices under control. Under this setup, monetary policy rule requires that central bank adjusts its policy rate so that inflation objective is achieved. This is done by incorporating all possible information available to the central bank. Meaning that despite incorporating information in the decision making with regard to developments in the other variables, exchange rate included, monetary policy does not consider the effects of chosen policy on these variables.

However, in the theoretical literature optimal policy is described as the policy, which minimizes the loss function of the central bank.

This function is a weighted combination of the output gap and inflation deviation from its desired level (its objective in the case of inflation targeting) with a much heavier weight on the inflation component especially in the case of inflation targeting<sup>7</sup>. Exchange rate has the potential to affect both components of such function<sup>8</sup>. Just to give an example that fits well with current and likely expected developments Albanian economy: assume that due to some relatively large interest rate differential a small open economy is experiencing a sustained appreciation of its currency. At the same time authorities find out that inflation expectations have increased beyond inflation objective. In these circumstances authorities decide to increase the base rate to correct expectations. The rate increase results successful with regard to inflation but at the same time increases further the interest rate differential encouraging additional flows of foreign currency and further appreciation. Such appreciation/depreciation as discussed by Mishkin (2001), might not only affect output gap or inflation deviation, but also affect the balance-sheets of the private sector and could jeopardize the financial stability of the economy. Therefore, central bank must pay some attention to exchange rate movements, but how much? Should such attention be as large as to include exchange rate in the Taylor rule? In other words, should central bank respond to changes in exchange rates? If yes, which rate, the nominal or the real one?

The question becomes more complicated when exchange rate interventions are also designed as a policy tool for the achievement of other secondary objectives of the monetary policy like increasing international reserves, smoothing short term fluctuations that rise due to particular characteristics of a small open economy and adjusting exchange rate when it moves away from the fundamentals. How could such policies cope with inflation targeting?

Ball (1999) considers such concerns and incorporates real exchange rate as an explanatory variable in the aggregate demand and supply equations where exchange rate is determined as a function of interest rate and a stochastic error. The implication of such innovation in the demand and supply equation is that the Taylor rule for optimal policy setting will also be modified by taking explicit account of exchange rate in the setting of the monetary policy instrument. In this respect

the new rule does not conflict inflation targeting, it just states that monetary policy considers real exchange rate fluctuations as well as the impact of exchange rate interventions on interest rate. Like Ball, Svensson (2000), also argues that including exchange rate in the Taylor rule is likely to produce more stable macroeconomic outcomes. Both authors propose optimal values for exchange rate coefficients, which are however subject to change due to model specification and parameter changes; therefore, such rules are not practically robust.

Other authors like Mishkin and Schmidt-Hebbel (2001), Taylor (2001) and Mishkin and Savastano (2001), argue that in a well specified model the effects of exchange rate are indirectly included in the policy rule (loss function as well) through its effects on output gap and inflation. Therefore, responding to exchange changes might add instability to monetary policy and undermine its performance. In general this dispute remains unresolved, since the exchange rate issue is not fully addressed in the inflation targeting literature. Most of the literature focuses in the closed economy monetary models and does not provide comparative analysis of the welfare effects or macroeconomic performance when exchange rate is incorporated in the monetary policy rule<sup>9</sup>.

Therefore, the best possible answer for this discussion might come from empirical investigation due to country specific factors. Mohanty and Klau 2005, have investigated the hypothesis that exchange rate belongs to the monetary reaction function of 13 emerging and transition economies. Their results shows that the exchange rate coefficients result significant in 11 of the 13, indicating that these central banks consider exchange rate developments in the design and implementation of monetary policy. What is the status of monetary policy with regard to exchange rate developments in Albania? To answer this question, we aim to investigate the Taylor rule for an open economy using Albanian data.

#### IV.1 TAYLOR RULE AND THE EXCHANGE RATE OF LEK

In this section we intend to investigate whether exchange rate has affected the Bank of Albanian' monetary policy decision making. To

estimate the interest rate policy reaction function in an open economy, many authors<sup>10</sup> have employed the Taylor rule that includes the effects of exchange rate movements in addition to inflation and output gap. In our analysis, we have used a slightly modified specification form of the Mohanty and Klau's (2004) version of the Taylor rule. The modification consists in the introduction of the nominal effective exchange rate, rather than the real one, with the argument that Bank of Albania's foreign exchange policy aims to tame speculative attacks and sudden fluctuations on the nominal exchange rate. Therefore, we estimate the following equation:

$$i_t = a + b \cdot i_{t-1} + c \cdot \pi_t + d \cdot y_t + e \cdot \Delta \log neer_t + f \cdot \Delta \log neer_{t-1} + u_t \quad (2)$$

where

$i_t$  is the central bank's policy rate at quarter  $t$ ;

$\pi$  represents the annual CPI inflation rate;

$y$  is the output gap;  $neer$  is the nominal effective exchange rate of lek (an increase indicates depreciation of the lek value);

$\Delta \log$  is the first difference operator of variables in natural logarithms;

$a$  is a constant,

$b, c, d, e$  and  $f$  are the slope coefficients to be estimated;

$u$  is the error term.

The parameters  $a, b$  and  $d$  are expected to be positive and greater than zero. For the monetary policy stance to be non-accommodating, the long-run relationship between inflation and the interest rate should be greater than one [i.e.,  $c / (1-b) > 1$ ]. The coefficient  $e$  is also expected to be positive, indicating the need for the central bank to tighten its monetary policy in response to the lek depreciation. However, the inclusion of the lagged exchange rate changes as an explanatory variable allows for more dynamic effects than just reacting to current lek fluctuations. The exchange rate very often exhibits mean reverting<sup>11</sup> movements; therefore, parameter  $f$  needs not be positive. If it is negative but smaller in absolute value than  $e$ , it will offset some of the interest rate reaction in the next period.

On the other hand, the role of the exchange rate in the Taylor rule would be insignificant, if the sum of coefficients  $e$  and  $f$  is equal to, or slightly different from zero. In that case, it will resemble a closed economy monetary policy rule, where exchange rate developments are neglected (Taylor, 2001).

The model has been estimated using the least square<sup>12</sup> method for the period 1997q1:2006q4. To check for robustness properties in Equation (2), another equation has been estimated by replacing the annual inflation and the exchange rate changes in (2) with the deviations from their respective trends. For simplicity, we will here on refer to the simple Eq. (2) as the baseline model and its alternative as the gap model.

#### IV.2 EMPIRICAL RESULTS OF THE BASELINE MODEL

The output gap is measured as the percent deviation of actual real GDP from its potential trend, where the latter is obtained by using the Hodrick-Prescott filter. The repo rate was used as an indicator of the Bank of Albania's policy rate. However, because the data for this instrument start from mid-2000, the series has been extrapolated before that time with the 3-month deposit rates, which has a high correlation of nearly 90 percent with the repo rate. The lek effective exchange rate is calculated as a basket of currencies weighted according to their respective trade weights of the five major trading partners.

The empirical findings of the baseline model are displayed in Table A2. The high  $R^2$  indicates that our open-economy Taylor rule explains fairly well the interest rate setting behaviour of the Bank of Albania. All the coefficients are statistically significant and show the expected sign.

It appears that the central bank has been cautious and slow to adjust its policy rate during the sample period. The lagged coefficient of the repo rate is roughly 0.8, indicating smooth movements in the monetary policy indicator. This view finds support in the small short-run and long-run inflation coefficients as exhibited in Table 2. The

weak response of repo rates to inflation points to an accommodating monetary policy stance towards price pressures, particularly during the period of high inflation rates in the 1990s.

*Table 2 Short-run and Long-run Reaction of the Baseline Model, 1997q1:2006q4*

	Inflation	Output gap	NEER
Short-run	0.0994	0.1519	0.3673
Long-run	0.4942	0.7555	1.8272

Note: the coefficients are based on results in Table A2 in the Appendix.

The sustained stabilization of the Albanian macroeconomic indicators after the 1997 financial turmoil appears to have reduced the need for strict monetary policy measures in response to demand shocks. The gradual improvement in the budget deficit as reflected in its decreasing ratio to nominal GDP has called for a less active role of the central bank. Therefore, the magnitude of policy rate changes has been smaller than deviations from potential output.

The results reveal a strong long-run relationship between base interest rate and exchange rate developments. An increment by 2 percentage points in the depreciation (appreciation) rate of lek has prompted the Bank of Albania to push up (down) interest rates by 73 bp and 3.65 pp in the short and long run, respectively. The coefficients are statistically significant and positive both in the current as well as the previous period changes, demonstrating a high degree of the persistence of exchange rate shocks and thus magnifying the response of the central bank's policy rate.

To check whether the results above are robust or not, the baseline model was re-specified by replacing the inflation rate and the exchange rate changes with their deviation from the respective HP trend<sup>13</sup>. The new estimates reinforce the previous findings with regard to the expected sign and magnitude of the parameters (Table A3 in the appendix). The current and lagged exchange rate changes maintain their influence on the policy rate decision-taking. This suggests that developments in the value of lek are very important and closely followed by the policymakers and reject the idea of excluding it from the monetary policy rule.

#### IV.3 TESTING FOR NONLINEARITY AND ASYMMETRY IN THE BOA'S REACTION FUNCTION

Equation (2) measures a linear reaction of the monetary policy actions to inflation, demand shocks and exchange rate fluctuations. This implies that the Bank of Albania would treat economic shocks in a similar manner, regardless of the magnitude and the actual performance. For that reason, it would be of importance to check whether domestic monetary policy has followed a nonlinear reaction to positive versus negative departures from trend, as well as an asymmetric response to larger versus smaller variations.

Here we are interested to test for nonlinearity in the response of the central bank in connection with inflation and the exchange rate only. First equation (2) has been re-estimated by including two slope dummies that check whether policymakers take similar measures for inflation and exchange rate departures from trend. The dummy variables take the value of one for negative variations and zero otherwise. Also, to test for different responses to larger vs. smaller shocks equation (2) is augmented with two variables consisting of squared deviations of inflation and exchange rate changes. In each case the overall reaction to annual inflation and exchange rate movements is obtained by summing up the slope dummy or squared deviation coefficients with their respective parameters.

Hypothetically, negative and significant coefficients suggest a weaker reaction of interest rates to a fall in inflation and exchange rate appreciation below trend values. This interpretation applies to the magnitude of the deviations as well. However, the closer these coefficients are to zero, the more unmoved are policymakers to either side deviations or the magnitude of these shocks.

The estimated results are shown in Table A4 and A5 in the appendix. It appears that the Bank of Albania reacts similarly to inflation values above and below the trend. The slope dummy coefficient with respect to inflation is statistically highly insignificant; hence a zero response due to the sign cannot be rejected. On the other hand, the response to exchange rate changes is significantly reduced during appreciation as opposed to depreciation periods.

Altogether, the interest rate response declines by around 37 bp to only 8.8 bp (Table A4).

In terms of the shocks' size, inflation rates are again paid due attention by policymakers, without making any difference between large and small deviations. The corresponding parameter is meagre and statistically insignificant. However, larger exchange rate deviations seem to magnify the monetary policy action.

## V. CONCLUSIONS

Central Bank of Albania has committed its resources to the study of potential alternative regimes of monetary policy. Important part of this research is focused on the study of exchange rate and its powerful monetary transmission model. Most importantly, the Bank of Albania is interested in the exchange rate effects on inflation and financial stability. Recent economic trends of mating inflation targeting stabilization regimes with free floating exchange rate, has revived the discussion of the appropriate exchange rate regime. At the same time this new policy setup is posing challenging questions for monetary authorities. The introduction of inflation targeting features in the monetary policy of the Bank of Albania has produced stable and low inflation and has coincided with a prolonged period of gradual and persistent appreciation in the domestic currency. Despite desirable monetary outcomes, these developments put forward important policy questions, which deal with the role of exchange rate in the new monetary policy, its objective, potential destabilizing effects of exchange rate developments and policy response to these developments.

In this paper we have tried to tackle both problems: the status of the pass-through effect of exchange rate developments on domestic prices and assess the role of exchange rate in the design and conduct of monetary policy from a pure empirical analysis of available data.

We find that in general a considerable exchange rate pass-through exists. This pass-through is stronger in the prices of tradable goods, permitting exchange rate to act as a shock absorber. However, the

power of the pass-through depends on choice period of investigation. Our results show that the pass-through of exchange rate to domestic prices weakens considerably during periods of low and stable inflation. The pass-through virtually disappears during the period that the BoA sets its inflation rate objective between 2 to 4 percent. However, it still indicates at least some substitution, while the pass-through of exchange rate to non-tradable prices breaks down.

This result matches well with the findings of similar research for other countries that have experienced similar changes. However, one must be careful with such interpretation, which is valid for periods of low and stable inflation. Such result might not continue to hold in periods of high inflation and volatile exchange rates.

In our investigation of the open economy Taylor rule shows that monetary policy is very responsive to changes in exchange rate shocks maybe more than to inflation innovations. This result came as a surprise since the operational policy framework is designed such that does not respond to shocks in the exchange rate. Such result could make sense in the case when exchange rate developments make a good predictor of inflation or inflation expectations. However, our previous results reveal that this is not the case. In this respect we find difficult to reconcile our results and believe that further research is needed until a reasonable explanation is found. Our tests show that authorities do not distinguish between inflation deviations above or below objective but have an intervention bias toward depreciation. The bias could result due to Bank of Albania's intervention policy, which calls for market intervention when temporary shocks affect the demand or supply in the foreign exchange market (with the purpose to reduce fluctuations). The nature of the shocks, which are almost always caused by large inflows of foreign currency due to remittances could provide a reasonable explanation for this result.

The most important implication of our result associates with the risk that the appearance of the exchange rate in the Taylor rule might mislead the public about the true objective of monetary policy and impair central bank credibility. Moreover, in the presence of a sluggish and highly seasonal concentration in foreign exchange market and an intervention regulation, which calls for market interventions that

are not related to the final objective of price stability, we would like to properly address this issue by referring to Mishkin and Savastano (2001, pg. 439), who suggest that if a central bank needs for any reason to intervene in the foreign exchange market, it is important that it states publicly the nature of the intervention and shows that it is not intended or related in any case with the achievement of the inflation objective.

APPENDIX

*Table A1 Exchange rate pass-through to domestic prices, 1995Q1:2007Q2*

	CPI	Tradable Prices	Non-tradable Prices
dlog P <sub>-1</sub>	0.3643 (0.0001)	0.4615 (0.0000)	0.1028 (0.0005)
dlog P*	0.8402 <sup>#)</sup> (0.0014)	0.6708 (0.0500)	0.0618 (0.0009)
dlog NEER	0.3376 (0.0000)	0.3561 (0.0000)	0.1859 (0.6171)
DOBJ*dlog NEER	-0.5371 (0.0000)	-0.3508 (0.0359)	-0.3403 (0.0079)
DOBJ*dlog P <sub>-1</sub>	-0.2998 (0.0364)	-0.3176 (0.0044)	-0.0675 (0.6788)
Adj. R <sup>2</sup>	0.8673	0.8553	0.5371
LM test (Chi-square (4))	0.2063	0.0733	0.4037
<p>Note: p-values in parentheses; p is the domestic price level; p* is the foreign price index; neer is the effective exchange rate of lek; DOBJ is a dummy variable that take the value of 1 during the period the inflation objective is set within 2-4 percent and zero otherwise; dlog indicates a change in the log of variables.  <sup>#)</sup> The coefficient is for lag 3.</p>			

*Table A2 Baseline model of the Taylor rule 1997Q1:2006Q4*

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.3384	0.3435	3.8960	0.0004
REPO <sub>-1</sub>	0.7990	0.0546	14.6413	0.0000
INFL	0.0994	0.0356	2.7878	0.0086
GAP	0.1519	0.0520	2.9182	0.0062
dlog NEER	0.1158	0.0373	3.0970	0.0039
dlog NEER <sub>-1</sub>	0.2515	0.0286	8.8008	0.0000
Adj. R <sup>2</sup>	0.9841	Prob(F-statistic)		0.0000
S.E. of regression	0.8344	LM test (Chi-square (2))		0.0669

*Table A3 Reaction of repo rate to trend deviations of inflation, output, and exchange rate 1997Q1:2006Q4*

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.5736	0.3338	1.7183	0.0948
REPO <sub>-1</sub>	0.9125	0.0317	28.8318	0.0000

INFLDEV	0.0710	0.0314	2.2648	0.0300
GAP	0.1755	0.0608	2.8853	0.0067
dlogNEERDEV	0.1657	0.0356	4.6547	0.0000
dlogNEERDEV <sub>-1</sub>	0.2621	0.0310	8.4544	0.0000
Adj. R <sup>2</sup>	0.9812	F-statistic		407.7027
S.E. of regression	0.9065	Prob(F-statistic)		0.0000

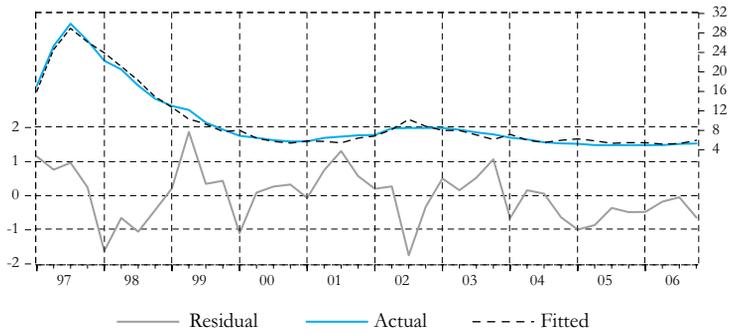
*Table A4 Repo reaction to positive vs. negative shocks of inflation and exchange rate  
Sample (adjusted): 1997Q1 2006Q4*

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.0642	0.2469	4.3095	0.0002
REPO <sub>-1</sub>	0.7821	0.0408	19.1273	0.0000
INFL	0.0569	0.0282	2.0136	0.0528
GAP	0.0211	0.0444	0.4755	0.6377
dlog NEER	0.3062	0.0418	7.3098	0.0000
dlog NEER <sub>-1</sub>	0.1488	0.0347	4.2866	0.0002
INFL*D1	-0.0199	0.0561	-0.3554	0.7246
dlogNEER*D2	-0.4869	0.0799	-6.0869	0.0000
dlogNEER <sub>-1</sub> *D2	0.1195	0.0449	2.6616	0.0122
Adj. R <sup>2</sup>	0.992047	F-statistic		609.1203
S.E. of regression	0.589321	Prob(F-statistic)		0.000000

*Table A5 Repo reaction to larger vs. smaller shocks  
Sample (adjusted): 1997Q1 2006Q4*

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.1933	0.2006	5.9479	0.0000
REPO <sub>-1</sub>	0.7735	0.0307	25.189	0.0000
INFL	0.0481	0.0251	1.9156	0.0647
GAP	-0.0302	0.0377	-0.8023	0.4285
dlog NEER	-0.0044	0.0338	-0.1310	0.8966
dlog NEER <sub>-1</sub>	0.0829	0.0276	2.9943	0.0054
INFLDEV <sup>2</sup>	-0.0017	0.0013	-1.2790	0.2104
dlogNEERDEV <sup>2</sup>	0.0162	0.0024	6.5564	0.0000
dlogNEERDEV <sub>-1</sub> <sup>2</sup>	0.0134	0.0024	5.5996	0.0000
Adj. R <sup>2</sup>	0.9950	F-statistic		981.8886
S.E. of regression	0.4647	Prob(F-statistic)		0.0000

Chart A1 Actual, fitted, and residual chart of the baseline model



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## ENDNOTES

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The views in this paper are of the authors and do not necessarily reflect those of the Bank of Albania.

<sup>1</sup> The Bank of Albania has frequently intervened in the market, buying foreign currencies twice a year during June-August period and December, to smooth exchange rate volatility in response to large inflows of remittances.

<sup>2</sup> See Muco et al 2004 and Peeters 2005.

<sup>3</sup> Please see Edwards (2006) for a detailed explanation on the issue.

<sup>4</sup> The series of tradable and nontradable prices were provided by Çeliku (2003).

<sup>5</sup> Authors' calculation. The foreign price index consists of the consumer prices from China, Germany, Greece, Italy and Turkey (based on import weights); the series are taken from Ecwin.

<sup>6</sup> The NEER is trade weighed; exchange rates are expressed as Albanian leks per unit of foreign currencies; therefore, a rise of the NEER index denotes a depreciation of the lek.

<sup>7</sup> The argument that explains why output gap belongs to the loss function of an IT central bank is given by Mishkin and Savastano (2001, pg 431), who conclude that "setting a positive goal for inflation at 2 or 3 % rather than 0% is at the same time showing that authorities do care about economic growth".

<sup>8</sup> Edwards (2007) provides a brief but good discussion of this issue incorporated in the description of the theoretic work on the topic based on the Taylor rule and the central bank's loss function. See the paper for a good selective review on the literature

<sup>9</sup> Edwards 2007 provides a comprehensive review of the literature on the topic.

<sup>10</sup> See for example Ball (1999), Svensson (2000), Taylor (2001), Mohanty and Klau (2004).

<sup>11</sup> As Mohanty and Klau (2004) have illustrated, the exchange rate shocks that are not caused by fiscal and/or monetary policies are assumed to be temporary; hence, mean reverting.

<sup>12</sup> Mohanty and Klau 2005 use OLS as well.

<sup>13</sup> In another attempt, the inflation gap was tried by measuring the inflation divergence from the annual objective rate, instead of its deviation from the HP trend. The outcome was quite similar and did not change the overall interpretation. At the end, it was decided to keep the inflation gap from a trend, because it showed a better statistical significance.

## DISCUSSION ON “THE ROLE OF EXCHANGE RATE IN AN IT FRAMEWORK, WHAT DO WE DO?”

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*David Vavra\**

How we should actually use inflation targeting? I think that the purest approach should be an indicator of transmission and that's the end of it. In reality, as we have heard and as many other research papers attest, we as central bankers tend to react to exchange rate movements with various instruments and we sometimes tend to use it as an instrument in inflation targeting framework as well. Now does that matter? Fabrizio raised this question yesterday, if I do not misinterpret. I think yes and the reason for that maybe is being more for operational considerations rather than for theoretical reasons. Now let's go one by one. Using the exchange rate as an objective: it means that we have one instrument, which is interest rate and we have two objectives: inflation and exchange rate. That's bound to create problems. I think these problems can be addressed, but just as a survey. The literature and the overall experience show that conflicts do rise. I am going to bother you with some country examples that I took as a courtesy, without their permission.

And what it also does or some of the literature finds that they inevitably reduce the effectiveness of your transmission if you have two targets. This may be particularly damaging in an emerging market context, where we actually have a hoisted problem with transmission and with the changing nature of transmission. So, it is not thorough. That does not sound very good, but what if, (let's take particular

cases, one of them Fabrizio emphasized), what if actually we have an open emerging market economy, which is very small, and there is a very strong pass-through. Reacting to exchange rate is basically the same as reacting to tradable prices, but if tradable prices are the whole CPI, essentially, does that matter whether we target the CPI or whether we target the exchange rate, if I do not misinterpret Fabrizio. Now, Serbia as a country example, we have all the measures we did in a dynamic approach and others, is basically 30% in the short term and 100% in one year. That's what we have, and as we saw in the presentation yesterday, with inflation we simply get done very fast, because we tighten interest rates to bring an exchange rate appreciation and that was the effect.

Of course, now it sounds better because we have one target; it doesn't matter whether we target the inflation or the exchange rate. If the two are essentially the same and we have one instrument, that sounds better, but actually how do you act in practice? That's my question. Should we set up bands consisting in targets? Now that's tricky, and that's what many countries do. That's tricky, because exchange rate is a forward-looking variable and it does jump. Also these bands, if you draw them, they also depend on the fundamentals in the economy, and not only on short-term fluctuations, but on fundamentals. And if in the fundamentals the pro activity changes, then these bands should be re-drawn. Maybe I misinterpret the Hungarian experience, but I would conjecture that there were times in the recent past, when the Hungarian Central Bank felt the compelling need to re-change the bands. I am not sure, I do not want to put my words into your mouth or abolish them. But, it is very difficult to do: you announce it, and then you change it, and then operationally it is very difficult, as very often we need a governmental approval to make changes. Israel might be an example, where the government is standing in operational difficulty to do something quickly with this.

There is a way around it, so having bands is not good, I think. We could actually have targets in terms of rates of change in exchange rate, instead of fixed bands. That at least preliminarily (I did not think too deeply about it), sounds better to me operationally. Still I think that we would have a counter politic problem, especially if the two things go apart: exchange rate is depreciated, but inflation

stays low. Do we react with interest rates to bring the exchange rate level back to the target, although the inflation is low at the target level? It would sound probably too complicated for that to explain. Essentially what I am getting to is basically that this would amount the problems we have with money targeting. Money targeting is also good if it works, but the problem is that it does not work, because the relationship between the money target and some inflation target is not that great. And in addition it is complicated, because past rates are changing, and all that is based on those rates. It is very strong and very large, and it is declining. I think operationally that would be bound to problems.

The other possibility is to use exchange rates as instruments, of course all as a combination. In that case, Singapore is a perfect example, because they do not even have interest rates as instruments, but they only have exchange rates as instruments. Anyway, that sounds better, because you have at least two, one or two instruments to control inflation. But again, the question is how to do it in practice? It can have a secret operational band, which means that by using a channel of instruments to clarify, I actually intervene daily or weekly to have the exchange rate in a certain band, close to a certain level, which is consistent with the inflation target. I do not target that in a sort of a long term prospective, but I draw these bands very often. How do you do it? What if a sudden appreciation shock happens, what do you do? – It goes off the band. You have two options:

- You intervene, and you bring it back inside the secret band, or
- You redraw the band.

The answer depends on the nature of the shock: what is the cost of the development? The problem is that on the other day, day one, day two of the exchange rate development, often you have no idea what the shock caused. We had it in Serbia two weeks ago, where the exchange rate depreciated 10% within five days. Other operational difficulties are i.e. keeping the band as a secret. Somebody told me that the best treasure secret in Singapore is the rule they use for setting their exchange rate and of course market expectations. I don't have time to go into details, but I have prepared two simulations here. They illustrate that in principle, in the long term, if you use

exchange rates or interest rates as instruments, it should not matter; it does not matter and it is totally consistent with inflation targeting. But in the short term, if you have an inflation shock that you don't know where it comes from, the typical central banker reaction is faced, because you don't know what the shock is. You increase your interest rate gradually, or you decrease it gradually in the need to wait for new information. Now, think about what will happen if you use exchange rates instead of interest rates? - If you use exchange rates instead of interest rates, markets will know that there is this particular shock. And you are going to react faced; if you are going, for instance, to appreciate your exchange rate gradually, the markets will factor in and the market's interest rates will drop, because they expect depreciation. In that case your interest rate will go against your desire. You are appreciating your exchange rate to bring the inflation down.

Basically, to conclude, I think in theory it's not a problem to use the exchange rate, and I think operational considerations make it unpractical and I think that politicians' considerations make it unwise. Well, we all make mistakes, even with pure inflation targeting, but if you mess up with the exchange rate, if you mess up with the exchange rate market, I think they are very apt at punishing you quickly, very quickly. And I think that this is Mishkin's idea originally that puts it forward: While consumers are really forgiving by their nature, you can reestablish the credibility with your consumers more easily than with the financial market, if you mess up with your exchange rate target.

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# MONETARY TRANSMISSION MECHANISM IN ALBANIA

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## ABSTRACT

This paper revisits the monetary transmission mechanism in Albania, summarizing findings of previous studies and presenting new evidence based on a SVAR estimation. We investigate the effect of monetary transmission channels on aggregate output and headline and core inflation. We conclude that the exchange rate channel is not as strong as reported in previous works, and that the money and expectations channel play the most important role within the transmission mechanism. Our findings also suggest that the Bank of Albania should pay attention to the exchange rate fluctuations, as they seem to have an adverse impact on real output fluctuations.

## I. INTRODUCTION

There is hardly a need to explain the importance of investigating and understanding the monetary transmission mechanism (MTM), for economists in general and for central bankers in particular. The amount and scope of research work on the monetary transmission channels in Albania is limited and the corresponding literature is no older than 7-8 years. The purpose of this paper is twofold: to summarize the findings of previous empirical work; and to re-

estimate a simple SVAR model in order to give a fresh opinion concerning the importance of specific transmission channels. A few words about the monetary policy framework and economic performance in Albania are in order.

Bank of Albania<sup>1</sup> mandate is to achieve and maintain price stability. In the last decade this objective has been roughly translated as having a CPI<sup>2</sup> annual inflation rate in the 2-4% range and in the last two years as a point target equal to 3% +/-1 pp. The BoA follows a monetary targeting regime<sup>3</sup> with distinct elements of an implicit inflation targeting. In 2000, the controls on the interest rates of 3-, 6- and 12-month deposits of state banks were removed and indirect instruments of monetary policy were set in place. At present, the operational framework of BoA consists of open market operations, standing facilities and required reserves. Since the beginning of the transition period and the establishment of the BoA as a modern central bank, the role of monetary policy in the Albanian economy has strengthened and gained importance in the overall framework of macroeconomic policies. For the better part of the last decade, output growth has been strong, inflation low and exchange rates stable. While the blooming market economy eradicated some of the problems inherited from the previously centralized system, new challenges emerged. Albania, at present, has an underdeveloped financial system; capital markets are almost inexistent; there is a high degree of informality and significant structural reforms and transformation are on the way.

So far, the monetary policy decision makers at the BoA have had no quantifiable basis on which to judge the effect of the monetary policy on the real economy and especially on inflation. Quantitative results on the size, direction and time-lag of the effect of the applicable transmission channels are essential to conducting good monetary policy. Two of the crucial questions posed by monetary policy authorities in the country today are: (1) what is (are) the most important transmission channel(s) functioning in the Albanian economy?, and (2) how can monetary policy be employed to ensure continued price stability?

This paper attempts to shed some light upon the nature and characteristics of the MTM in Albania. In section 2 we present some

theoretical background on the monetary transmission channels, complemented with summarized findings of studies focusing on MTM in transition countries. A review of previous studies of the MTM in Albania is given in section 3. In section 4 we replicate the results of a VAR model by Muço et al (2003) and present a new set of results obtained using a SVAR model. Section 5 concludes with a short discussion of implications for monetary policy.

## II. THEORETICAL BACKGROUND ON MONETARY TRANSMISSION CHANNELS AND EVIDENCE FROM EMERGING AND TRANSITION COUNTRIES

In this section we present a theoretical overview of the MTM channels. Drawing from results of research on emerging and transition economies we draw parallels and present our judgment about the expected strength and relative importance of each of the channels in the case of Albania.

The MTM is the process through which monetary policy decisions affect the economic activity in general and the price level in particular. At one end of the transmission mechanism stand the instruments that can be controlled by the monetary authority, and at the other end are the final objectives of the monetary policy such as price stability, output growth and employment. There is growing consensus among economists that monetary policy can only be used to smooth short-term output fluctuations and does not affect long-term real growth. Monetary policy can, however, be an effective tool to achieve price stability, which has been established as the single final objective of many central banks all over the world. In line with the specification presented by Mishkin (1996), we look at the following channels of monetary transmission: the interest rate channel, the exchange rate channel, the asset prices channel and the credit channel. This standard scheme is often augmented to include an expectations channel, which has received considerable attention in recent research work.

- *The interest rate channel*

The interest rate channel implies the mechanism through which the change in the policy interest rate is translated into market deposits and loans interest rates, and, at a second stage, the mechanism through which the new market interest rates affect firms and households spending and investment decisions. It is important to keep in mind that the size and the direction of the effect of a certain monetary policy decision on market interest rates depends on the extent to which the policy change was anticipated and on how the change affects expectations about future policy decisions. It is generally believed and proven that a change in the policy rate is reflected in an almost immediate change in the same direction and of a similar size in the short-term lending and deposit market interest rates. The speed with which these rates adjust depends on the characteristics and depth of the market, on the strength of competition among financial institutions etc.. The long-term rates, on the other hand, may move either in the same or in the opposite direction after a change in the policy rate. The actual effect on long-term rates of an official rate change, will partly depend on the impact of the policy change on inflation expectations (BoE MPC Report). If investors expect a rate rise to be followed by lower interest rates in the future, the long-term rates may fall in response to the current rise in the official rate. Theoretically, an expansionary monetary policy, i.e. a decrease in the official nominal interest rate, is followed by a fall in real interest rates (in a sticky prices framework), which in turn leads to lower cost of capital and increases businesses and consumers investment, and finally increases aggregate output (Mishkin, 1996).

The empirical results of the studies on interest rate pass-through for the CEE countries are very similar to the findings for the euro area (Égert and MacDonald, 2006). In general, it seems that: the most complete pass-through is found for short-term corporate lending rates, followed by long-term corporate lending rates and the lowest pass-through is found for consumer loans; the pass-through to deposit rates is less complete than for lending rates; and there is substantial cross-country heterogeneity for the long-run pass-through.

The second stage of the interest rate channel consists in the link between market interest rates and real activities such as consumption and investment. Changes in real interest rates affect income and spending through the substitution, the wealth, the income and the cost of capital channel. Changes in interest rates can have conflicting effects, as they affect both savers' and borrowers' behaviour. The empirical work on this stage of the interest channel for CEEC is still scarce and the results are inconclusive.

For Albania, we believe that the interest channel has been inexistent for the major part of 1990-2005. The adoption of an indirect policy instrument (the one-week reverse repo rate), as the official policy rate in the economy, occurred only recently. By the end of the 90s, the domestic monetary policy was still facing a great challenge in the form of undeveloped financial markets, large informal credit and foreign exchange markets, and a low degree of financial education and public trust in the banking system, aggravated particularly after the 1997 collapse of the pyramid schemes. There is a consensus, however, that the switch from direct to indirect monetary policy instruments and the increasing credibility and transparency of the central bank have helped strengthen the relationship between money and inflation. Although the interest rate channel may not be the most significant monetary policy transmission channel in Albania at present, it is believed to have assumed a greater role over the last few years.

- *The exchange rate channel*

Changes in official interest rates can also affect the exchange rate. As the exchange rate indicates the value of domestic currency relative to foreign currencies, it can be influenced by foreign interest rates, as well as domestic interest ones. The size and the direction of the impact of a change in the policy rate on the exchange rate is difficult to predict, as it will depend on expectations about domestic and foreign interest rates and inflation (BoE MP Report). The normal reaction to a rise (fall) in the policy rate, would be an appreciation (depreciation) of the domestic currency, as assets denominated in domestic currency would become more attractive for foreign investors. An appreciation of the domestic currency would make

imports more expensive and exports cheaper, so net exports and, consequently, aggregate demand would decrease. In addition to the effect on net exports and aggregate demand, the exchange rate has a direct effect on domestic inflation, because it determines the price of imported goods expressed in domestic currency. In the literature, this is known as the pass-through effect. The exchange rate channel can also work through the wealth and the balance sheet channels, which are generally included in the discussion about the asset prices channel. The exchange rate affects the balance sheets of firms with large foreign currency denominated debt. When foreign currency is appreciated (domestic currency appreciates), the debt burden of these firms increases, and with no corresponding assets denomination to match this increase, the net worth of firms goes down. The same happens with consumers holding large amounts of foreign currency assets; their wealth decreases and so does their consumption. In this framework, the exchange rate working through the balance sheet and the wealth channel, affects aggregate demand in an opposite direction compared to the traditional net exports channel.

The exchange rate channel has received particular attention in research on transition economies, as it is believed to be particularly important in high inflation environments and in countries with poor financial markets (Aslanidi, 2007). Kamin et al (1998) state that, for transition countries, the exchange rate channel, in contrast to the other channels, affects not only aggregate demand, but also aggregate supply. However, here we focus on the role played by the exchange rate as a channel through which monetary policy affects aggregate demand. For the exchange rate channel to work within the monetary transmission framework, two relationships must hold. First, there must be a link between monetary policy and the exchange rate, and second, the exchange rate must influence output and inflation.

Empirical evidence for transition countries for the first stage of transmission, i.e. from monetary policy to the exchange rate shows mixed results. Vonnák (2007) concludes that two different studies on Hungary find similar responses of the exchange rate to monetary policy in the last 5-10 years. An unexpected 25 basis points rate increase, on average, appreciates the exchange rate almost immediately by 0.5-1.0%. For other transition countries Égert

and MacDonald (2006) state that VAR models give mixed results on this relationship. A positive interest rate shock can lead to an appreciation or depreciation of the exchange rate. This phenomenon, known as the exchange rate puzzle, under special circumstances can be attributed to the unsuccessful defence of an exchange rate level. Vonnák (2007) argues that the presence of shocks to risk premiums renders measuring the effect of monetary policy on the exchange rate difficult. If the Uncovered Interest Parity condition is augmented with a risk premium term<sup>4</sup>, it can be seen that an increase in the risk premium can lead to higher domestic interest rates, to a spot depreciation, or can be offset by depreciation in the future (Vonnák, 2007). If this is the case, the stronger the dominance of risk premium shocks, the more likely it is to observe an opposite reaction of the exchange rate, i.e. a weakening of domestic currency after monetary tightening.

Turning to the second stage of the channel, Aslanidi (2007) finds that the exchange rate is more efficient in influencing fluctuations in output, monetary aggregates and credit than the interest rate and foreign exchange interventions in Georgia. Moreover, foreign exchange interventions seem to have a stronger impact on the level of the exchange rate and on the real economy than the interest rate. In their transition countries survey, Égert and MacDonald (2006) summarize the results of the studies of the exchange rate pass-through to inflation as follows: (a) there is considerable cross country heterogeneity especially for the CPI; (b) the pass-through is different for subgroups of the CPI, PPI and import prices; (c) exchange rate pass-through has declined lately for almost all countries; (d) the pass-through seems strongest against the anchor or benchmark currency.

The Albanian economy is a small open economy. The goods trade deficit stands at 40% of GDP and exports and imports of goods and services are as high as 80% of GDP. The current account persistently records large inflows in the form of migrants' remittances, which have played a significant role in the financing of Albania's trade deficit and in keeping exchange rates stable in the last ten years. Albanians living abroad represent a large share of the number of non-residents coming to Albania as tourists especially in the summer and winter. Capital inflows consist primarily of foreign direct investment and official

transfers. Based on the nature and structure of imports and exports of goods and services, we would expect changes in the exchange rate to have a greater influence on the volume of imports of goods and services, rather than on the volume of exports of goods and services. Vika<sup>5</sup> (2006) found that real income is the main determinant of trade flows in the long run, particularly for exports. Furthermore, changes in relative prices appear to have a larger impact than exchange rate fluctuations have on the volume of merchandise imports. The opposite is true for the export supply, which seems to react greater and faster to changes in the Lek/Euro exchange rate than to relative prices. These findings shed light on the relative importance of the exchange rate among other foreign trade determinants (relative prices, domestic and foreign income etc.), but they do not help us to assess the relative importance of the exchange rate channel as part of the overall monetary policy transmission mechanism. Regardless of the direction and magnitude of the influence of exchange rate on net exports, we are convinced that the exchange rate has had a measurable and strong effect on inflation in Albania in the last decade, by affecting import prices and inflation expectations.

- *The asset prices channel*

Asset prices channel reflects the impact of monetary policy on prices of assets, such as shares, bonds, real estate and other domestic assets. Hórvath and Maino (2006) summarize: this channel operates through changes in firms' market value and in household wealth. The former channel alters the relative price of new equipment, affecting investment spending, while the latter affects household consumption and the availability of collateral for borrowing. Mishkin (1996) explains that an increase in the money supply, would, according to Tobin's q theory, lead to higher spending in the stock market, an increase in stock prices, a higher value of  $q^6$  and an increase in investment spending. The wealth effects are manifested in changes in households' wealth due to changes in stock prices. When stock prices increase, consumers become wealthier and have more money to spend. In the case of a monetary expansion, a decrease in the official interest rate would lead to higher investment and higher consumption, and consequently to higher aggregate demand.

It is hard to find empirical results on the strength of the asset prices channel for transition countries. This channel has attracted less attention and research than the other more traditional channels such as the interest rate channel, the exchange rate channel and more recently, the credit channel. For Hungary, Vonnák (2007) asserts that there are two reasons for considering the stock price channel as irrelevant. Firstly, there is no empirical evidence that monetary policy affects stock prices. And secondly, shares play a minor role in Hungarian households' financial wealth. Housing wealth may be the more important component of the asset prices channel for Hungary, due to the large share of its wealth relative to other households' financial assets. However, Vonnák (2007) concludes that the housing market is incapable of explaining the effect of monetary policy in Hungary.

In the case of Albania, it is way too early to consider the existence of an asset prices channel within the monetary transmission mechanism, as the range of domestic assets is limited to real estate assets, while bonds and stock markets are nonexistent. There may be a reason to suspect a link between increasing house prices and increased consumer spending, but we do not expect to find a relationship between monetary policy and house prices for the period under analysis. In our model, we include a house price index to analyze the role of this channel in the transmission mechanism.

- *The credit channel*

The functioning of the credit channel is considered to be closely linked to the information asymmetries in the credit market (Mishkin, 1996). Following the Bernanke and Blinder (1988) argument, this channel is often viewed as an enhancement channel that amplifies the interest rate channel. Central to the bank-lending channel is the imperfect substitutability between credits and other financial assets in the banks' balance-sheets on the one hand, and that between bank credits and other forms of financing in firms' balance – sheets, on the other (Égert and MacDonald, 2006). The credit channel works through the bank lending channel and the balance-sheet channel. Believers in the bank lending channel stress the special role of banks as solvers of asymmetries in the financial system. An expansionary

monetary policy would increase bank reserves and deposits and the quality and quantity of available loans. The increase in loans would lead to increased investment and, consequently, increased output. The mechanism of the balance-sheet channel, alternatively known as the broad-lending channel or the financial accelerator, allows changes in the money supply to cause changes in the net worth and cash flow of borrowers. An expansionary monetary policy would raise the net worth and the cash flow of borrowers. As a result, there would be less asymmetric information and moral hazard in the credit market and the amount of loans would increase. In either case, higher lending would lead to higher investment and to higher output (Mishkin, 1996).

Égert and MacDonald (2006) observe that the body of empirical literature focusing on Central and Eastern European Countries concentrates on the first stage of the lending channel, i.e. the reaction of bank loans to monetary policy changes, more than on the second stage of the transmission, i.e. the effect of changes in credit aggregates on output and prices. Evidence from micro data for most countries suggests that, in general, banks react differently to monetary policy changes depending on bank characteristics such as size, liquidity, capitalization and ownership structure. In addition to cross-country heterogeneities, various authors find different results for the same country at different periods. In the case of CEE countries, foreign involvement generally seems to increase banks' responsiveness to monetary policy actions<sup>7</sup>.

In a study examining the link between credit and output and inflation, Héricourt (2005) finds that an increase in credit temporarily increases both output and prices for Poland, Slovakia and Slovenia, but causes an initial fall in output in the Czech Republic (which is recovered later). Égert and MacDonald (2006) note that the literature on the credit channel in CEEC-s is still very scarce and looks only at selected aspects of the credit channel. One shortcoming of the studies, in their view, is that they assume that credit markets are in equilibrium and that the models data reflect this equilibrium. The authors suggest using more disaggregated credit data such as corporate short and long-term loans and various types of consumer loans, in order to understand how, if at all, the credit channel works in these countries.

Without ruling out the possibility of the existence of a credit channel in Albania, we think that the relative importance of this channel in the transmission mechanism may not be significant. The large share of foreign currency loans (about 70% of the total credit stock), the large degree of concentration in the banking system and the low dependence of firms on bank loans to finance their activity, do not favour the functioning of a credit channel in Albania. In this paper, we do not consider the credit channel as a separate channel in the monetary policy transmission.

### III. LITERATURE REVIEW

In this part we present a summary of empirical findings of studies focusing on the monetary transmission mechanism in Albania. The papers are presented in chronological order, as most of them build upon or refer to the results of previous work. Three of the papers presented here look at the overall monetary transmission mechanism by investigating the relative importance of different channels and their evolution over time. One paper focuses on the credit channel using commercial banks' micro data, and another paper focuses on the exchange rate pass-through. As a general impression, there seems to be a consensus that the exchange rate channel was and, to a lesser extent, continues to be significant in the overall transmission mechanism framework; monetary policy has gained importance after the adoption of indirect monetary policy instruments and there is little evidence to support the existence of a credit channel.

One of the early works that looks at the monetary policy transmission mechanism in Albania is by Muço, Sanfey and Luçi (2001). The authors argue that none of the traditional channels - interest rates, exchange rates, credit rationing and inflation expectations - is likely to be an effective tool for monetary control in Albania. The authors state that inflation had little correlation with money supply growth during 1994-2000, but there was a strong link between exchange rate stability and inflation. A reaction function is used to investigate how monetary policy instruments, namely the money growth and the policy rate, react to aggregate economic information and to political factors<sup>8</sup>. The authors conclude that the BoA reacts by reducing the

M3 growth rate six months after an unexpected rise in inflation takes place. There is no evidence of BoA reaction to the real sector changes. The decision of the BoA to change the deposit interest rate seems more likely react to changes in the inflation level rather than to an unexpected rise in inflation. The authors do not find evidence of the effect of monetary policy on the real economy. This result was expected as the real economy does not rely heavily on credit from the banking system. A simple VAR analysis with monthly data over 1994:01-2001:08 shows that there is not any strong causality running from inflation to M3 growth, while the political dummy positively affects both inflation and money growth.

In a later paper, Muço, Sanfey and Taçi (2003) examine the conduct of monetary policy in Albania during the transition period using a VAR model. The period under investigation stretches from January 1994 to May 2003 and the model uses monthly data on the following five variables: M3 monthly rate of growth, monthly CPI inflation, the logarithm of the Lek/USD exchange rate, the logarithm of remittances in USD, and the monthly rate of growth of trade balance. The ordering restrictions for the estimation of the VAR model are as follows: remittances → money growth → exchange rate → inflation → trade balance. Remittances are thought to influence both money supply and the exchange rate. Money growth is believed to affect the exchange rate, and both money growth and exchange rate should affect the rate of inflation. The final link in the chain is the trade balance which is affected by inflation, or the change in relative export/import prices. The chosen lag length for each variable is two. The estimation period is divided into two sub-samples to account for the shift from direct to indirect monetary policy instruments<sup>9</sup>. The overall result for the first period is that monetary shocks do not appear to be related to inflation. Remittances and the trade balance have an expected positive short-term effect on inflation, lasting between 2-4 months after the shock, and the exchange rate shock has a small negative effect that persists over a period of 12 months<sup>10</sup>. The variance decomposition of the forecast error shows that shocks to remittances and the exchange rate explain about 14% of the error variance, while the contribution of money growth is extremely small. The picture is different for the second period. Money growth appears to have a positive effect on inflation, which peaks after three months

and dies out after four to five months. The exchange rate effect is similar to that found for the first period. Shocks to money growth explain a significant part of the trade balance as well. The variance decomposition of forecast errors shows that the effect of the money supply is stronger than in the first period explaining about 16% of the error variance after 12 months. The effect of remittances and exchange rate are still high, indicating that these factors are food indicators of inflation expectations. The strong effect of remittances on trade balance (60% of forecast error variance), and the visible effect of money growth on trade balance (33%), according to Muço et al indicate that the exchange rate transmission channel was present during the period of indirect monetary policy instruments.

In a slightly different approach, Peeters (2004) looks into the details of the monetary policy transmission mechanism in Albania and tests the hypothesis that the exchange rate is the most important channel in the monetary policy process. The author analyzes the relative importance of the exchange rate channel, the deposit and credit channel and the wage channel. Peeters argues that the exchange rate channel is likely to be weak due to the sizable trade openness of the country and that movements in the exchange rate are likely to be influenced by foreign factors rather than by domestic monetary policy. The deposit and credit channel is also expected to be weak due to the fact that demand for deposits is highly inelastic<sup>11</sup> and that the extent of loans in domestic currency in Albania is still limited. Concerning the wage channel, the author maintains that the high level of unemployment and the weakness of labour unions, could slow or impede wage pressures altogether. Relying on graphical inspection of the underlying variables, the Peeters suggests that: the relationship between exchange rate and inflation has weakened since 2001<sup>12</sup>; the deposit channel seems to be functioning as the easing of monetary policy since 2002, has been reflected in decreasing deposit interest rates and in decreasing volumes of new lek deposits for 12, 6 and 3 month maturities; and that the working of the credit channel seems somehow troubled as the relationship between policy rates, credit rates and new lek loans differs across the years under analysis and is not always consistent with expectations. Regarding the wage channel, Peeters argues that there may be a strong link between annual wage growth, especially for the non-agricultural

private sector, and CPI inflation, as the correlation between the variables suggests. In the author's view, the cost-push linkage may be rather stronger than the demand pressures caused by changes in the wage level. Peeters conducts a VAR analysis using monthly data on the monetary policy rate, the exchange rate<sup>13</sup>, the volume of deposits, the volume of credits and inflation. In comparing the two most influential exchange rates in the Albanian economy, Peeters shows that the Lek/Usd rate hardly explains the variance of inflation in the 2002-2004 period. The Euro/Lek exchange rate, on the other hand accounts for the greatest part of the inflation variance in 2000-2002. In the following period, the exchange rate seems to have become weaker at the benefit of credits. In decreasing order, inflation variance is explained by movements in inflation itself, credits, exchange rate, deposits and the monetary policy rate in 2002-2004. The author acknowledges the lack of the wage channel as one of the drawbacks of this VAR analysis and states that the analysis merely provides information on the relative importance of the factors included. The major conclusion of this paper is that there are strong shifts in the monetary policy transmission channel and these shifts point at a diminishing role of the exchange rate at the benefit of the credit channel.

Luçi and Vika (2005) conducted an empirical study of the credit channel in Albania for the period Q1:2001-2004:Q3, using data on individual banks. They measured the effect of changes in monetary policy on the volume of new credits and deposits, and the role played by commercial banks' characteristics in the transmission process<sup>14</sup>. The authors argue that, in the absence of developed money and capital markets, bank credit is the most important and possibly the only external source of financing especially for small-to-medium size firms in Albania. However, the penetration of credit services in the Albanian economy remains very limited and firms rely mostly on internal sources and other informal sources for finance. The authors argue that the capability of the central bank to affect credit supply through monetary policy in Albania is expected to be quite limited due to numerous problems in the credit market. The dominant position of the Savings Bank, the large share of liquid assets to total banks' assets and the large informal credit market that flourished in the mid 90s, undermined the role of monetary policy during this period. Luçi

and Vika (2005) summarize as follows: the effectiveness of the credit channel in Albania remains modest, hindered by the large share of cash transactions, by an undeveloped interbank market, by strong banks' preference to lend in foreign currency and by an overall low penetration of credit services in the economy. The hypothesis that credit supply was not affected by changes in monetary policy and that there were no significant differences among individual banks, could not be rejected. The authors also found that a monetary policy contraction had not caused a contraction in the volume of new lek deposits. This study concluded that there is very little empirical evidence to support the existence of a credit channel in Albania.

Istrefi and Semi (2007) assess the extent and speed of exchange rate pass-through to consumer prices in Albania using vector autoregression model (VAR). The reference measure of exchange rate is the NEER. The main result is that the exchange rate pass-through is almost complete but in decline. The pass-through of an exchange rate shock to consumer prices after 4 months is about 42% and after 9 months it is almost complete (99%). Furthermore, exchange rate shocks appear to be more important in explaining consumer price variance than the other variables (M3 growth and 3-month Lek deposit interest rates). Exchange rate shocks explain up to 25% of the consumer price variance. The results suggest the presence of an asymmetry in the pass-through: pass-through is higher in the case of domestic currency depreciation and lower in the case of appreciation. Dividing the sample into two sub-samples (1996:01-2000:08 and 2000:09-2006:12) reveals a weaker pass-through in the last 7 years. The authors argue that the low inflation environment, the domestic currency stability and increased monetary policy credibility may have contributed to a dampening of the exchange rate pass-through during the last decade.

In an analysis of the monetary policy rule followed by the BoA in the period Q4:1994-Q1:2003, Samiei (2003) concludes that there is some evidence that the bank has followed a systematic approach to monetary policy by reacting both to inflation and output developments - although severe data problems reduce the reliability of results. In the author's opinion, this approach has played an important role in maintaining low inflation. The systematic monetary policy has

also been helped by a gradual fiscal consolidation and large foreign currency inflows, which have helped maintain a strong exchange rate. Samiei adds that inflation in Albania is significantly influenced by supply shocks, so reacting to a demand shock by following a standard Taylor rule, may not be always feasible for monetary policy.

Since in this paper we replicate the work of Muço et al (2003), we comment on some weak points that we have identified in this analysis. Regarding the nature and form of variables, we think that: the use of M3 as a measure of money is not the best choice given the limited effect of monetary policy on this monetary aggregate; the Lek/USD exchange rate is an inferior alternative to the Lek/Euro rate given the different conditions prevailing at the time when the study was carried out; the inclusion of the trade balance series in nominal form does not seem very advisable as import and export values in USD are affected both by exchange rate and relative prices developments; the remittances variable, despite its importance as a major contributor to exchange rate stability, is unpromising from the statistical point of view as there is no direct measure of this type of flows for Albania – the estimation methodology is such that might lead to a strong inherent correlation of this series to merchandise imports. We also do not favour the use of monthly changes as they introduce a lot of noise in the data series and complicate the estimation of the model.

Regarding the presentation of the results, since the responses of variables in the impulse response functions seem rather flat an inclusion of confidence intervals would be necessary to better understand the significance of the response and the relative importance of the different channels. In our replication of this model we try to address some of these issues and make improvements where the data permit.

#### IV. RECENT FINDINGS

Following our review in section III, we investigate if the results in Muço et al., (2003) hold for a longer data span. The reason why we choose to replicate this study is because it provided a good insight of how monetary policy effects on final variables of interest might have changed over time. However as explained in section III a short time span

available to Muço et al., (2003) especially for the second time period, leads us to question the reliability of the findings given the asymptotic properties of SVAR analysis. Further, we test if the results hold even if the model is modified to account for the critique in section III.

#### REPLICATION OF THE MODEL OF MUÇO ET AL. (2003)

We conduct the replication for the second subsample referred to in Muço et al. (2003) and extend it for later observations so that the total period is 2000 M8 – 2007 M6. In Appendix 1 tables 1 – 3 we present the tests for residual autocorrelation, non-normality and conditional heteroskedasticity of the estimated VAR 2 model. The first test is the Jarque- Bera test on the normality of residuals in Doornik and Hansen (1994). Table 1 indicates the normality hypothesis is rejected at conventional levels of significance for all equations except the equation for the USD exchange rate. Table 2 displays the ARCH-LM test in Doornik and Hendry (1997) and indicates that the hypothesis of no heteroscedasticity of the residuals can be rejected at conventional significance levels for the remittances equation and the trade balance equation<sup>15</sup>. In table 3 we present the Breusch-Godfrey LM test for autocorrelation of the residuals and the Edgerton and Shukur (1999) LMF test which corrects for small sample bias. Both tests indicate rejection of the null of no serial correlation. In charts 1 and 2 Appendix 1, we present the CUSUM and CUSUM Sq tests of the stability of the VAR. The Cusum Sq indicates instability of the VAR in the money and trade balance equations. While estimations of VAR models are generally robust to deviations from normality (Juselius, 2006), the violation of the serial correlation assumption is seriously harmful for VAR analysis. On the other hand it is worth noting that the residual correlation and heteroskedasticity tests are derived under normality assumptions and vice-versa, hence it is impossible to know which of the tests can be trusted. The residuals and stability tests should serve as a warning about the reliance we place on the VAR analysis results.

Next we present the impulse responses of different equations in the system following a shock to money growth, trade balances, inflation, the exchange rate, and remittances respectively. We observe the following:

A shock to the change in money (Chart 1) causes:

- A permanent exchange rate depreciation occurring after one month. The effect is totally different from that in Muço et al.,
- A temporary surge in inflation that dies out quickly within one month. This could be explained by rising inflation expectations following monetary easing. The effect is similar to that observed by Muço et al.,
- No significant effect on trade balances. The effect is totally different from that in Muço et al.,

Chart 1 Response to money indicator shock  
(money, exchange rate, inflation, trade balance)

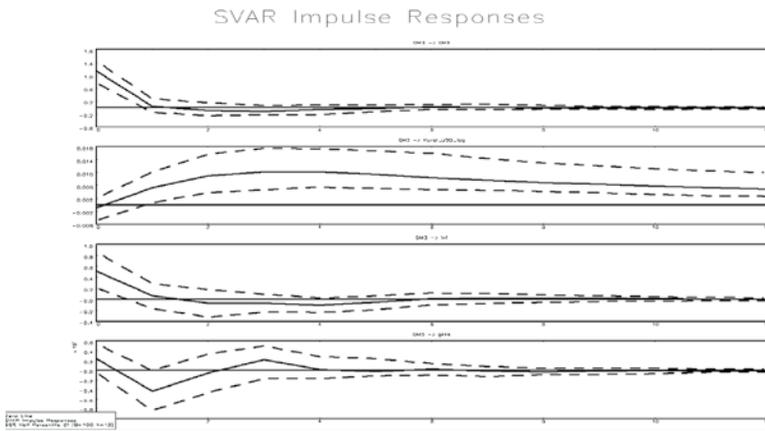
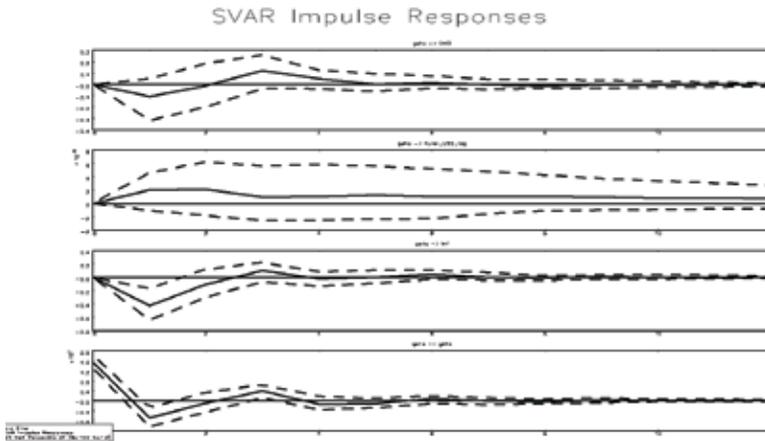


Chart 2 Response to trade balance shock  
(money, exchange rate, inflation, trade balance)



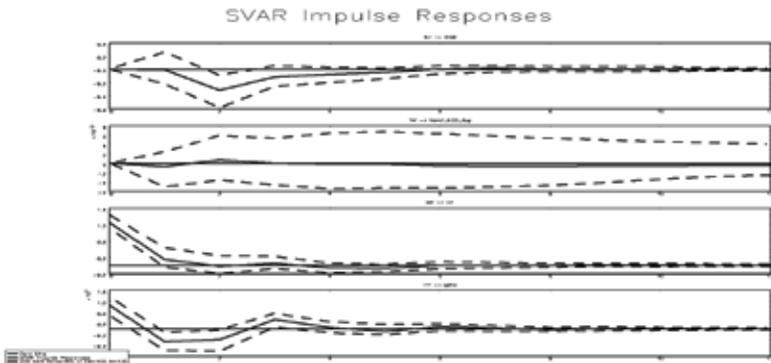
A shock to the growth in trade deficit (Chart 2) causes:

- No significant effect on M3 changes. The effect is totally different from that in Muço et al.,
- No significant effect on the exchange rate. The effect is the opposite to that in Muço et al.,
- A puzzling temporary decrease in inflation. The effect is similar to Muço et al..

A shock to inflation (Chart 3) causes:

- Temporary fall in M3 after 2 months. The effect is similar to Muço et al. at the beginning but in their case there is a permanent increase in money growth following the shock.
- No effect on the exchange rate, and the shape of the response is similar to that of Muço et al..
- Temporary increase in the trade deficit growth followed by a decrease in the trade deficit growth. The effect is similar in shape to that of Muço et al..

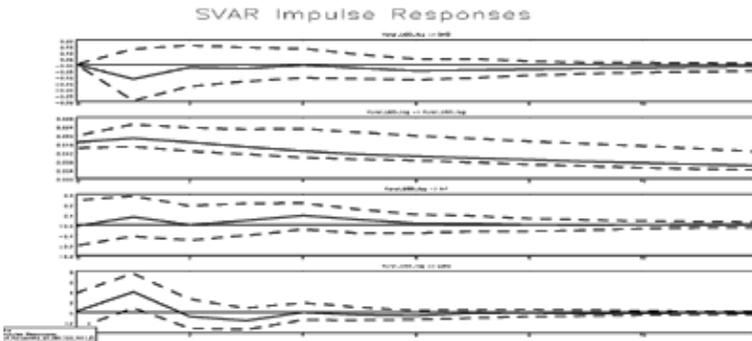
Chart 3 Response to inflation shock  
(money, exchange rate, inflation, trade balance)



A shock to NEER - depreciation of lek (Chart 4) causes:

- No effect on money growth. The effect is similar in shape to that in Muço et al..
- No effect on inflation, and the shape is different from that in Muço et al..
- Temporary increase in the trade deficit after one month. The effect is similar in shape to that in Muço et al..

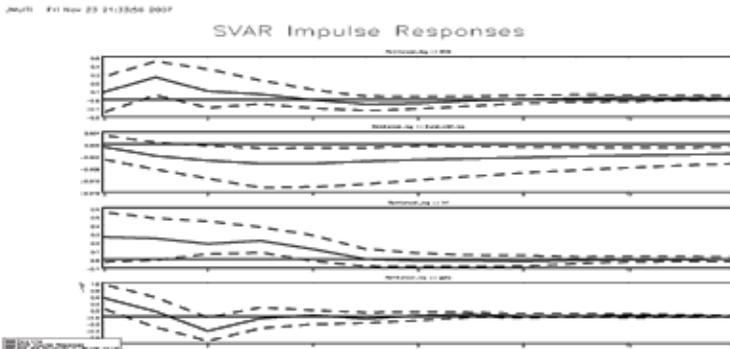
Chart 4 Response to exchange rate (NEER) shock  
(money, exchange rate, inflation, trade balance)



A shock to remittances (Chart 5) causes:

- Temporary increase in money after one quarter
- Permanent fall in the exchange rate after 2 quarters. The effect is totally different from that in Muço et al.
- No significant effect on the trade deficit. The effect is similar to that of Muço et al.
- Temporary increase in inflation after one month lasting for 4 months. The effect is totally different from that in Muço et al.

Chart 5 Response to remittances shock  
(money, exchange rate, inflation, trade balance)



Overall the response of the system in our sample is quite different from that found by Muço et al. (2003). In addition, by presenting confidence intervals we make a distinction between significant and insignificant effects, which were not presented in Muço et al.(2003). With regard to the transmission hypothesis the money growth

effect on inflation was the only robust result, while other effects were found to be either different or insignificant. In table 1 we show the forecast error variance decomposition. Comparing these results with those of Muço et al. (2003) we observe that although the money shock is still important in explaining the forecast error in inflation after 12 months, both remittances and the exchange rate proportions of forecast errors in inflation are significantly smaller than those reported by Muço et al. (2003). The same could be said of the forecast error in the trade deficit growth, suggesting that evidence of a strong exchange rate channel could not be found.

*Table 1 Forecast error variance decomposition in inflation for: remittances, money, exchange rate, inflation and trade balance*

Proportions of forecast error in "Remitancat_log"					
forecast horizon	Remitancat_log	DM3	Kursi_USD_log	inf	geks
1	100%	0%	0%	0%	0%
6	72%	17%	2%	9%	1%
12	71%	17%	3%	9%	1%
Proportions of forecast error in "DM3"					
1	1%	99%	0%	0%	0%
6	6%	84%	1%	8%	2%
12	6%	83%	2%	8%	2%
Proportions of forecast error in "Kursi_USD_log"					
1	0%	0%	99%	0%	0%
6	8%	20%	71%	0%	1%
12	10%	24%	65%	0%	1%
Proportions of forecast error in "inf"					
1	5%	18%	0%	77%	0%
6	12%	16%	1%	60%	11%
12	12%	16%	1%	60%	11%
Proportions of forecast error in "geks"					
1	9%	2%	0%	21%	68%
6	10%	6%	4%	23%	57%
12	10%	6%	4%	23%	57%

## SVAR ANALYSIS OF THE MODIFIED MODEL

As a next step of our analysis, building on this research and the critique to it in section III, we modify the model as follows:

1. We replace the bilateral exchange rate USD/lek with NEER data on the basis that a composition of exchange rates would

overcome potential problems resulting from a shift from USD to EURO as the primary foreign currency in Albania. The NEER variable (index) is taken in logarithm form.

2. We replace the broad aggregate M3 with M2 as M2 excludes foreign currency holdings and accounts for the measurement problem arising from the conversion of foreign currency deposits in lek with the prevailing exchange rate of the period. It has been shown that this later measure is better related to monetary policy. We convert M2 to real M2 using CPI inflation as a deflator and use annual growth rates of real M2.
3. We replace trade balance with a measure of GDP on the basis that this measures effects more accurately on other components such as investment and consumption. Nominal GDP is converted into real GDP using CPI.
4. We include a variable that directly captures the movements of monetary policy: the repo rate. The repo rate is taken in levels.
5. We use annual growth rates for headline and core inflation.
6. We conduct the analysis with quarterly data instead of monthly data in order to avoid unnecessary noise in the data series.

The specification tests for our model (Appendix 2) indicate that autocorrelation is still a problem, however longer lags were also tried and did not bring significant improvement. Both normality and heteroskedasticity tests do not find enough evidence to reject the nulls of normality and no heteroskedasticity of the residuals. Stability tests indicate that the model is generally stable although the CUSUM Sq test detects some instability in the money equation.

Differently from Muço et al. in identifying the structural shocks from the residuals in each equation we use the scheme proposed by Kim and Roubini (2000). This scheme (presented in table 2) allows for a formulation of a money demand equation in shocks, allows for the contemporaneous reaction of all shocks in the exchange rate. The scheme uses information lags in monetary policy decision in that the repo rate does not react to contemporaneous shocks in inflation and real output. This scheme as explained in section III seems more realistic in the case of Albania when information, especially as regards output is available with considerable lags.

Table 2 The scheme of money demand equation proposed by Kim and Roubini, 2000. Variables are presented according to the following order: gross domestic product, money (M2), nominal effective exchange rate, base interest rate, inflation

rgdp	rm2	NEER log	REPO	Head Inflation
*	0	0	0	0
*	*	*	*	0
*	*	*	*	*
0	0	*	*	*
*	0	0	0	*

In charts 6-7 we examine the response of the system to shocks to the repo rate, which may be considered pure monetary policy shocks, and shocks to the exchange rate. We seek to investigate whether the exchange rate channel is in fact as weak as resulted from replication. The reason why we concentrate on this channel is that we suspect that using the bilateral USD/ lek exchange rate may not fully capture the importance of this channel given the lesser importance of this foreign currency over the last years.

Chart 6 The system's response to base interest rate – REPO shock (gross domestic product, money, nominal effective exchange rate, inflation)

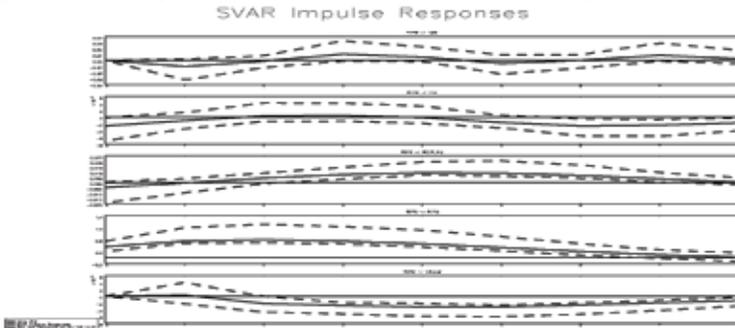
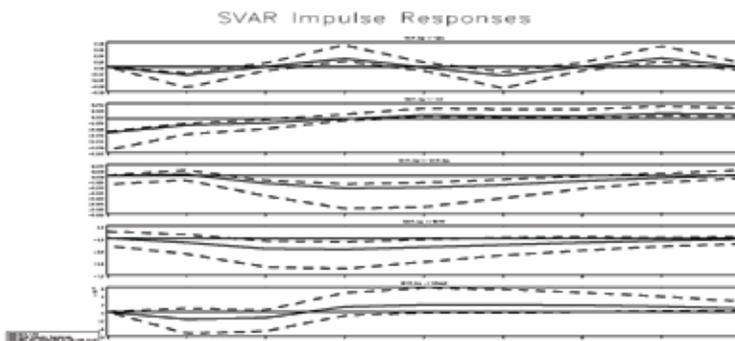


Chart 7 The system's response to exchange rate shock (gross domestic product, money, nominal effective exchange rate, inflation)

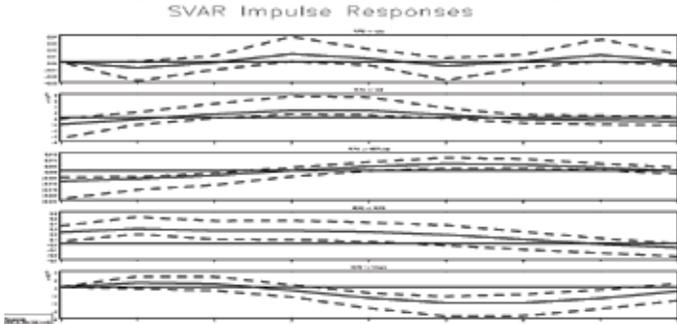


We observe the following:

- An increase in the repo rate does not have any significant effect on GDP.
- A rise in the repo rate brings a significant fall in real money holdings after 5 quarters.
- There is a puzzling exchange rate depreciation becoming significant after 1 quarter and dying after the 7<sup>th</sup> quarter.
- A rise in the repo rate lowers inflation after 2 quarters.
- A shock to the exchange rate brings fluctuations in real production. As we mentioned in section II, there are wealth effects positively affecting spending, following exchange rate depreciation in economies where agents hold a considerable part of their portfolio in foreign currency. Our results suggest the BoA should pay attention to the exchange rate fluctuations.
- A positive shock to the exchange rate initially causes a fall in M2 in line with currency substitution theory, but after 2 quarters M2 increases with respect to its initial levels. The money balances behaviour may reflect fluctuations in output.
- A positive shock to the exchange rate causes a fall in the repo rate, with an effect becoming significant after one quarter indicating that the BoA has in fact considered exchange rate shocks smoothing in its policy rule.
- A positive shock to the exchange rate increases inflation after 4 quarters, but the effect is just marginally significant.

Finally we investigate whether it is possible to better understand the transmission process if we focus on a core measure of inflation that excludes temporary fluctuations. Since the central bank can control only the evolution of the monetary policy component of inflation, by allowing the central bank to form expectations only on core inflation, it is also expected to improve the model diagnostics (Appendix 3). However our estimation does not find evidence of this hypothesis. We consider the impulse responses of all variables after shocks in the repo rate and the exchange rate. In chart 8 we present the impulse responses of a shock to the repo rate, while the responses to an exchange rate shock are shown in Appendix 4 since there was no difference from those obtained in our original modification.

Chart 8 The system's response to base interest rate – REPO shocks  
(gross domestic product, money, nominal effective exchange rate, core inflation)



By replacing headline inflation with core inflation we observe the following differences:

- A shock increasing the interest rate has an initial positive effect in money balances but this effect dies out after 5 quarters. The shape of the response is similar to that in our first modification but the statistical significance has changed.
- A positive shock to the repo rate causes an initial fall in NEER in line with our expectations, but this is reversed after the 4<sup>th</sup> quarter.

#### IV. CONCLUSIONS AND IMPLICATIONS FOR MONETARY POLICY

This paper focuses on the monetary policy transmission mechanism in Albania. It presents some theoretical background and recent findings of research work on the MTM in transition countries. A first conclusion is that there is significant heterogeneity across countries and across periods regarding the strength and relevance of particular transmission channels. In some countries the interest rate channel appears to be gaining importance over time and in others, the dominant role is still played by the exchange rate channel. Results concerning the credit channel and other asset prices channels are more mixed and inconclusive.

For Albania, we re-estimate a VAR model originally estimated by Muço et al (2003) using the data in their original form, and then making modifications in the type of variables, their frequency and their ordering. An attempt to replicate the results using identical data but longer time series shows that the response of the system in our sample is quite different from that found by Muço et al. (2003). In addition, by presenting confidence intervals we make a distinction between significant and insignificant effects, not presented in the earlier paper. With regard to the transmission hypothesis the money growth effect on inflation was the only robust result, while other effects were found to be either different or insignificant. Although the money shock is still important in explaining the forecast error in inflation after 12 months, both remittances and the exchange rate proportions of forecast errors in inflation are significantly smaller than those reported by Muço et al.(2003). The same can be said of the forecast error in the trade deficit growth, suggesting that evidence of a strong exchange rate channel could not be found.

The original model was modified to include real GDP instead of nominal net exports, real M2 instead of nominal M3, NEER instead of the Lek/USD exchange rate, to include the BoA policy rate, and to exclude remittances. We use annual changes instead of monthly changes and the periodicity in the revised model is quarterly. We observe that an increase in the policy rate does not have a significant effect on real GDP; it causes a strong drop in real money holdings after 5 quarters; it causes a depreciation of domestic currency after one quarter and, most importantly, it lowers inflation after 2 quarters, but the inflation rate goes back to its original level in about 8 quarters. A positive shock to the exchange rate increases inflation after 4 quarters, but the effect is just marginally significant. We also observe that a shock to the exchange rate causes fluctuations in real output. We suspect wealth effects being at work here, giving rise to a drop in spending after exchange rate depreciation.

The results obtained after replacing headline inflation with a core inflation measure, show no major differences in the responses of the other variables to a shock in the policy rate. However, we would

strongly advocate the use of a core inflation measure, preferably one that excludes the effect of administered prices, to monitor monetary policy effectiveness in the future.

Overall, we believe that the exchange rate channel is not as strong as reported in previous works, and that the money and expectations channel play the most important role within the transmission mechanism. Our findings also suggest that the BoA should pay attention to the exchange rate fluctuations as they seem to have an adverse impact on real output fluctuations.

APPENDIX 1 SPECIFICATION TESTS FOR THE  
MODEL OF MUÇO ET AL. (2003)

Table 1

JARQUE-BERA TEST				
variable	teststat	p-Value( $\chi^2$ )	skewness	kurtosis
u1	31.07	0.00	0.04	6.05
u2	194.20	0.00	1.99	9.51
u3	4.00	0.14	-0.48	3.52
u4	17.52	0.00	0.74	4.75
u5	7.00	0.03	0.71	3.32

Table 2

ARCH-LM TEST with 12 lags				
variable	teststat	p-Value( $\chi^2$ )	F stat	p-Value(F)
u1	31.36	0.00	4.85	0.00
u2	4.50	0.97	0.40	0.96
u3	6.97	0.86	0.65	0.79
u4	40.38	0.00	8.29	0.00
u5	7.10	0.85	0.66	0.78

Table 3

LM-TYPE TEST FOR AUTOCORRELATION with 5 lags	
Reference: Doornik (1996), LM test and LMF test (with F-approximation)	
LM statistic:	192.2664
p-value:	0.0001
df:	125
LMF statistic:	1.8626
p-value:	0
df1:	125
df2:	196

Chart 1

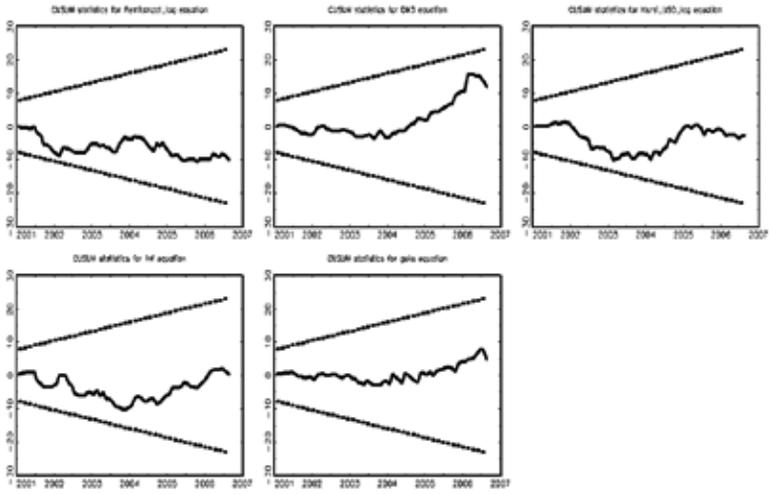
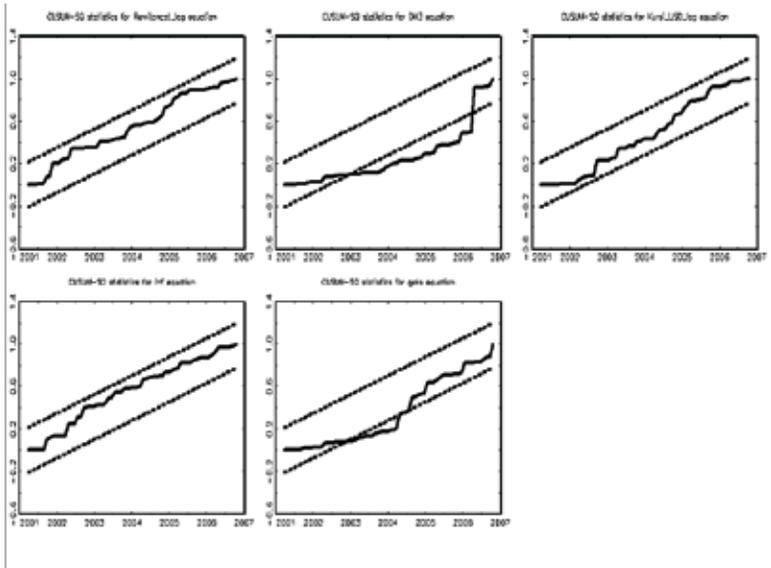


Chart 2



## APPENDIX 2 SPECIFICATION TESTS FOR THE MODIFIED MODEL (MODEL 1)

LM-TYPE TEST FOR AUTOCORRELATION with 4 lags	
Reference: Doornik (1996)	
LM statistic:	-345.089
p-value:	-1
df:	100

JARQUE-BERA TEST				
variable	teststat	p-Value(Chi <sup>2</sup> )	skewness	kurtosis
u1	0.4923	0.7818	-0.2453	2.6416
u2	0.017	0.9915	-0.0296	3.0963
u3	0.2971	0.862	0.2356	3.0287
u4	4.8354	0.0891	-0.8411	3.8926
u5	0.3998	0.8188	-0.2707	3.0822

ARCH-LM TEST with 4 lags				
variable	teststat	p-Value(Chi <sup>2</sup> )	F stat	p-Value(F)
u1	2.3476	0.6721	0.6406	0.6389
u2	3.8337	0.429	1.1105	0.3756
u3	4.7268	0.3165	1.4217	0.2584
u4	4.5457	0.3372	1.3567	0.2796
u5	3.6144	0.4607	1.0375	0.4093

Chart 1

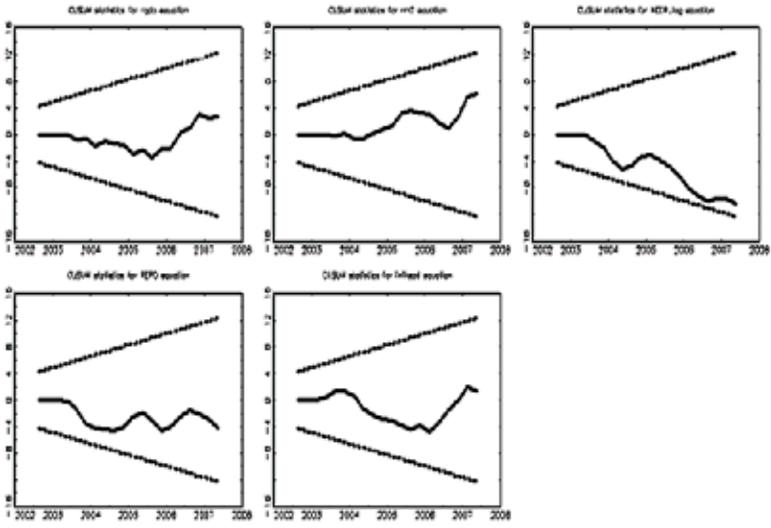
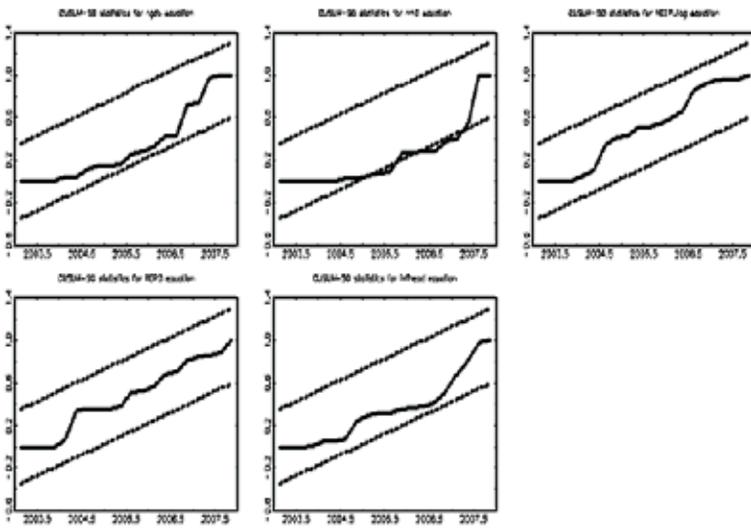


Chart 2



## APPENDIX 3 SPECIFICATION TESTS FOR MODEL 2

Variables are included in the following order: rgdp, rm2, NEER\_log, repo, infcore.

LM-TYPE TEST FOR AUTOCORRELATION with 4 lags	
Reference: Doornik (1996)	
LM statistic:	159.9999
p-value:	0.0001
df:	100

ARCH-LM TEST with 4 lags				
variable	teststat	p-Value(Chi <sup>2</sup> )	F stat	p-Value(F)
u1	2.8626	0.5811	0.7971	0.5393
u2	4.2397	0.3745	1.2491	0.3183
u3	7.5018	0.1116	2.5618	0.0656
u4	6.158	0.1877	1.9736	0.1323
u5	4.8237	0.3059	1.4569	0.2476

JARQUE-BERA TEST				
variable	teststat	p-Value(Chi <sup>2</sup> )	skewness	kurtosis
u1	1.5104	0.4699	-0.1459	1.9765
u2	0.0827	0.9595	-0.0713	3.2042
u3	1.1197	0.5713	0.458	3.0297
u4	4.4975	0.1055	-0.739	4.0903
u5	1.2196	0.5435	-0.4402	2.6264

# CUSUM and CUSUM sq tests for stability

Chart 1

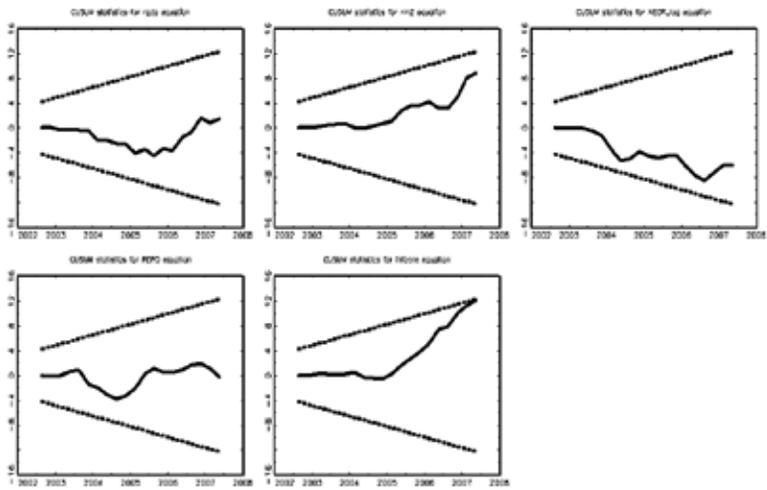
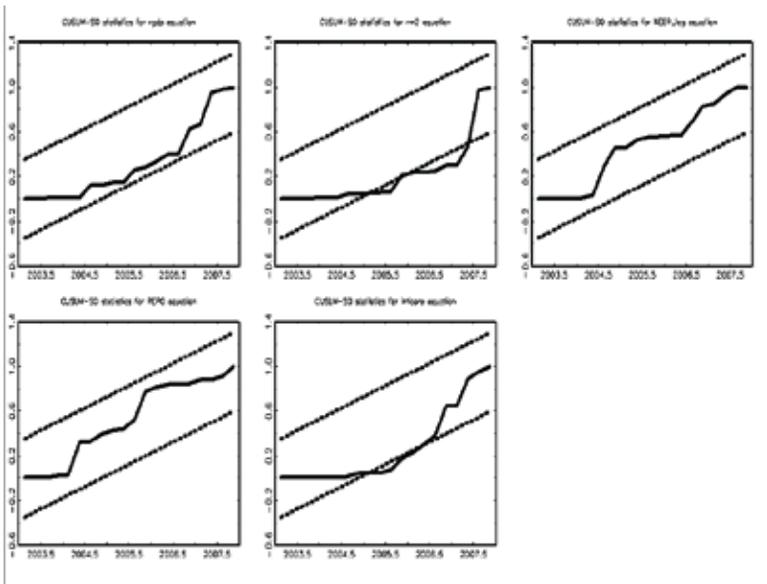
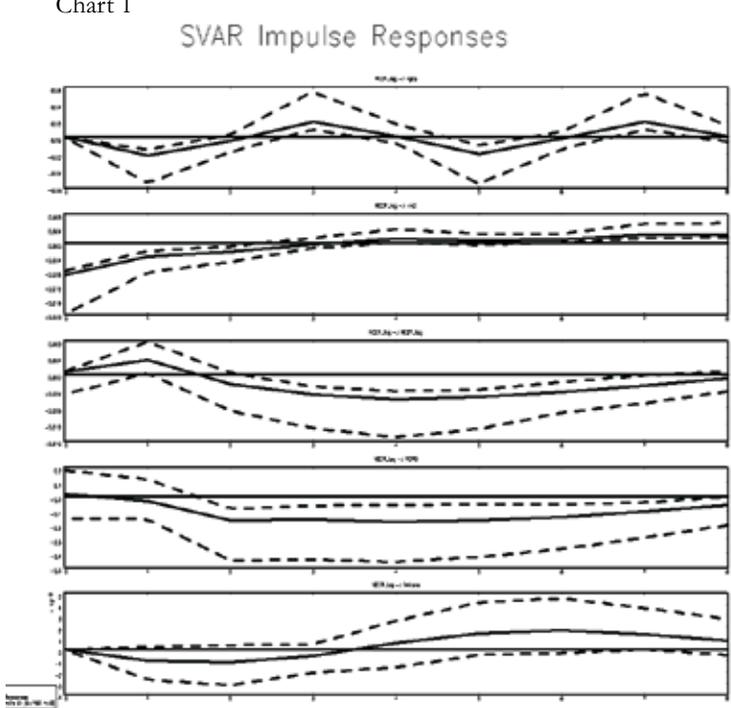


Chart 2



# APPENDIX 4 THE SYSTEM'S RESPONSE TO A SHOCK TO EXCHANGE RATES (MODEL 2)

Chart 1



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## ENDNOTES

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Diana Shytlla, Chief of Sector, Monetary Policy Department, Bank of Albania.

<sup>1</sup> Henceforth denoted as the BoA.

<sup>2</sup> CPI - Consumer Price Index measured and published by the National Statistical Office – INSTAT.

<sup>3</sup> With broad money (M3) growth as an intermediate target.

<sup>4</sup> The augmented UIP formula is  $i_t = i_t^* + E_t s_{t+1} - s_t + rp_t$ , where  $i$  and  $i^*$  are domestic and foreign interest rates,  $s$  is the spot rate,  $E_s$  is the expected exchange rate and  $rp$  is the risk premium term.

<sup>5</sup> Unpublished BoA discussion paper: ‘Measuring import and export functions in Albania’ by Ilir Vika, Research Department.

<sup>6</sup>  $Q$  = Market value of firm/ Replacement cost of capital in the Tobin’s  $q$  Theory of Investment. The higher the  $q$ -ratio, the cheaper it is for firms to purchase new plants and equipment by issuing new equity. In this scenario, firms would be encouraged to increase investment spending.

<sup>7</sup> For a detailed review of these papers see Egert and MacDonald (2006) pp28-29.

<sup>8</sup> Reaction functions for money growth (M3 growth) and for the 12-month deposit interest rate are respectively:

$$\Delta M_t = \alpha(L) [\pi_{t-1} - \pi'_{t-1}] + \beta(L) [y_{t-1} - y'_{t-1}] + \chi(L) POLDUM_t + \delta(L) \Delta M_t + u_t,$$

$$\Delta R_t = \alpha(L) [\pi_{t-1} - \pi'_{t-1}] + \beta(L) [y_{t-1} - y'_{t-1}] + \chi(L) POLDUM_t + \delta(L) \Delta R_t + u_t,$$

where  $\Delta M$  is the annual change of broad money (M3);  $\Delta R$  is the 12 month deposit interest rate quarterly change;  $L$  are the lag operators;  $\pi_{t-1} - \pi'_{t-1}$  is unexpected annual inflation and  $y_{t-1} - y'_{t-1}$  is unpredicted output.

<sup>9</sup> Period one: January 1994- August 2000; Period two: September 2000-May 2003.

<sup>10</sup> Here we do not present the results of the shocks of the other variables.

<sup>11</sup> Because alternatives to deposits like equity or bonds are rare or missing.

<sup>12</sup> As inflation seems to follow the exchange rate with a lag of 5 months for the period 1998-2001, but there is no evidence of this relationship for the following period (2001-2003).

<sup>13</sup> Both the Lek/Euro and the Lek/Usd exchange rates are used.

<sup>14</sup> Three commercial bank characteristics: size, liquidity, capitalization, were used to detect the presence of distributional effects among banks.

<sup>15</sup> Other lags were also tried and diagnostics problems persist. Therefore, in this section we continue the analysis with the same lag order as in Muco et al(2003).

## COMMENTS ON “MONETARY TRANSMISSION MECHANISM IN ALBANIA”

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*Kerstin Mitlid\**

I am honored to be invited to this conference. It is the first time I participate in this annual conference, but I have met some of you in Stockholm and in Tirana earlier this year. I am impressed by the competence and hospitality of the staff of the Bank of Albania.

This paper gives a good insight of what you know about the transmission mechanism in Albania. The fresh results from your structural VAR model indicate that the transmission mechanism has changed during the last years. That is, of course, not surprising. The economy changes very fast and structural reforms will probably continue to cause huge changes also in the future.

It is a challenge to continue to conduct credible monetary policy during the whole transition period. The financial system is undeveloped; the money market and the bond market are very poor or even nonexistent; competition among banks is weak; moreover, you have problems with statistics, especially for the real economy.

Mr. Fullani told us yesterday that reforms have been carried out in order to create incentives for a money market and for a bond market. If successful, this will change the conditions for monetary policy and the transmission mechanism.

My impression is that you have competent economists, familiar with new macroeconomics and financial theories, as well as econometrics. But the challenge is to use this competence in order to implement monetary policy in an economy in such a fast transition.

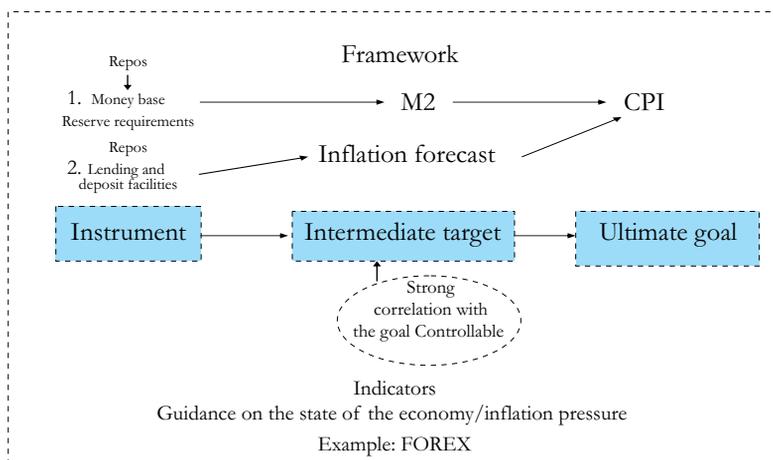
Now to a few comments on the paper. The purpose of your paper is to give some answers on two important questions:

- What are the most important transmission channels in Albania?
- How can monetary policy be employed to ensure price stability?

You discussed and showed results from earlier investigations on the transmission mechanism. You also showed fresh results from SVAR models. That is relevant and informative.

However, I think it should have been useful if you were a bit more clear and explicit about what the possible implications your result and other investigations have for the monetary policy framework.

To relate to the simple framework shown in this slide should perhaps have been fruitful.



You have some instruments as tools for affecting the ultimate goal. In the long run the ultimate goal for monetary policy must be price stability. In the short run you can put some weight on stabilizing production. Measures for price stability can be price level, inflation (core or CPI) or relative prices.

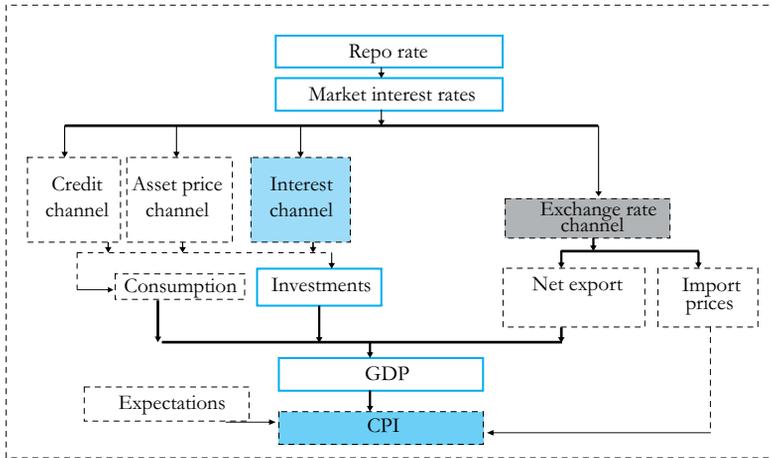
As a policymaker you also must decide whether to use an intermediate target or not. Money growth and fixed exchange rate are examples of intermediate targets. Inflation forecast can also be seen as an intermediate target, if you have an inflation targeting regime.

An intermediate target must be controllable and have high correlation with the ultimate goal. There must also be a time lag between the intermediate target and the ultimate goal so that the effect from a monetary policy decision on the intermediate target is observed before the effect on the ultimate target.

It is not fully clear from your paper which framework you have and which part of the transmission mechanism you are testing. Monetary aggregate seems to play the role of an intermediate target but we have also heard today that you use inflation forecast as an intermediate target. Does that mean that you have two pillars as the ECB? Further – as you have no money market and an undeveloped bond market, the interest rate formation in Albania does not work well – how efficient are the instruments you use to control your intermediate target and ultimate goal and how does it work?

And what is the role of the exchange rate? As you have a free float - the exchange rate should be seen as an indicator for the inflation and should be taken into account in the monetary policy decision as any other indicator.

When you described the results from earlier investigations, you used the framework showed in this slide:



All earlier investigations pointed out the exchange rate as the most important channel in the transmission mechanism. The exchange rate seems to have been important for inflation. Remittances and debts in foreign currencies seem to be important here. On the opposite side – results from earlier investigations showed that the interest channel, the credit channel and the asset price channel have been almost nonexistent.

Your survey of earlier investigations of the transmission mechanism did not say much of the first part of the transmission mechanism. I think that this is a shortcoming, especially as that link probably will change much in the future. The preconditions for conducting monetary policy will change dramatically if or when you get the interest rate formation in order and when households and companies get alternatives for their savings.

Now to a few comments on the fresh result from your SVAR model. I will refrain from giving technical comments as I am not an expert in econometrics.

This slide shows the main results from your model:

## RESULTS FROM YOUR STRUCTURAL VAR MODEL

Changes (shocks) in repo rate have:

- \* no effect on GDP,
- \* effects on real money balance after 5 quarters,
- \* effects on inflation after 2 quarters,
- \* adverse effect on exchange rate after 1 quarter.

A positive shock to exchange rate:

- \* brings fluctuation in real production,
- \* causes a fall in M2,
- \* causes a fall in the repo rate,
- \* increases inflation after 4 months (but marginally).

What are the conclusions for monetary policy from these results?

My reaction when I saw these results was that shocks to the repo rate seem to have effect on inflation with a very short time lag – only two quarters. At the same time real money balances reacted after 5 quarters. What is your interpretation of the links between the repo rate, real money and inflation?

Your results indicate that the exchange rate now has less effect on inflation than earlier investigations have shown. What do you think explains this – has something changed in the economy or in the monetary policy reaction on shocks to the exchange rate?

Next slide shows your policy conclusions:

## YOUR POLICY CONCLUSIONS

- \* Money and expectations channel most important
- \* Pay attention to exchange rate

Comments:

Does it mean: Use M2 as an intermediate target for CPI?

Announce an inflation target to effect expectations? Use exchange rate as an indicator for the real economy - take that into account in the monetary policy decision?

My comment on that is: I do agree that the expectations channel is very important. But do the results from your model confirm that?

Your conclusion was also that money is the most important channel. Does that mean that you recommend that some measures for money should be used as an intermediate target? If so – it would have been interesting if you had discussed stability in velocity, money demand function and controllability of the chosen monetary aggregate. Changes in the financial system will probably change the demand for money, especially when new savings instruments are introduced and make the correlation between money and inflation less stable.

Another conclusion you draw was that the monetary policy authorities should pay attention to the exchange rate. The reason was that fluctuations in the exchange rate caused fluctuations in production, but only minor effects on inflation. My comments on that are: In an inflation targeting exchange rate, fluctuations must be taken into account if output or inflation is assumed to be affected – but normally not for its own sake. If you have a shock to the exchange rate and assume that it for instance will increase inflation, the monetary policy must be tighter than otherwise. But, of course, that doesn't mean that you should use interventions or try to reach or keep a certain level for the exchange rate.

To sum up:

The paper gives a good summary of earlier investigations of the transmission mechanism in Albania. The new results you get from your VAR model are interesting. But the paper should gain much if you discussed your results from a monetary policy viewpoint and linked the discussion of the results to an in advance specified framework.

\* Kerstin Mitlid, Adviser to the Governors, Financial Stability Department, Sveriges Riksbank.



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