BANK OF ALBANIA

THE THIRD NATIONAL CONFERENCE "BANK OF ALBANIA IN THE SECOND DECADE OF TRANSITION"

DECEMBER 5 - 6, 2002

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Honorable Mr. Governor of Albania,
Honorable directors and representatives of partner banks,
Honorable participants,

I have the pleasure to see off, together with you, a decade of the Central Bank of Albania activity and progress and to orientate the commitments to our banking system modernization and integration with the European and global system towards the new decade.

Not only the Bank of Albania but the whole Albanian banking system is closing its transitory cycle in order to be better involved in the national challenges of market economy consolidation and its sustainable growth through the development of competitive abilities of domestic enterprises in the regional, European and global markets, etc.

During this decade of its activity, undoubtedly, the Bank of Albania has played the primary role in the domestic banking system establishment and consolidation and has assisted the governments in compiling and implementing the reforms, which installed the free market economy even in Albania. I think that currently the Central Bank, as a very important institution of the country and a legal partner of the Government, has the proper experience and capacities for increasing its role and impact on the country's economic developments. The passing of the banking system from the state monopoly to private dominance is the most comprehensive indicator of the Bank of Albania work and tradition that it has already established. Allow me, taking advantage of this financial and banking professionals' environment, as the Prime Minister, to share some assessments with you so as to realize and work together for further improvement of the banking system, of the whole national economy parameters and performance.

Based on the legal status of the Bank of Albania as "Government Advisor" I would like to require a more salient commitment of this institution to carry out the program priorities, especially in the fight against cash economy, fiscal evasion, capital fragmentation of public or private development. All these priorities can not be accomplished without a direct commitment and a closer cooperation between the government and the Bank of Albania. With this I am not requesting from the Bank of Albania to give up its legal and constitutional independence, but I am inviting it to strengthen the cooperation in the benefit of the development of the country and the whole national market formalization. This means that it is not enough to meet (each-other) and cooperate as many times as it happens that the Bank's monetary policies interfere with the Government fiscal policies. Together we should program the development of a formal market economy, with a financial and banking system that shifts money and transactions into banks, that orientates the dormant savings and capitals towards programmed and stable development priorities that increase the confidence of the consumers and enterprises in Leke. The Government, with its new fiscal package that associates the project-budget 2003, and with some other laws and by –laws that promote legal undertaking by simplifying and correcting the administrative, customs, fiscal procedures, etc., has scheduled a radical transformation of the fiscal system in the country for putting the economic disincentives, the fiscal evasion, and the still-high informal character of economy into the definitive recovery way.

In order to make this transforming reform bring about full impact on economy it should indispensably be associated with a profound reform in the financial and banking system as well. We can not maintain high paces of GDP growth by being based further on the household economy that invests the domestic

savings. Even still less are these paces maintained when the agriculture and construction, the two main branches contributing in the domestic production, are almost completely out of control or financing banking scheme. As the Prime Minister, I would require, honorable bankers, your contribution for a new banking system role in the market performance. With this I mean that it is not normal, for instance, in the construction industry, that the banks credit individual purchasers of flats, who in turn appear in front of the project executors (who are wrongly called investors) as small investors, at a time when the banks' position should have been in the investor's position.

I would like to share with you the conviction that the Albanian banking system progress can not be assessed only with the reduction of risk on loans repayment, but with the credit portfolio that this system injects in the national economy. I highlight this fact because in 3 years into the future the banks' role will be crucial for the national economy. Due to successful reforms taking place in economy during these years and consolidation of macro parameters, Albania is leaving the level of the countries, which are granted development soft loans and donations by international institutions, partners or development banks. The approaching of this moment is as much positive and valuable for the performance of reforms as it is obligatory, particularly for the Government and the Bank of Albania. This moment becomes more natural particularly today when the Government is starting officially the process of negotiations for a Stabilization and Association Agreement with the European Union. On the one hand the decrease of soft terms foreign financing, the commitment to reduce further the domestic and foreign dept, and on the other hand the successful facing of stabilization and association challenges, lay down two fundamental alternatives for development possibilities of economy in 10 future years.

1. Mobilization of all domestic capitals in order to orientate them towards development priority investment programs
2. Absorption of foreign direct investments.

And, I believe that no one doubts that these alternatives complementary with each-other need a completely different partnership between the Government and the Bank of Albania as the heart of Albanian banking system.

I believe that, it comes out of this very brief analysis that the country needs a sound and extended financial system. Individual or household capitals are powerless and inadequate to grow without the support of a proper financial system. Due to lack of a modern financial system, financial intermediaries, private development funds and finally capital markets, the individual investments are oriented towards sectors that promote consumption but do not produce. The Government welcomes not only suggestions but also a close cooperation with the financial and banking community in the country for making possible the financial and capital market establishment in Albania. As the Prime Minister of the legal partner as well I invite the Bank of Albania to work together and rapidly for creating the instruments and institutions that orientate the money and capitals more directly towards the competing and most productive sectors of the national economy. Nowadays it is becoming more vulnerable in the global and regional integration and opening process. Another element that determines a new role of the Bank of Albania and the financial and banking system in the national economy is also the acceleration of opening and integration processes. We should remain competitive in this performance. Except the transforming reforms to face the European integration challenges, Albania is already committed to implementing a number of free trade agreements with the regional countries.

The commencement of implementing such agreements would increase the competitiveness in the regional market and would undoubtedly provide impact on the increase of the volume of trading exchanges as well as on the respective national currencies. I do not want to enter into the debate of administrative or natural euroization of our economy. But I would like to request from you bankers to take all measures so that the Leke withstands this opening and liberalization process of our economy, guaranteeing the promotion of direct investments of domestic and foreign enterprises in the economy of the country.

Finally, I would like to dwell on an issue that needs an entirely new viewpoint and treatment: the budget deficit. The Government has performed public investments and has generated deficit because the country, the economy and the population need to be provided with the basic services and infrastructure. The Bank of Albania is in the legal height of accomplishing its own obligations when it requires the reduction of deficit and the Government is committed to performing such a thing. The Government will not generate damaging deficit to economy and macro parameters when the banking system is able to credit the national or regional development and sustainable growth projects. Nationally, the public investments versus private investments are still in minority but I re-emphasize that the private enterprise, which is still in the levels of "barter exchanges", makes us re-emphasize the commitment to fill the vacuums of instruments and financial market institutions that absorb and then orientate the domestic household savings towards productive investments. Asserting this I do not neglect at all the state and the Government tasks to further consolidate the social, legal and economic environment or to recover the public, administrative and particularly the judicial system. But, our commitment as legislative and executive would be jeopardized

without an immediate banking system performance in facing the challenges of integration, modernization and development ahead of us, I re-emphasize by remaining competitive.

In conclusion, allow me to wish you once more the anniversary of the Bank of Albania and new Albanian banking system and I guarantee, on behalf of the Government, the maximum commitment to reform together the national economy towards modern and European standards.

Thank you!

Speech by British Ambassador,
H.E. DR DAVID LANDSMAN, ON THE OCCASION OF THE THIRD ANNUAL BANK OF ALBANIA CONFERENCE

SPEECH BY BRITISH AMBASSADOR, H.E. DR DAVID LANDSMAN, ON THE OCCASION OF THE THIRD ANNUAL BANK OF ALBANIA CONFERENCE

Mr Governor, Ladies and Gentlemen. Although Ambassadors receive many invitations to speak, I consider it an especial honor to have been invited by you to address this impressive international conference organized by one of Albania's great institutions. The participation of so many distinguished bankers and economists, including from Great Britain, is a sign (if it were needed) that the Bank of Albania is a highly respected and active member of the international central banking community.

Your theme for the conference is of the greatest importance. We need to study our history to plan for the future. There is no doubt that the Bank of Albania has played outstanding role in the country's difficult transition. It is one of the institutions of the country which has had most success and which rightly enjoys great credibility both at home and abroad. Given the problematic recent history of the country, its record of assuring monetary stability is impressive, in the region and more widely.

If the last ten years have been for Albania about transition, the next ten (and beyond) will certainly be about European integration. It is fitting that European Commissioner Chris Patten is visiting Tirana today; he will confirm that the historic opening of negotiations for a Stabilisation and Association Agreement will begin early next year. The Bank of Albania will have a very important part to play in this process. European Integration cannot take place without economic development, for which monetary stability is a prerequisite. Strengthening of the economic rule of law is also a necessity, where the

Bank's supervisory role will be indispensable.

Equally, effective supervision is required for the fight against money laundering, strengthening our defences against terrorism and organised crime. In short, the Bank must play a crucial role in helping Albania to meet the so-called "Copenhagen Criteria" for European Union membership. In other words, the Bank can contribute to political stability, the development of democracy and effective institutions. It can contribute to the functioning of a market economy which can deliver sustained growth. And it can contribute to Albania's ability to implement the acquis communautaire, or European Union legislation.

As the conference has already discussed, one of the Bank's most important characteristics is its operational independence combined with proper accountability. This is a precious commodity and should be cherished. An independent central bank is now established as a condition for European integration.

The British Government which took office in May 1997, in a surprise and courageous move, acted immediately to grant the Bank of England its independence at a time when the issue was still very controversial in my country. We believe that this decision has paid clear results. It has brought monetary stability and ensured low inflation, which has in turn contributed to economic growth which, given the current global climate, are impressive achievements indeed.

I am sure that the Bank of Albania, if it continues along the path which it has trodden in recent years, can continue to make its own contribution to the economic and democratic development of the country. At the same time it will be preparing for the day when its Governor takes his or her rightful place at the table of European Central Bank. After ten very successful years, I have pleasure in wishing you another hundred.

BANK OF ALBANIA: A DECADE LATER
by Shkëlqim Cani, BoA Governor

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1. INSTEAD OF A PROLOGUE

We are leaving behind the 12th year of transition. Like many other institutions, Bank of Albania, having its numerous responsibilities, has been an active witness and actor of the difficult process of economic, political and social transformation of the country, and so being aware of the achievements and failures of this process. It is not my intention trying to reproduce passages or parts of each event that is related to the Bank of Albania's activity during this decade, for this would take up a lot of your time. Nevertheless, what I would like to focus on, are the key episodes considered to have contributed most to the political and institutional development of Bank of Albania.

2. BANK OF ALBANIA, ITS LEGAL FRAMEWORK AND INSTITUTIONAL DEVELOPMENT

The system of two-tier banks was officially established when the Parliament approved Law no 7559 "On the Bank of Albania" dated April 22, 1992 and Law no 7560 "On the Banking System of Albania".

The law "On the Bank of Albania" acknowledges this bank the authority to formulate and implement the monetary policy, to regulate and supervise the banking system including licensing of new commercial banks, to issue domestic currency, to formulate and regulate the exchange rate policies of the country, etc.

On the other hand, the law cares to vest this new born institution with a certain degree of independence, specifying

long office term for the governor, the role of the Supervisory Council, the criteria for the election of its member, etc.

Despite the initial difficulties, which somehow were justified by the low professional level and unsubstantial inheritance in central banking business, as well as in the institutional management in general, the development of Bank of Albania over the last ten years of its existence is tangible in every aspect. Legal and institutional framework of the bank mark special achievements in this respect.

As years have gone by, the legal and regulative grounds have improved significantly. At present, the activity of the Bank of Albania is based on the article 161 of the Constitution of the Republic of Albania, on Law no 8269 dated December 23, 1997 as well as on a wide regulatory package covering specific issues related to supervision of banking system, transparency, licensing of banks and non banks, operational activity, management of monetary and material resources, etc. Also, Bank of Albania is legally granted the right to independently formulate and implement the monetary policy of the country with the final objective of achieving and maintaining price stability.

As I mentioned before, the institutional aspect of the bank has progressed remarkably. Main attention was given to building a strong central bank with a high degree of political and economic independence. The current law of the Bank of Albania embodies advanced standards in terms of:

• clearly defining the relationship between Bank of Albania and state budget. We claim that over the medium term, direct credit to government from Bank of Albania will be legally prohibited in compliance also with the requirements of our future membership in EU. As of now, the bank finances the budget deficit in limited amounts;

- unambiguously defining the exclusivity that Bank of Albania has on formulating and implementing the monetary policy of the country. In the context of achieving the final objective, the Supervisory Council has the authority to assess and decide independently on the reference interest rates in the economy.
- appointing, setting the office terms, determining cases of probation for members of Supervisory Council, the governor and other administrators of Bank of Albania;

Yet, the last ten year experience has encountered cases when the level of independence legally known to the Bank of Albania was "treaded upon", thus reducing its real independence to levels far from advanced standards. Also, I believe I am not overdoing it when I say that the professional and intellectual capacity of the bank has increased over the years. Today, many regulations providing arrangements on managing foreign reserves, supervision, foreign debt, transparency, accountability, market operations, financial administration, security, etc. exist in the central bank. Furthermore, deeper analyses of economic and financial development of the country have lead to more decent judgments and decisions, thus increasing public appreciation of Bank of Albania.

The Bank has already constructed a satisfying level of transparency converting itself to an institution open to every interested party. Although of a fragile framework, the level of transparency offered by the Bank of Albania encompasses all aspects of central banking starting from publication of its decisions to their explanation for the public. Furthermore, Bank of Albania has employed a variety of ways to accomplish transparency ranging from classic ones, such as publications of the Bank of Albania, to the most fashionable ones, such as updated information on Internet.

The accountability of Bank of Albania has improved. Recent disputes and discussions in Parliament, as a reaction to the Bank's Annual Reports, are a good indicator of the increasing problems raised and the explanatory power of these reports, hence raising awareness of all members of Parliament to these. However, bank of Albania does not cherish the illusion that every thing is perfect. Moreover she is aware that there is still much more to do with regard to implementing the good international practices and standards. Greater efforts and commitment is required in the future, especially in light of the challenges that the country faces. We have already established that the Central European Bank will be the model for the future institutional framework of Bank of Albania, while other economic and political policy objectives demand for qualitative steps towards professionalism.

3. BANK OF ALBANIA: MONETARY POLICY AND PRICE STABILITY.

The dispute on what the monetary policy can or cannot do is still ongoing. One opinion is that besides price stability, monetary policy should also target employment and economic growth of the country. The alternative view focuses only on price stability. Nevertheless, both views converge on the suggestion that monetary policy serves economic growth and employment only if price stability is maintained. Accordingly, price stability is a necessary condition to maintain growth and therefore the only apposite objective of monetary policy.

In case of Albania, the debate was solved in favour of price stability, which is with no doubt defined as the final objective of Bank of Albania's monetary policy. Monetary policy, being a set of decisions and corrective measures in response to a certain given condition of the economy, aimed at having control on money supply.

Since the very beginning, it was decided on a clear

monetary targeting regime. The monetary base was chosen as a nominal anchor and its growth would be supervised by implementing certain performance criteria on Bank of Albania's assets. There were two operational instruments to control money: credit limitations, and interest rate[1] for lek deposits placed with state owned banks.

Following July 1992 a flexible exchange rate regime was adopted and current account transactions were fully liberalized. The critical situation of the foreign exchange reserves did not allow an active participation of the Bank of Albania, and in addition, the adoption of the flexible exchange rate regime was expected to act as an automatic stabilizer of the Balance of Payments accounts, the dollarization level being quite high at the moment.

These measures, accompanied by a tight monetary policy and the liberalization of the bulk of consumer prices resulted in a sharp moderation of the prevailing macroeconomic disorder. The very high inflation levels of 1991-1992 started to fall and the output contraction came to a halt. The consolidation of these achievements continued with fast rhythms during the 1993-195 period.

The raise of the interest rates and the control placed upon the credit for the economy brought to a halt the monetary hemorrhage and caused the consumer price index to be a mere 6% at the end of 1995.

The subsequent period, the low effectiveness of the banking system being a major responsible, corresponds to the development and bankruptcy of the pyramid schemes. The high interest rates offered by them totally replaced the interest rates offered by the banking system causing the ineffectiveness of the monetary policy. This brought a high

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[1] Interest rate for 12 month lek deposits was increased from 2-3 per cent (annual base) to 28 per cent.

level deposits to the pyramidal schemes, while their investment in production or valuable assets were minimal. The lack of capacity of the pyramid schemes to manage and invest the deposits, caused their channeling to the commercial banks, and in turn, an increase in banks reserves and the investment of these reserves in government bonds. As a result, at the end of 1996, the inflation turned out to be three times higher than the previous year, reflecting the increase of the banking sector lending to the government.

The consequences of the pyramid schemes bankruptcy to the economy were wide and their economic bill quite a large one. At the end of 1997 the output fall was accompanied by higher inflation, higher unemployment and deterioration of the international position of the country. Nevertheless, the raise of the interest rates to almost 32% started to give its results. The results of the monetary and fiscal policy became more tangible at the end of 1998, time when, as a part of the Emergency Program After the Conflict, certain quantitative restrictions were imposed, namely those regarding the increase of the net foreign exchange reserves, the level of the credit extended by the Bank of Albania to the government and the level of the credit extended by the banking sector to the government.

The 1999-2000 period registered unusual inflation rates for an economy like that of Albania. Although during 1999 Albania hosted the almost biblical exodus from Kosovo, the inflation remained at reasonably low levels. From that period right to the end of 2000 the interest rate fell continuously, although in real terms it remained high. On the other hand, the reaction of the market has been relatively slow and this has been reflected even in the large difference between the minimal deposit interest rates and the yield of treasury bonds. In these conditions, while implementing the abolition of the lower limits for the time deposits, the Bank of Albania entered an

unexplored path, that of the monetary control through the market.

Now we can state that we have a two-year experience of controlling money supply through the open market operations. As latest development have demonstrated, the interest rate for the repurchase agreements has assumed a determining role for the other interest rates in the economy, demonstrating a higher effectiveness of the monetary transmission mechanism. This of course illustrates an increase of the capacities of the Bank of Albania in the political decision-making process. Subsequently, as a natural reflection of these developments, the Bank of Albania has adopted an operational program, which includes weekly auctions of repurchasing agreements, accompanied by other facilities, such as one-day deposits or loans. All these developments have caused the increase of the number of transactions as well as that of the participants in the financial market.

The increase in the effectiveness of the monetary policy combined with several other factors, such the fiscal consolidation of the last 2-3 years and the privatization of a couple of large state-owned enterprises, can be said to have played a crucial role in the macroeconomic consolidation of the country, exceptionally in the time span between the last quarters of 1998 and 2001.

Throughout this period, the real growth has been at high levels such as 7 - 8 %, while the annual inflation has averaged a successful 1.4 %. The unemployment level as well as the international position of the country has also improved.

Regarding the monetary policy, its contribution has clearly been materialized in the continuous achievement of the three quantitative objectives part of the monetary program of the Bank of Albania.

An important achievement of these years is the revival of the loan-supplying activity of the banking system. As during

2001, the loan to the economy has increased with high rates during the first three quarters of this year. In the first eight months of 2002 the loan to the economy has amounted to 38 billion lek, while the expectation for the end of the year amounts to 58 billion lek, that means 17,5 billion more than the previous year and 8 billion more than the total loan extended throughout the 1993-1999 period.

In addition to the monetary policy, the Bank of Albania is responsible for the design and implementation of the foreign exchange policy. At the time being, the Bank of Albania has adopted a fully flexible rate regime, where the exchange rate is determined by the market forces. Reflecting the positive macroeconomic developments, during the last 5 years the exchange rate has been relatively stable, fluctuating around the level of Lek 140 per US dollar. The foreign exchange reserves have increased to 826 million USD at the end of November 2002, almost three times higher than the 309 million USD of the end of 1997.

Anyway, still it cannot be said that the monetary control is perfect. This fact is related to the state of development of the markets in general, where I can mention the dominating position of the Savings Bank and the existence of the informal market in the economy. This imperfect control, along with different shocks from the supply side such as the energy crisis of the last two years and the new composition of the consumer price basket, has caused an increase of the inflation rate, increasing the concerns for the realization of the objective that the Bank set for 2002. Still, based on the last expectations of the Bank of Albania we believe that in a similar way to the last year it will be possible that the inflation rate at the end of the year result to approximately 4%, near the upper band of the target for 2002.

4. BANK OF ALBANIA: BANKING SYSTEM AND FINANCIAL STABILITY OF THE COUNTRY

The banking system of Albania is relatively young. The notion and existence of the commercial banking first came into being in the spring of 1992, even though before that the National Bank (Bank of State) was carrying out functions similar to those of a commercial bank.

The changes of the financial sector, which at that time was identified as the banking system itself, were an important part of the reforms that started in 1992. At the same time, the authorities were engaged in the creation of a suitable environment for foreign capital investment in the commercial banking activity, which resulted in the creation, after one year, of the first two banks with private capital participation; the Italian – Albanian bank and the Arabian – Albanian Islamic Bank.

Despite the developments mentioned above, until mid-1990s and a bit further, the banking system continued to represent an underdeveloped financial segment, with an absolute domination of the public sector and in the existence of a very poor infrastructure, manifesting in this way inadequate bank services. This period also relates to a rapid increase of the bad credit portfolio, which, under the circumstances of an ineffective and far-from-international-standards supervision, lacking tradition and of course due to incapability and other various subjective reasons, created huge problems in the financial situation for the three state banks.

In this situation, starting from the middle of 1997, the authorities at the time reached to a conclusion that besides decisions in monetary policy, in order to create an efficient and secure banking system, it was necessary to undertake other reforms starting from the liquidation of any 'insolvent' bank, to possible changes in legislation, increase of supervising

and licensing capacities and so on.

Some of the first steps were the decision to liquidate the Agrarian Commercial Bank, the establishment of the Bad Assets Resolution Trust, the attempts to privatize the National Commercial Bank and the Savings Bank etc. In the same way, after the new law "On banks in the Republic of Albania" was passed, the licensing package went through some modifications, like the increase of the amount of required capital and the abolition of discriminating foreign investors. In addition to the universal banking certification, Bank of Albania extended the focus of her licensing activities with the Savings & Loan Associations and also with other nonbank financial institutions.

Over the years, with the consolidation of the political stability, the strengthening of the public order and also a quick restoration of the macroeconomic equilibrium, it is believed that the attraction for foreign capital has increased and it is becoming more appealing to the banking business in Albania. Actually, the Albanian banking system consists of 14 commercial banks, which is two times more than the number at the end of 1996. A good reason for that is the fact that our local business has become more interested in the area of commercial banking. Now the Bank of Albania is analyzing the first applications of Albanian businesspersons to be permitted to operate banking activities in Albania with an entire local capital. Furthermore, according to the latest data[2], assets of the banking system are estimated to be nearly 53 percent of the total production compared to 45 percent at the end of 1998.

In addition to its extension, the banking system in the last years has made progress even in terms of the augmentation of the financial position. To better concrete the achievements, it is sufficient to briefly refer to the data in 2002. The position

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[2] Quarter III, 2002.

of the banking system looks good and there is a tendency of improvement almost in all indicators. It is the fourth year that banking system shows positive financial results. Realized profit during the first three quarters amounts to Lek 2.8 billion compared to a loss of Lek 3.2 billion at the end of 1998.

Referring again to year 1998, assets of the banking system increased 59 percent or in absolute value of Lek 122 billion. A significant impact on asset growth had private and joint-venture banks. The growth of these banks' assets, in comparison to year 1998, totals Lek 120 billion which is a result of the increased credibility of these banks, an increasing number of clients coming to them, and also owing to the extension of their activities in other cities.

At the end of September 2002, the balance of non-performing loans (gross) was only 6.4 percent of the total portfolio compared to 32.7 percent in 1999.

The ratio of capital adequacy for the banking system is 28.7 percent, while capitalization is high even in the particular groups of banks. In these high ratios of capital adequacy (minimum required rate is 12 percent), along with high levels of capital, has been significantly affected by the asset structure of the banking system as classified according to its risk. The banking system continues to evidence a high level of zero-risk or low risk investments in assets. Any change in asset structure in favor of high-risk assets would significantly improve the ratio and at the same time affect earnings growth rate – without omitting the impact on the development of different sectors of the economy – via higher lending.

Many indicators that are considered as liquidity measures are shown at satisfying levels. A very low ratio of the net credit balance to total assets (10.6 percent), the ratio of net credit balance to average deposits (12.8 percent), and also the fact that 49.8 percent of total credits are short-term loans, support the above argument.

In conclusion, I should stress that, despite the improvement of the indicators, reforms in the banking system seems not to be taking place at a satisfying pace. This assessment relates to the delay of the privatization process of Savings Bank, and also the need to replace the owner of National Commercial Bank. Both banks represent the largest banks in the banking system and problems that concern their ownership, unfortunately, will affect the performance of reforms in the banking system and the progress in its activities. These issues require a particular attention from the respective authorities. At the same time, the approval of the law on deposit insurance is a further positive step with the view to assure depositors and help increase credibility in the banking system.

5. A FEW WORDS ABOUT CHALLENGES IN THE SECOND DECADE

To be realistic, I have to say that experience of the Bank of Albania increases the security of her orientation in the future. Also, we have to admit that the global environment we are living in makes the perception of future developments somehow easier. However, without trying to go beyond the limits of modesty, which I am kindly allowed by those present here, I should say that Bank of Albania is, however, an institution that deserves to aim from now and on at the perfection of her vision in the future, since it has already one such.

In that context, we remain very much committed to further develop our actual legislative and regulatory framework, and also the other capacities of Bank of Albania that have to do with planning and applying monetary policies, market perfection and making market intervention more efficient, strengthening supervisory standards, etc.

Concretely, the Bank of Albania with her mid-term objective to build a similar model to that of the European Central Bank will bear in mind:

- Financial stability is considered as the principal priority for the Bank of Albania, as long as banking system forms the most important segment in the financial sector. For that reason, the Bank of Albania will continue to increase **her licensing and supervisory capacity** by having a midterm objective to consolidate the banking system, and make it more efficient, competitive, and covering a larger area, etc.
- The Bank of Albania remains affirmed in the necessity of **deepening and moving on the reforms in the financial system in general and in banking in particular**. There is no doubt that the greatest challenge in the coming year is the Savings Bank, while we consider it of a particular importance to find a new owner for the National Commercial Bank.
- With regard to our policies, we have already declared that our strategic objective will be to **adopt an inflation-targeting regime**. In fact we have an experience in declaring the objective inflation, while some other preconditions have to some degree been completed. However, in the coming years, our commitment will continue in other fields as well, which are thought to give a great contribution to a successful adoption of this regime.
- **Further consolidation of legal independence**. It is understandable that, besides coming closer to a juristic definition of independence, attempts to a more rigorous respect of it will increase in daily practices. Perhaps time has come to think right at this moment for a halt for Bank of Albania to lend to the state budget. I would

like to bring to mind to those present in this room that an important criterion of legislative convergence for every aspirant country is in fact to compose a law for the central bank that is in line with EU regulations, where independence is particularly outstanding.

- Further strengthening of independence implies increasing the responsibilities of the Bank of Albania, which above all imply **greater transparency and accountability before public**. Although recent progress is tangible, we remain committed to fully apply the code of good practices on transparency in financial and monetary policies.

- Increasing openness of the Bank of Albania in declaring and explaining her policy decisions, and also her ambitious goals to adopt an inflation-targeting regime in the future, highlights the necessity for higher level of professionalism. For that reason, the Bank of Albania will continue to apply **advanced policies of human resource management**, where further staff training is given a particular stress.

Dear invitee, participants, friends and colleges,

I personally have no doubt that presentations, discussions and other intermissions from your side during the conference will be a new value added to the to-date achievements.

Hoping that the contribution you will be giving to the discussions in this conference will be of a particular importance, there is nothing else for me to add, and I wish you enjoy your stay during this conference.

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PERFORMANCE OF CENTRAL BANK INDEPENDENCE IN TRANSITION ECONOMIES

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The main theme, rather that conclusion in my paper is the need for coordination of monetary fiscal policy into full independence of both the central bank and the ministry of finance and the government.

Let me start by recalling very briefly the evolution of central banking in the transition. Under central planning the central bank was, was not so much dependent from the government, because that kind of dependence only was present in war communism when the central bank was a minor department of the min of finance. It is not so much of dependence as much as the central bank being an integral part of the government and the planning system. So much so that the governor of the central bank was usually sitting in the council of ministers with a ministerial status.

The limitations of central bank powers were much more basic than the question of dependence. Monetary policy was simply an instrument for monitoring and lying and verifying plan implementation. The central bank was a monolithic institution and it issued credit automatically at a symbolic interest rate to anybody who had the entitlement to funds.

In theory this equilibrium led to an endemic excess demand both for consumption goods and for production investment goods. This was a system which was not suitable not only to

any market economy but to any referring of the old system in the direction of market socialism. Several countries which tried unsuccessfully to implement market reforms in the old system had to reform the central banking system. Split the commercial banking functions away from the central bank and transfer them to central bank directorates and regional subsidiaries.

The new central banks set up just before or after the transition were not simple central banks, they are state of the art central banks with full independence from the government, not only in the charter instruments but also in setting monetary targets responsibility for price stability and very much on the Bundesbank model. The model for Albania is the ECB. While the model for ECB has been shaped after the model of the Bundesbank.

Why is it today politically correct to look at central bank independence in a very high form? We should remember that central bank independence is not a relatively recent develop. The bank of England which by the way was private until its nationalization in 1946 gained independence in 1997 and even then it got instruments' independence while inflation targets are still set by chancellor of the ex-checker.

The bank of Japan got independence only in 1998. So, we really should not take for granted either central bank independence or this hi form of central bank independence that is present in central banks in trans economies today.

There are costs in central bank independence as you shall see, lack of coordination between government policy and the central bank. But, central bank independence rules and its become a condition for EU membership.

There have been masses of studies aimed at measuring central bank independence through various indices and relating those indices to economic performance. There is the Cukierman index of legal central bank independence, the Brilli Machendire and Tabellini which includes both political and econ

independence. There is the turnover of governors index. And evidence suggests there is indeed a negative relation between central bank independence and inflation whereas, there is no significant relation between central bank independence and econ growth.

Often we find inflation targeting in central banks and there is a tendency not to hit the target but to overshoot, there is a kind of central planning mentality, which is residual. The Polish central banks has a target for the end of next year of 3% inflation +/-1 and its below that range its 1.1% this year and they are still holding up their interest rates in spite of having over fulfilled their targets.

These are the kind of anomalies. I regard them as instances or failures of monetary coordination. Maybe at least at the beginning of the transition might have been preferable to adopt some kind of British, Japanese, or New Zealand model of central bank independence. Finally, I think Albania in this respect is in a very good position. Regarding pyramid schemes the central bank cannot do much.

ALBANIA'S WAY TO EUROPE

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ALBANIA'S WAY TO EUROPE

1. INTRODUCTION

According to Article 49 of the Treaty on European Union, "any European state may apply to become a member of the Union". The existing Member States have established some political and economic criteria (the „Copenhagen criteria") that have to be fulfilled by the candidates after application. They imply, shortly and in principle, the existence of a functioning democracy with respect of the human and minority rights and the existing of a market economy that is able to withstand market pressure in the internal market of the EU. Eventually, at a point of time after accession, the new Member State will introduce the Euro and therefore become a member of European Monetary Union.

A look at the map shows that Albania is very much a part of the European continent. She is therefore eligible to embark on the road to membership to the EU and, finally, to introducing the euro. In the following, some highlights of the way to that final goal shall be pointed out from the viewpoint of a national central bank (which the Bank of Albania would be in the final face after the introduction of the euro).

On this way, one can distinguish three steps:

1. The phase before accession,
2. membership in the European Union, but not yet of the euro area and
3. member of the euro area

2. THE PHASE BEFORE ACCESSION

Monetary and exchange rate policy remains in national responsibility with the possibility, in principle, to choose an exchange rate system from several alternatives and to choose any monetary policy strategy. This is the stage Albania is in right now.

With increasing integration into the EU – pre-accession partnership agreements and free trade agreements with the EU – an increasing orientation towards the EU is probably sensible. This implies, inter alea, an increasing orientation of the exchange rate policy towards the euro.

Nevertheless, the unilateral introduction the of the euro is seen by the Eurosystem (see under chapter 5) as not being in line with the spirit of the Treaty, which foresees the introduction of the euro as the result of a multilateral process with the check of convergence and a test whether the conversion rate is the right one.

3. PHASE AFTER ACCESSION

After accession to the EU, which may imply action from the national central bank (Bank of Albania) only in a limited manner (capital liberalisation), Albania would be a member with an abrogation, that is, Albania would not immediately become a member of the euro area. The major consequences would be that Albania:
- Would have to conduct exchange rate policy as a matter of common interest (Article 124 of the Treaty) which would exclude e.g. competitive devaluations.
- An entry into the exchange rate mechanism (ERM) would be expected, meaning fixed exchange rates to the euro with a fluctuation band.
- Within the ERM, other exchange rate systems like a pegging to other currencies, floating or a crawling

fluctuation band versus the euro would be excluded.
*   Currency boards are a special case and a participation in ERM would be possible after the examination of each individual case.

4.   INTRODUCING THE EURO

Membership of the euro area, meaning the introduction of the euro as the national currency, would follow the application of the same criteria as for the incumbent members. They concern a maximum inflation rate and interest rates in the year before the examination, a sustainable budgetary position and two years of membership of the ERM. Furthermore, independence of the national central bank is necessary. It is the position of the Eurosystem that these criteria should be applied in a strict manner.

5.   THE WORKING OF THE EURO AREA

Looking at the EU today, we can see that it comprises 15 Member States, of which twelve participate in monetary union. Three countries do not (yet) participate. According to the Treaty however, all 15 Member States' national central banks (NCBs) participate in the so called "European System of Central Banks", but not in the „Eurosystem". Starting with the „Eurosystem", an expression that is not found in the Treaty, it comprises the ECB and the NCBs of those countries that have introduced the euro as their currency. This is the only actor that counts. The ESCB exists only, more or less, on paper for political reasons.

5.1 THE INSTITUTIONAL FRAMEWORK

Both the ESCB and the Eurosystem are governed by the

decision making bodies of the ECB; however the ESCB has only a „shadow existence".

The overall decision making body is the Governing Council of the ECB. It comprises the Executive Board of the ECB (more next paragraph) and the Governors of the participating NCBs. Its major responsibilities are:

- to formulate the monetary policy of the euro area
- to adopt guidelines and to take decisions necessary to perform the entrusted tasks
- to have a consultative function as laid down in Article 105, paragraph 4 of the Treaty in its field of competence.

The Executive Board of the ECB comprises the President and Vice President of the ECB and for other members. It is the truly central gremium of the euro area. It is responsible for

- the day-to-day-business of the ECB and especially for preparing the meetings of the Governing Council
- implementing the monetary policy especially decisions taken by the Governing Council.

A delegation of powers from the governing council to the Executive Board is possible.

If and as long there are Member States with a derogation, the General Council will be constituted as the third decision making body of the ECB (Article 123, paragraph 3 of the Treaty). It comprises the President and Vice President of the ECB and the Governors of all NCBs. To sum it up shortly, it takes over transitional tasks which, because of the derogation's of Member States, still need to be performed in stage three. Its importance can be measured by the fact that

the Governing Council meets every fortnight and the General Council every three months.

Turning to the functioning of the Eurosystem, the supreme decision making body is, as already stated, the Governing Council. Its work is assisted, by 13 committees[1]. These committees a mandated by the Governing Council and they report via the Executive Board back to the Governing Council. Excluding monetary policy, their importance should not be underestimated. They prepare almost all of the technical decisions of the Governing Council.

As to the relation between the ECB and the NCBs, there is one guiding principle: The ECB (that is, the Governing Council) takes all the decisions, the NCBs implement them. The Bank of Albania would be one of the national central banks in the future. While the NCBs are an integral part of the ESCB according to the Treaty. In reality read: (the Eurosystem) and shall act in accordance with the guidelines an instructions of the ECB. They are the only ones which are in contact with the markets and with credit institutions. Figuratively speaking, the ECB is the head preparing decisions of the Governing Council whereas the NCBs are the body, carrying out the decisions taken in the head (in principle, by the Governing Council).

5.2   THE DISTRIBUTION OF TASKS

The distribution of tasks between the centre and the Member States can be layed out as follows:

ECB (the Governing Council)
- to formulate the monetary policy
- to specify the regulatory, organisational and logistical

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[1] For accounting and monetary income, banking supervision, banknotes, budget, external communications, information technoligy, internal audit, international relations, legal, market operations, monetary policy, payment and settlement systems, statistics

framework of the Eurosystem
- to authorise the issuance of banknotes
- to issue legal acts (regulations, recommendations, decisions)
- to offer advice to the appropriate institutions and bodies
- to prepare and address the annual report on the activities of the Eurosystem and on the monetary policy

National Central Banks
- to implement the single monetary policy
- to manage the foreign exchange reserves of the ECB
- to carry out operations in foreign reserve assets remaining with the NCBs
- to perform functions other than those specified in the Treaty which are conferred upon the respective national central bank by national law

It follows from the above that NCBs are indispensable to the functioning of monetary union at present and in the foreseeable future. The execution of monetary policy by the ECB alone would not be manageable, giving the differences in the structures of national financial and especially banking markets. Whereas, e.g. in the Netherlands there are only five major players, in Germany, there are around 2700 banks. Apart from structural there are, of course, linguistic and generally cultural differences between the Member States. These reasons militate for postponing any further centralisation to a more or less distant future.

Concerning the role of a national central bank in the Eurosystem, the basic distinction is between the functions performed for the Eurosystem and those performed on its own account, being disconnected from it. The major duties in connection with the Eurosystem are:

- to implement the refinancing transactions with credit institutions
- to manage the minimum reserves
- to conduct the foreign exchange operations for the ECB with its reserves (the ECB does not conduct foreign exchange operations)
- to operate a large value transborder payment system ("TARGET") and to promote the smooth operation of the payment systems
- cash distribution
- public relations work in the national language
- to advise the government in the field of monetary policy
- to collect statisticall data

These examples were taken from the tasks the Deutsche Bundesbank performs. They would closely resemble those of other NCBs in monetary union. In the case of the Deutsche Bundesbank, some tasks remain that are not connected to the monetary union proper, but are being allowed by the Eurosystem, as long as they do not disturb monetary policy. They are:

- performing as a fiscal agent for the national government
- managing the national foreign exchange assets
- participating in banking supervision
- co-operating in international bodies
- technical central bank co-operation
- managing the pension reserves of the federal government
- out-of-court customer complaints body for cross-border transfer payments

5.3 THE RELATIONSHIP BETWEEN ECB AND NCBs

Lastly, it should be mentioned that the ECB is owned by the NCBs and could be considered as a "branch". Article 29 of the Statute of ESCB lays down that the NCBs' percentage share in the capital of the ECB shall be equal to the sum of

* 50 % of the share of the respective Member State in the population of the Community in 1997 and
* 50 % of the share of the respective Member State in the gross domestic product of the Community at market prices in the years 1992-1996.
  These figures are revised normally every 5 years.

The NCBs are therefore shareholders of the ECB, meaning the headquarters in Frankfurt, comprising its staff and the Executive Board – which is, of course, independent. The annual budget of the ECB is submitted annually for decision by the Governing Council.

THE MONETARY TRANSMISSION MECHANISM IN THEORY AND PRACTICE,

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THE MONETARY TRANSMISSION MECHANISM IN THERY AND PRACTICE,

A. THEORY

(a) Model

Before turning to the main transmission channels, I should note that the transmission mechanism is theory or model dependent:

- If you believe in the real business cycle theory, so popular in the 1980s, the transmission mechanism is an irrelevant issue since money plays no role in that theory;

- Similarly, if you believe that prices and wages are completely flexible (old classical theory and some branches of the rational expectation hypothesis), monetary policy can only affect nominal values but not real values such as output and employment;

- Also, if the country has a fixed exchange rate target, there is not much interest in the transmission mechanism. Unless, there is low substitutability between domestic and foreign assets, the policy interest rate has to follow that of the target currency country.

- Consequently, the following is based on three assumptions:
  1. prices and wages are rigid in the short run;
  2. capital and credit markets have frictions (information asymmetries and agency costs);
  3. the economy is open with a floating exchange rate and no capital controls.

(b) Principal transmission channels (Graph 1):

Change of policy rate via money market or reserve operations;
Interest rate channel

1. Change in short-term nominal market rates;
2. Change in short-term real rates via sticky prices;
3. Change in long-term nominal and real rates via expectation hypothesis of the term structure;
4. Changes in aggregate demand (consumer durables, housing, inventories, investment) depending on interest elasticities.

Income or cash flow channel:

1. Changes in net interest income of creditors (household sector), including distributional effects;
2. Changes in net interest income and cash flow of debtors (companies).

Asset price or wealth channel

1. Changes in equity and house prices;
2. Changes in private consumption (wealth effect) and investment (cost of capital, Tobin's q).

Narrow and broad credit channels

1. Changes in banks' ability to lend via lower reserves or insufficient capital;
2. Changes in banks' willingness to lend via changes in collateral values ("financial accelerator effect");
3. Changes in business investment with differential effects for large and small firms. In particular, large firms often have access to international markets whereas smaller firms are highly dependent on bank credit.

Exchange rate channel:

1. Induced by change in interest rate (uncovered interest parity condition);

2. Induced by change in monetary base or broader aggregates;
3. Relative price, income as well as balance sheet effects (contractive devaluations).

Monetarist channel (Meltzer):
1. Changes in relative quantities of assets that are imperfect substitutes;
2. Changes in relative asset prices;
3. Illustration of asset and money market equilibrium (Graph 2);
4. Liquidity trap.

Expectations channel: Undoubtedly important but virtually impossible to predict, let alone quantify.

Changes in aggregate demand (Graph 3)Þ
1. Changes in output growth and the output gap;
2. Direct (exchange rate) and indirect changes in inflation or the level of prices via the Phillips curve.

Back to the central bank reaction function
Operational targets
1. MCIs: origin and purpose;
2. FCIs: mostly used by investment banks (Goldman Sachs) but also considered by SNB;
3. Advantages and disadvantages.

B. MODEL SIMULATIONS

(a) ECB (Monthly Bulletin, October 2002)

Over the last two years, the ECB has held several conferences and published a series of working papers on the monetary transmission mechanism in the euro area. The results can be summarised under three headings:
1. Effects of monetary policy changes on output and

inflation. A primary objective of the ECB is to ensure price stability over the medium term. Hence, it is important for them to know how much to change monetary policy and when to do so if expected inflation deviates from the target. Table 1 shows the results of simulations on three different models on the additional assumptions that a temporary (2 years) 100 bp increase of the policy rate raises long-term rates by 20 bp while the exchange rate is assumed to appreciate by 2%. The broad features of the results are that:

- real GDP declines in response but eventually returns to the initial level. In other words, monetary policy is neutral in the long run;
- consumer prices respond with a longer lag, but the effect is permanent;
- the effectiveness of monetary policy highly dependent on the structural characteristics of wage and price setting (Graph 4).

2. The channels of monetary policy changes.
- The main effects are via changes in investment with consumption taking second place. Exchange rate effects on net trade seem to be very small (Table 2);
- Some weak evidence that changes in interest rates and liquidity affect banks' ability to supply loans while the demand for loans is mostly determined by the cost-of-capital. In other words, little evidence of a credit channel even though banks still play a major role in providing external finance.

3. Differences in monetary policy effects
- according to business cycle: more effective in recession;
- by sector: most effect on producers of durable

goods and capital intensive sectors;
- by country: no robust results.

(b) United Kingdom (Report prepared by the Monetary Policy Committee)

Response to a one percentage increase in policy rate lasting for one year:
- GDP: After 5 quarters a decline of 0.2-0.35% and then return to base;
- Inflation: After 9 quarters a decline of 0.2-0.4 percentage points and the effect goes well beyond 3 years.

C. PRACTICAL EXPERIENCE

(a) Japan

- 1989 - 1995 (Graph 5): In late 1988, the BoJ started to increase its policy rate to break the rise in equity and land prices. With a lag of about 9 months, equity prices started to decline and, by early 1992, had fallen more than 50%. Land prices showed a similar decline. In response to the decline in asset prices as well as to a weaker economy, the BoJ began to lower its policy rate already in mid-1990 and it has since been reduced to virtually zero. However, equity prices have continued falling.
- Recent period (Graphs 6a and b): With interest rates at zero, prices falling and the economy weakening, the BoJ introduced a policy of quantitative easing in early 2001. As the graph shows, this led to a 30% increase in the monetary base but:
  1. The growth of the broad money aggregate remained constant around 2-3%;
  2. Bank credit to the private sector declined;

3. Equity prices declined contrary to the predictions of the monetarist channel;
4. The exchange rate strengthened contrary to what UIP would predict;
5. Prices have continued to decline and GDP is basically flat;
6. What lessons can we draw with respect to the monetary transmission mechanism?

- Weak banks;
- Fragile financial system;
- Zero bound on nominal interest rate.

(b) United States

- Recent changes in the transmission mechanism (Federal Reserve Bank of New York Conference):
  1. The reserves market (Graph .7): The Fed's policy rate (the Federal Funds rate) is the overnight interest rate in the reserves market. The Fed announces but does not set its target. Nonetheless, despite a significant decline in banks' demand for reserves in recent years, the actual rate follows the target rate very closely. Will this continue?
  2. Shifts in the output response to changes in interest rates (Table 3 and Graph 8): Two changes are apparent: First, output seems to have become less responsive to monetary policy changes in the later period. Output only starts to decline in the third quarter after the change and the cumulative decline after two years is only 0.65% compared with 0.95 for the earlier period. Second, the positive correlations for output changes prior to the change in monetary

policy have increased substantially, suggesting that the Fed has become more forward-looking or pre-emptive. This may, of course also explain the weaker response ex post.

3. Somewhat surprisingly, there is no evidence that the wealth channel has become more important. Even in the United States, it has always been weak (3-5 cents change in consumption for one dollar change in wealth) and it even seems to have weakened during the 1990s.

4. The net effect of changes in financial intermediation on the transmission mechanism is uncertain. For instance, changes in bank lending standards are found to lead output changes, but banks have become less important and monetary policy does not seem to influence lending standards. Mortgage rates have become more responsive to changes in policy rates but because of securitisation residential construction has become less sensitive to changes in mortgage rates. At the same time, a new and effective channel has emerged: refinancing of mortgages (explain).

5. There has been much discussion about a potential capital channel; ie banks changing their lending behaviour if they get close to their capital adequacy requirement. Not yet much evidence, but it may change with Basle II.

- US experience during 2001-2002 (Graph 9):
  1. Fed funds rate reduced from 6.5% to 1.75% in just 1 year;
  2. 10-year bond rate did not start coming down until early this year; discuss episode in late 2001 and early 2002;

3.   Spreads on corporate bonds (not shown) actually widened; ie the external finance premium rose rather than declined;

4.   Mortgage rates declined slightly but this was enough to start a refinancing boom;

5.   Equity prices have mostly fallen, with an accelerated rate of decline this year;

6.   The dollar initially strengthened slightly and only declined in the spring-summer of this year. Are exchange rates determined by interest rate differentials or expected growth differentials?

7.   All in all, a FCI rose slightly during 2001 despite the aggressive rate cuts and did not ease until the exchange rate and the long-term bond rate started to come down this year;

8.   Does this mean that the various headwinds prevented the monetary easing from having any effects?

9.   Should a central bank attempt to stabilise output growth?

(c) Emerging market countries

- Equity and other financial markets typically thin and underdevelopedÞ asset price and wealth effects weak while volatility is high.
- Another sign of underdeveloped financial markets is a high degree of self-financing which is not very sensitive to changes in borrowing conditions.
- Banking sector may be dominated by oligopolistic conditionsÞ slow response of lending and deposit rates.
- Bank lending response may also be weak because of bad loans.
- Ceilings on interest rates or credit growthÞ credit

availability effects become important.
- In countries with an unfavourable inflation history, financial contracts have short durationÞ relatively quick pass-through of new conditions.
- Countries with an unfavourable inflation history typically also have indexed (CPI, short-term interest rate, exchange rate) debt contracts (take Brazil as an example).
  1. tends to dampen swings in nominal rates and thus in cash flow;
  2. the implied real rate may serve as a useful signal of the stance of monetary policy;
  3. for public debt the government takes over the exchange rate risk.
- A high degree of informal dollarisation or eurorisation makes monetary policy less effective.
- Four major issues or uncertainties:
  1. Weak but uncertain link between changes in monetary policy, long-terms rates and asset prices;
  2. The scope for an independent and effective monetary policy in countries with fragile financial systems (Mexico 1994, Japan now, perhaps China later);
  3. How to evaluate the stance of monetary policy (operational indicators);
  4. Monetary policy effectiveness in countries with high inflation (perhaps not so relevant any more).

THE TRANMSISSION MECHANISM OF MONETARY POLICY IN TRANSITION AND DEVELOPING COUNTRIES

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THE TRANMSISSION MECHANISM OF MONETARY POLICY IN TRANSITION AND DEVELOPING COUNTRIES

Some countries have sophisticated financial systems, with numerous banks and a mature set of bond markets. In others, such features are only embryonic. Most developed countries are at one end of a spectrum between these positions. Most developing and transition economies are moving towards that point, but at different speeds; and some have quite some way to go to reach it. The first point to stress about transition and developing countries' financial and economic systems is that they are very far from homogeneous .

Money, in its narrowest form of token coinage and paper notes, circulates in every country in the world, however. In more advanced countries, monetary policy works through interest rates. Central banks alter their policy rate. Interest rates on treasury bills and retail interest rates on loans and deposits quickly move more or less one for one. Interest rate changes then prompt changes in consumption and investment spending through a variety of channels; and policy interest rate changes may alter the value of the exchange rate, with consequent impact on aggregate demand through changes in the gap between exports and imports. Interest rates therefore provide the crucial early steps in the transmission mechanism of monetary policy in advanced countries. So how does that mechanism work in institutional environments where interest rates are relatively unimportant, or even, in the extreme, completely absent? How and why does a rise in monetary aggregates arise in such a context? What are its effects? What are the key links between the supply of money on the one side, and aggregate output and prices on the other, in

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[1] This is one of the main themes to emerge from Mahadeva and Sterne (2000).

countries where interest rates play at most a minor role? These are the questions top which this paper is addressed.

With almost no exceptions, currency is always and everywhere the non-interest-bearing liability of the State. Occasionally this currency might be supplemented by paper issued by private institutions, but the role played by privately issued currency is usually trivial or non-existent. Currency acts as means of payment, medium of exchange, and unit of account. It is also an important store of value. In less developed financial systems, bank deposits will also perform the last of these four functions to some degree. Cheques drawn on those deposits may be used alongside currency as exchange and payment instruments, too, but currency is likely to enjoy the lion's share. In advanced financial systems, by contrast, currency acts as little more than small change.

There are two principal ways in which the supply of currency can rise. One results from the State's budgetary deficits. The other is the consequence of a surplus on the country's balance of payments with the rest of the world.

If the State runs a budget deficit, receipts from taxation fail to match the public authorities' disbursements. The gap has to be offset by some combination of borrowing and currency issuance. In the absence of domestic bond markets and banks, the State will not be able to borrow from domestic sources (though it might, if it wishes, still sell State assets to domestic residents). So government borrowing, in all likelihood, means borrowing from abroad - from overseas banks or international financial institutions, for example, or in the form of trade credit extended by foreign firms selling exports to the public sector. Arranging finance from those external sources may be hard. Its terms may be unattractive, too, even if such funding is feasible.

In such circumstances, it seems likely that currency will have to plug at least some of the gap. That would imply a

strong positive link between the budget deficit and the increase in currency outstanding.

A surplus on the country's balance of payments will generally entail a rise in domestic residents' holdings of liquid claims against the rest of the world. If these agents began the period in portfolio equilibrium, the chances are that they will end it holding some foreign exchange that is surplus to their requirements. If the country's monetary authorities operate a fixed or managed exchange rate system, they will need to intervene to prevent a local excess demand for foreign exchange from generating an appreciation of the currency.

Essentially this means selling domestic currency to buy up the unwanted foreign exchange. Private holdings of domestic currency can only rise as a result. And quite often, the monetary authorities of less developed countries may actually prohibit domestic residents from holding foreign currency, obliging them to surrender it (though with compensation) to the central bank. The end result will be the same: a higher level of domestic currency outstanding.

During the Second World War, and for some time thereafter, most countries imposed restrictions on international capital movements. Developed countries, and not a few developing ones, have now abolished these. Where this has happened, the external value of national currencies, if freely floating, is influenced far more by capital movements across the exchanges than by the state of the current account of the balance of payments. Real interest rates in such countries are linked to levels elsewhere, perhaps with differentials to reflect risks and additional anticipated taxation. Such complications aside, domestic nominal interest rates in local currency tend to match similar rates overseas, supplemented by a term to cover the expected drift in the relevant nominal exchange rate[2]. But at the other end of

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[2] This is the much debated uncovered interest parity (UIP) hypothesis, which has recently received a stout defence by Meredith (2002).

our spectrum, capital movement restrictions remain common, and it will be the current account of the balance of payments that exercises the dominant influence on the exchange rate when it floats.

So much, then, for reasons why the supply of (narrow) money, currency, may increase. What happens next?

The key point to start with here is the notion that currency is an asset, held over time. Firms and households need to weigh up the expected benefits and costs of holding currency, against those of holding assets alternative to currency. Those alternatives include real assets, such as buildings, land, consumer durables, machinery, farm equipment and livestock, and inventories of raw materials, work in progress and finished goods awaiting sale. All those other assets offer some prospect of yield. For buildings and consumer durables, for instance, it will be imputed rent, that is the rent that the owner does not have to pay someone else for their use.

Currency bears no nominal interest. What it provides, instead, is a yield of convenience. This may be thought of as a stream of savings in transactions, search and trading costs that the holder would have incurred, if forced, instead, to resort to make purchases through a different and more cumbersome mechanism, like barter.

In equilibrium, the right balance has to be struck between currency holdings on the one side, and alternative assets on the other. This should entail equality between the marginal convenience yield on money (call this MCYM) and the anticipated net marginal return on the latter. Risks aside, all assets should offer the same net return at the margin. If they did not, the portfolio's total yield would be raised by selling low-yield assets and buying high-yield ones instead.

It is real currency that provides the benefit streams that households and firms enjoy. So nominal currency holdings have to be divided by an index of prices of items their holders expect

to buy. And though currency offers no nominal interest by definition, its real yield will be non-zero unless prices are stationary. Inflation imposes a negative real yield on currency. It is indeed an approximate measure of the cost of holding currency, and indeed the only one available in an economy with no data to reveal a real rate of interest.

Higher inflation should reduce real currency holdings. Phenomena like expectations of a bad harvest (which will raise food prices) or exchange rate devaluation (which should increase the home currency prices of exportable and importable goods, about one for one) should induce a flight from cash. Farmers, traders, families and firms will react to such developments by attempting to raise their inventories of goods expected to rise in price. Since the overall supply of such goods is likely to be given, or at best slow to change, their prices will tend to jump to clear markets. In the process, holdings of real currency will fall.

A sudden burst of actual inflation can arise, therefore, as a result of increased expectations of future prices. You do not need a rise in currency to occur at the same time. What a piece of paper money is worth today depends upon what real value it is expected to command tomorrow, and that is governed by what prices are expected to be the day after tomorrow, and so on in an infinite chain. Equally, heightened fears of inflation in the distant future, whatever occasioned them, this logic suggests, could conceivably translate into a big jump in prices now. This is especially true if the prices of goods and services are highly flexible, a condition that may well be fulfilled when the country's record of past monetary stability is weak. And it in no way depends upon the presence of banks or mature bond markets; it could operate perfectly well without them[3].

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[3] For a recent model of inflation dynamics governed partly by budgetary variables, the reader may wish to consult Fry and Sinclair (2002).

The main message from this observation, then, is that the demand for currency can be volatile. The behaviour of the price level over time depends on currency demand as well as currency supply. In a sophisticated financial system the authorities nowadays aim to set interest rates. They meet any swings in the demand for money by immediate changes in its supply. In a much less developed financial system, where interest rates mean little or play little role, monetary policy means, above all, controlling and varying the evolution of narrow money - currency - to achieve its objectives (such as low and steady inflation, subject, perhaps, to what are perceived as satisfactory outcomes for real variables such as GDP).

When it is the stock of money that is the chief subject of control, unforeseen changes in money demand can create havoc. The best thing to aim for, perhaps, is to create a climate in which sudden changes in expected future price levels, and consequent sudden changes in today's demand for currency, simply do not happen. That may mean building a reputation for achieving low and steady inflation in the past, or constructing a device of credible commitment to it in the future.

So much for why prices could jump now in the absence of accompanying changes in the supply of currency. Suppose, now, that the stock currency does increase: through what channels shall we observe an increase in prices, in monetary systems where interest rates are absent or unimportant?

When the nominal supply of currency has gone up, perhaps as a result of budget deficits or of balance of payments surpluses, upward pressure on the price level can and indeed should ensue. There are just two provisos. First, we must qualify the last claim by stating a key condition - all other things equal. Second, there are many reasons for thinking that the upward pressure on prices may be slow in coming. What happens following the increase in currency, then, and why?

The first stage involves agents' discovery that they now have a surplus of currency. (This must be so, if all other things are equal, and currency holdings were "right" at their previous, lower level). To restore equilibrium in their portfolios, they will seek to augment holdings of alternative assets. A farmer with a large cash surplus may think of extending the family dwelling, or stock of animals. A manufacturer or workshop owner may start looking to buy a machine, to raise production or cut costs. A trader will contemplate adding to his inventory of goods to sell. A family may react by purchasing a hitherto unaffordable vehicle, telephone or television set. A large private institution with surplus cash may think of buying other businesses, or constructing new buildings for sale or rent.

(In some poorer economies, capital formation is often subject to central planning or control. Official approval is needed for investment, at least in larger projects or enterprises. But even here, some categories of investment (such as inventories or smaller projects, and durables purchases by households) that go unregulated).

The increased demand for all such goods will be considerably enhanced if the economic agents involved perceive that the surplus cash is not just something they are experiencing themselves, but a widespread phenomenon, affecting many others. That will make them anticipate shortages and price increases in the near future. They will be much keener to secure their new purchases at current prices, in advance of those rises to come.

If a rise in the supply of currency raises the demand for a wide range of alternative, real assets, an immediate consequence will be a rise in their (explicit or shadow) prices. The stocks of such assets can be thought of as fixed in the short run. So their holders will become wealthier in terms of consumption goods. The resulting wealth effect, common to those with sophisticated financial markets and those without,

will tend to boost overall consumption.

There is a second factor that can strengthen the demand for non-cash assets when the supply of money has risen. This is imperfections in capital markets. The first rule of capital markets is this: you can always get a loan when you can prove you do not need it. In all economies, those with sophisticated financial systems and those without, the asset-poor find borrowing a challenge. Asymmetries in information are the main reason for this. But borrowing is impossible for everyone when loan markets barely function at all, and countries with only rudimentary banks and financial markets will be close to this position. If there is a widespread unsatisfied demand for credit, additional surpluses of real currency, whatever caused them, can be expected to generate a large increase in the effective demand for goods of all kinds. This phenomenon should be particularly powerful in poorer transition and developing countries.

An unexpected cash surplus is really like a windfall gain. When capital markets work well, someone experiencing a windfall gain should react by barely increasing recurrent consumption spending, on non-durable goods, at all. The most you would expect is for non-durable consumption to rise, over a year, by the product of the gain and the real rate of interest. Nearly all the windfall would be "saved" - transferred into income-yielding assets, or, of course, consumer durables.

If capital markets are deficient, on the other hand, there are likely to be many consumers who cannot borrow what they would have liked, and been able, to borrow, had capital markets been perfect: particularly individuals confident about future income. Give such people an cash surplus, and you should see an immediate and appreciable increase in current non-durable consumption spending. "Real balance" effects - the alleged tendency for an increase in real money holdings to induce higher consumption - receive a poor press in the

economic literature, and for several reasons. They involve attributing causality to at best an indirect association between a pair of endogenous variables that might even be independent of each other in long run equilibrium. It is rather like "explaining" the consumption of olive oil by the consumption of carrots. The econometric evidence in their favour is not strong, either. But in an economy with very poorly developed capital markets, the real balance effect channel of the transmission mechanism of monetary policy really does merit some close attention. What makes this interesting is the implication that a (narrow) money supply increase is not limited, in its initial effects, to the markets for other assets.

If aggregate demand does increase in the wake of a rise in the supply of currency, what happens next? At first, it is volumes of purchases that should react most. Increased demand for goods may be satisfied initially from traders' inventories. When the goods are exportable or importable, and foreign exchange rates remain fixed, higher home demand may be met from reduced exports or increased imports. But markets for many goods where international trade is insignificant, such as most services, or housing, may witness increased levels of business, when there is initial slack or excess supply in the markets for them.

Then there will be domestic products supplied by just a handful of home firms - in a small developing economy, maybe just one - which have set their prices for the time being, and stand prepared to meet any increase in demand by increasing production. Temporarily sticky prices make no sense in goods markets where sellers compete perfectly with each other. But they have strong appeal under monopoly and some other forms of imperfect competition (although you can also have monopoly with perfect price flexibility). And so temporarily sticky goods prices, and the imperfect competition with which they are at least partly associated, can give monetary policy a powerful,

temporary, real effect.

Furthermore, in a developing country, news of a stronger demand for labour may well filter from the towns to the countryside, prompting migration. And a fringe of townsfolk seeking employment will furnish some of the additional labour demanded. So, taking all these factors into account, a rise in the supply of narrow money should trigger not just an increase in aggregate demand, but a wide set of changes embracing all components of GDP, as well as increases in the demand for labour and overall level of employment.

There is an important qualification that needs to be made at this point. It relates to the country's exchange rate system. If the exchange rate is fixed, and remains so, we have already seen that there will be forces that immediately start weakening the trade balance, by lowering exports and raising imports. As time goes on, these consequences may well be reinforced by other developments (upward pressure on the prices of non-traded goods and labour in the home economy). If the economy stays wedded to its fixed exchange rate, and the rest of the world displays no inflation, the home country's trade deficits will lead to a sequence of subsequent money supply reductions.

So the initial rise in the money supply ends up in reversing itself automatically. It has no persistent effects on anything - output or prices - precisely because it has to reverse itself later on. In an open economy of this kind, what determines the domestic rate of inflation in the long run is two things: the rate of inflation abroad, in the rest of the world; and the trend, if any, in the exchange rate. A once and for all devaluation of the exchange rate ends up by raising all domestic prices (non-traded goods and labour) as well as traded goods. The monetarist claim that the rate of growth of the money supply "determines" the rate of inflation is simply false in such circumstances.

With cleanly floating exchange rates, however, the picture changes completely, and the portfolio equilibrium approach to the first stages of the monetary transmission mechanism introduces the crucial new element of foreign currency. If home residents are allowed to hold this - or if the government and central bank are unable to stop them from doing so - a sudden surplus of domestic cash is likely to be translated rapidly into foreign exchange. This is all the likelier if the cash surplus is thought to be economy-wide, because everyone else will be trying to do this, too. The end result is, of course, an immediate depreciation of domestic currency. That will translate into higher domestic nominal prices of both importable and exportable goods (though not necessarily one for one in the short run). If non-traded goods prices are sluggish, but traded goods prices jump at once by the full extent of the depreciation, equilibrium in the market for domestic money suggests that the exchange rate depreciation will tend to overshoot. This is so because, given sticky non-traded goods prices, the exchange rate has to fall that bit more to bring up nominal money demand to match its higher supply.

Let us now return from these interesting digressions about the open economy to the main theme. Prices will shortly react to these developments, but typically with a lag. If inflation is modest - in the 3 per cent to 5 per cent range, let us say, that Albania has recently been displaying - the lag may be at least a year. The maximum impact on the price level in economies with inflation at this level is usually seen about eight quarters after the initial monetary impulse. In countries where inflation is faster, the lag shortens.

The theory of menu costs suggests that individual nominal prices are held for an interval that is inversely proportional to the two-thirds root of the trend rate of inflation. So if 4 per cent inflation makes firms with market power reprice their products once a year, an eightfold jump in the trend inflation

rate, to 32 per cent, would see them switching to changing nominal prices every three months.

The strongest influence on firms' selling prices is probably the unit cost they face for labour, which depends critically upon money wage rates. Theory and evidence concur in the observation that money wage rates respond to expected inflation, roughly one for one, and, in addition, negatively to the level of unemployment. If the evidence of rich countries can be extrapolated elsewhere, it shows that the unemployment effect is lagged, by perhaps six months or so when the trend level of inflation is low, and potentially less than this when it is rapid. Rapid inflation also appears to make the short-term Phillips curve steeper, reducing the fall in unemployment associated with any temporary (unanticipated) increase in the rate of money wage increase[4].

When it comes, then, to the way in which aggregate demand increases are split between output and price level changes, and to the timing of price level effects, the differences between countries with sophisticated financial systems and those without begin to fade. These differences are very important in the first stage, which relates to the channels linking a change in the monetary policy instrument to changes in aggregate demand. But not later on. And in all economies, whatever the state of their financial development, there is one key conclusion that merits particular emphasis. This is that the long run real effect, upon the time paths of output, or employment, for example, of a change in the monetary policy instrument is going to be negligible. Eventually all the effect of monetary expansion shows up in higher prices. And none in higher output.

Indeed, one can go further. Saying that the monetary policy

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[4] Indeed, the character and speed of the transmission mechanism of monetary policy depends greatly upon whether inflation is rapid or slow, perhaps even more on this than on the extent of domestic banking and bond markets. Vinals (2001) and Woodford (2000) have important reflections on this.

can have no enduring impact upon output does not mean that what happens to monetary policy is irrelevant for real variables. Persistently faster growth in nominal money can only mean persistently, permanently faster inflation. That implies lower real holdings of money, and a retreat from the benefits that higher real money brings towards time-wasting alternatives such as barter. So fast inflation is a time waster. And if it wastes time that would otherwise be devoted to work, output will fall. And if it wastes resources that would otherwise be devoted to training, to building up human capital, it will waste resources that would otherwise be devoted to growth. Very rapid inflation in perpetuity could well mean permanently slower economic growth[5].

Furthermore, if monetary policy is fitful, with big random swings, the rate of inflation will become less predictable. Asymmetries may well mean that any short-lived output gain, in the expansionary phase, is briefer and smaller than the output cost associated with bringing inflation back down again. The variance of output is likely to rise, and it is not inconceivable that its average level over time could fall.

There is great uncertainty about the transmission mechanism of monetary policy in advanced countries, and perhaps even more so in developing and transition countries, where the usual interest rate channels are weaker or even absent. Among central bankers and economists alike, there is also much greater modesty now than thirty years ago about what monetary policy can achieve, and in anyone's ability to predict the shocks that all of us would ideally like monetary policy to neutralize. But if there is greater diffidence and realism in accepting what monetary policy cannot do, there is at least the hope that it will be employed more circumspectly and successfully. For developing and transition countries, on the other hand, there is an added burden. What matters does

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[5] Barro (1996) presents clear evidence testifying to this.

not just involve appreciating how the weakness of interest rate channels alters (standard textbook) perceptions about the transmission mechanism of monetary policy, but monitoring how these perceptions have to keep changing as those interest rate channels deepen and strengthen as time goes on. That is indeed no small challenge.

In countries where financial markets are still in their infancy, the transmission mechanism of monetary policy is not the same as where they are mature. In the former, interest rates play little role. Official rates may even be dead letters, fixed far below a full market equilibrium (expected inflation plus world real interest plus premia for risk), and a state of financial repression will ensue. In their place, we see a much bigger, explicit role for monetary aggregates, and particularly for the supply of currency.

Here, the concept of portfolio equilibrium, between real currency on the one side and alternative, real assets on the other, is key. An increased nominal supply of currency, at unchanged goods prices, prompts an excess demand for those alternative assets, leading to a jump in their prices and to increased attempts to add to them. Wealth effects and imperfections in capital markets will combine to raise consumption demand. Upward pressure on employment and output will lead to a quickening pace of money wage rises, and then inflation. With a successfully defended fixed exchange rate, all these effects will tend to be undone through payments deficits, reserve losses and subsequent monetary contraction. But a floating exchange rate is liable to register depreciation, pushing up all traded goods prices, as would an enforced devaluation.

As transition and developing countries mature, retail banks assume growing importance. Deposits outpace currency. Loan and deposit interest rates enter the story, creating interest rate channels to supplement the wealth and direct-spending

effects noted above. As restrictions on international capital movements fade, exchange rate dynamics start to reflect cross country nominal interest differentials. Central banks come increasingly to focus on changes in policy interest rates as the key instrument of monetary policy. Quantities of money, broad and narrow, become demand determined, of interest chiefly for what they may hint about the private sector's future spending plans. Official interest rates need to be revised swiftly and sharply, really more than one for one, whenever inflation threatens to rise above (or fall below) its formal or informal target.

Paradoxically, higher nominal interest rates may play two roles. They can furnish evidence that expectations of inflation have risen (an admission that monetary policy has failed to maintain price stability); and yet they are also a device, indeed the main device, for bringing inflation back down to target. A not dissimilar paradox applies in countries where official interest rates are yet to become the central instrument of monetary policy. A reduction in real currency holdings can testify to higher inflation expectations (monetary policy has "failed"); but it could also mean that monetary policy has recently been deliberately tightened to reduce inflation, quite possibly with success later on.

Indeed, the analysis of monetary policy is complicated by another paradox: if monetary policy were conducted perfectly, and ironed out all unwelcome disturbances in inflation or output completely, econometric evidence would appear to tell us that it had exercised no effect! It is only when monetary policy is conducted with less than complete success that we are in a position to see the details of how it really works. This paradox applies no less in countries where the financial system is not yet deep and strong enough for policy to work through interest rates, but rather on the supply of currency.

The "headline" elements in the transmission mechanism of

monetary policy are the chain linking the monetary policy instrument to aggregate demand, and thence to output, employment, the pace of money wage increases and inflation. These elements are the same everywhere. Where countries differ lies primarily in the first stage. What matters is whether the instrument is an official nominal interest rate on the one side, or a monetary aggregate (or device to control it) on the other - and in the nexus that takes us from such policy intervention to the subsequent changes in aggregate demand. In larger, richer countries, interest rates are the key device. Among transition and developing countries there is great diversity. All (or almost all) are moving towards an interest-rate control system based on domestic banks and bond markets, and some measure of financial deregulation, but at very diverse speeds. And some are only at the very start of that hazardous but, one hopes, ultimately rewarding journey.

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MONETARY TRANSMISSION – CASE OF ALBANIA,

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MONETARY TRANSMISSION – CASE OF ALBANIA.

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I. CONSIDERATIONS ON INFLATION TARGETING.

Inflation targeting is one of the monetary policy regimes that serves a central bank to control inflation. Some economists consider it as a modern strategy, not only because of its start going back to '90s, but above all, due to the role it plays in keeping moderate levels of inflation. However, the "young" age, is considered by some researches as a problematic aspect, since it bears, to some extent, the risk of a non-rich experience, being reflected in the degree of credibility of this monetary policy regime. Therefore, it is just the element "credibility", which, being very important for the central banks, may incur swings, or even "shocks" due to unpredicted deviations of targeted inflation rate from the actual one.

Notwithstanding the above problem, the application of Inflation targeting in most industrialized countries, being adopted for some years, has proved to be a monetary strategy with a very important role in controlling inflation or keeping it in low levels. Therefore, this regime has raised the interest of monetary-policy-making-environment to further extend it in other countries, especially in transition economies. It is assessed that this form of controlling inflation is fruitful, especially in the countries where actual inflation rates have

rested over the targeted rates for a relatively long period of time. As such, the regime enjoys a positive quality, that of the "organic stimulator", which, being found in a proper macroeconomic environment, orients the central banks' monetary policy towards the maintaining of inflation within the pre-determined bands. Therefore, the decision-taking relates to an entire judgment process by the policy-makers regarding the degree of matching the future expected inflation with inflation target announced in advance.

In most cases, the decision-making authorities announce a future inflation target band, aiming at price stability. Nevertheless, if inflation in the subsequent period (1 or 2 yeas later) is outside the announced target band, then something is wrong with the monetary policy, and therefore, something needs to be changed so as to enhance its effectiveness.

The process of forecasting inflation and determining its band passes through an entire analytical stage and is finalised in building a model that takes into account the most substantial links between economic indicators, which finally manage to influence the expected inflation.

However, the fact that there exists a certain group of unpredicted phenomena, whose effect makes the expected inflation result outside the band, makes necessary for a central bank to measure, besides the total inflation, even the core inflation, which is an indicator that leaves inflationary pressures, which are beyond the control of monetary policy, outside the attention.

The transparency in measurement is assessed to be another important element of Inflation targeting simply because the success of this regime depends upon the fact whether the private agents, households, public, will generally accept or not the officially announced target. This means that the actors of a country' s whole economic activity should be able to establish mid-term micro-strategies, which will serve the

economic activity growth under acceptable conditions of price stability. Most countries that have adopted this regime, have initially presented strong measures to serve the enhancement of credibility, including open discussions of policies and interpretations of economic data.

A determining feature of Inflation targeting is that the intermediary target, the future inflation, is not a surveyed variable. Thus, from an operational viewpoint, Inflation targeting may be considered as a two-step process. First, the monetary authority makes an inflation forecasting to estimate whether inflation, under the current monetary policies, will rest within the target range or not. The second step appears into stage if the future inflation is expected to result outside the target range. In that event, a well-defined rule, which links the decision-making process with the projected inflation, should determine the conduct of monetary policy instruments, enabling the orienting of the projected inflation towards the target range.

By definition, Inflation targeting is a mid-term monetary policy that implies five principal elements:

1)   Public announcement of a mid-term inflation rate, as a target to be achieved;
2)   Institutional commitment for price stability, as a primary monetary policy target, where all the other targets depend upon;
3)   Establishment of a strategy to include numerous variables, not only monetary aggregates or exchange rates, which are used to determine the policy framework of instruments;
 4)   Transparency enhancement of monetary policy strategy, through communicating to the public and market on the plans, targets and decisions of monetary authorities;

5)   Increase of central bank's responsibility to achieve its inflation targets.

Considering the so-far experience, "the indispensability of public announcement of inflation target rate" constitutes "the body" of this definition, whereas the four other elements may be compared as constituting the big skeleton's "limbs" of the central bank's mechanism or monetary policy.

The construction and disclosure of the band constitutes one side of Inflation targeting, whereas its success depends upon many other factors. It should be underlined that one of the prerequisites that provides success, the matching of expected inflation with the targeted inflation, is that the application of such a regime does not necessarily imply the existence of an enduring link between currency and inflation. This strategy does not depend upon such a link, but instead, it uses the whole possible available information to determine the best group of monetary policy instruments, which finally provide impact on inflation.

In conclusion, it is defined that inflation targeting regime, in essence, is a forecasting process that analyses the internal dependency and inter-dependency between economic indicators, step by step up to macro-links level. Their construction logic leads to the building up of a model that "vests" and explains as completely as possible the paths, through which monetary policy decisions pass, as well as the effects they provide, being finalised in the attainment of an inflation target. Thus, a very positive feature of inflation targeting is also highlighted: It is easy to be comprehended by the public and simultaneously, it is a regime with a fairly transparent mechanism.

On the other hand, the existence of transparency and the requirement on enhancing it leads to the increase of central bank's responsibility to the public. The constant success of

monetary policy, made concrete in attaining the announced inflation target, even in the absence of well-defined legal standards for evaluating or rejecting it, would lead to the creation of public support for an independent central bank.

According to some authors, Inflation targeting is considered to be a more effective strategy, only if it is applied after a relatively long disinflation period or a low inflation period. At the same time, it is rational to be applied for a basket of goods and services, where those with administratively controlled prices are not considered in calculating the price index, which will serve as an inflation target. (The case of Czech Republic). It is just the case of most transition and developing economies, whose CPI is calculated by including this category of goods and services as well. In most of transition countries, in their way to economic market reforms, the administrative interventions for further price liberalization may cause deformations of inflation indicator, which do not relate to the monetary policy effects at all. In such cases, if the implementation of Inflation targeting is projected as a central bank's mid-term strategy, it is necessary that a high coordination level of decisions between monetary and fiscal authorities must be ensured in advance regarding the term and extent of future changes in controlled prices.

The considerations on the monetary policy of Inflation targeting regime should not be separated from those of fiscal policy and financial position in an economy. Furthermore, the economic development of a country is considered as stable if supported by the goals: financial stability and fiscal consolidation. Together, they comprise the foundation of success of every monetary policy strategy. It is an indispensable requirement that these goals find their best position possible, in such a way that they serve as sound prerequisites of projecting the Inflation targeting strategy.

The space of important considerations on Inflation targeting

can not be separated from the exchange rate regime, which is an as much important aspect. Inflation targeting requires a floating exchange rate, whose oscillations are inevitable. The sharp and speculative depreciation may increase the dept weight expressed in dollars, which would lead to a deterioration of the balance sheets, increasing the risk of financial crises. In the cases of partially dollarized economies, such a strategy may not be stable. Therefore, cautious adjustments should be undertaken on controlling the financial institutions, in such a way that the system be able to resist the exchange rate shocks.

Concluding these considerations, we would emphasize that the presence of multiplied relationships in economy, makes possible that even economic policies, especially monetary policies, be extremely cautious in the judgment on future inflation rates. This is one of the reasons that they, along with the need for more transparency, have shed light on inflation targeting, an interesting, why not even fruitful alternative of controlling inflation, a possible challenge on monetary policy regime that the Bank of Albania will pursue in a mid-term period.

II. MONETARY POLICY AND INFLATION IN ALBANIA VERSUS INFLATION TARGETING.

The above considerations on inflation targeting bring to attention of experts, researches, policy-makers, and decision-makers, that the process of inflation targeting can not and must not be considered as a simple one. The transition countries are referred to here, where time after time economic and structural problems occur, which are undoubtedly reflected in certain difficulty levels during their integration process. One of them is Albania, where positive endeavors towards the difficult way of adopting Inflation targeting regime, do not lack.

We base the above assertion on the monetary policy evolution and on the somewhat stable performance of inflation during 1992-2002.

II. 1. General considerations on the monetary policy of the previous decade pursued by the Bank of Albania

Initially the monetary policy in Albania was worked out and applied by mid 1992, when, some decisions were introduced for the first time as part of the IMF agreement to support Albania, decisions that aimed at exerting control on the demand for money by using direct instruments of control. Since the first Law on the Bank of Albania, it was defined that its main target is the maintaining of national currency value and therefore, the maintaining of consumer price stability.

The Bank of Albania annual report of 1992 mentions that the definitive monetary policy target is the consumer price stability, the increase of output and the providing of a full balance sheet in the external position of the country. Base money was selected as an intermediary target, while two basic instruments of monetary control were: credit limit and interest rate on Leke time deposits with the state-owned banks. Since July 1992 and onward, a "floating" exchange rate regime has been adopted, while the transactions in the current account were totally liberalized. These measures, along with the adopting of a tightening fiscal policy and the deregulation of most consumer prices led to an immediate restraining of further imbalances of macroeconomic equilibrium.

Drawing some general conclusions on the period of 1992 – 2000, we may underline that the monetary policy is generally characterized by:

- **A final explicit target, that is the maintaining of price stability.** The country's economy development has

followed up the observance of quantitative inflation targets at year-ends. Nevertheless, the rationale used to set such a wanted target, has never been transparent. What is more, even the ways to achieve this stability have generally been unclear. It is concluded out of estimations of 2000 that during the whole period no strong link is discovered between currency increase and inflation. Even though, at most data provided by time series, the planned level of monetary aggregate increase does not comply with the actual levels, inflation is kept under control (frequently, significantly below the target).

- **Setting an intermediate target on currency increase.** The money increase is regarded by the Bank of Albania as an intermediate target, which will lead to the final target meeting. Actually, the money (base money) is the only indicator that may be entirely controlled by the Bank of Albania. In spite of this, as stated above, the relation between this indicator and inflation has not resulted to be strong, and therefore, other factors, highlighting exchange rate, are assessed to be more direct determinants of the behavior of inflationary pressures in economy.

- **Application of quantitative restrictions on asset side.** Since the second six-month period of 1992, there were placed ceilings and floors on the position of such indicators as: net foreign assets of the Bank of Albania (floor), the banking system net domestic assets (ceiling) divided into net credit to government and credit to economy. The so-called criteria for achieving success continue to be used even at present, though somewhat unlike the first years of transition. Without referring concretely to the type of those currently used, we would emphasize that at least for the period of

1998 –2000, the three quantitative objectives are realized close to the targets set, while the actual realization of monetary indicators, especially those of reserve money and monetary aggregates, is far from their programmed level.

- **A direct control on money.** Only during the third quarter of 2000, the application of direct monetary control instruments was definitely abandoned, when the Bank of Albania Supervisory Council decision left "outside the game" the minimum level of interest rate on Leke time deposits with second tier banks having state-owned capital. Meanwhile, the restrictions in extending new credit were abolished at an earlier stage.

- **A high position of credit to government.** Initially, by direct ways and later on by issuing treasury bills, it was managed that the major part of government debt was purchased by the banking system. In this way, the budget was transformed into the biggest "consumer" of money. Recently the basic Lek interest rate is that of twelve-month maturity treasury bills yield. A reduction of the demand for money by the budget would decrease the treasury bills yield and vice-versa. An increase of the demand for money by the government would increase the treasury bills yield, in spite of the fact whether the Bank of Albania will increase or decrease the repo rate in money market. The change in the interest rate by the central bank, finds its market embodiment in changing, in the same direction, the credit rate, investment in securities, fixed asset price, general expectations, etc. It is understandable that, in the case of our country, having an undeveloped inter-bank market, an extremely focused primary treasury bill market, and a formal credit market were foreign currency is borrowed more,

the signals of the central bank are difficult to "penetrate" in the "terrain", and therefore, even the efficiency remains modest.

- **A lack of clarity and a low efficiency of monetary transition mechanism.** Since the third quarter of 2000, the Bank of Albania started to control the money supply through the application of indirect instruments, repo auctions occupying the most important part in the money market. In fact, the story of applying indirect instruments is earlier, since mid '1992. Nevertheless, it should be stressed that their effectiveness has been low and in all cases, mainly the decisions are transmitted through administrative interest rate. This is true as long as the restraining of further inflation increase is tended, since over other periods, when monetary policy smoothing is attempted, this measure has also resulted as ineffective. From this viewpoint, it is right to raise the question: Will the repo rate be able to convey the Bank of Albania decisions to economy? The answer to this question is relatively difficult. The monetary market, in spite of the Bank of Albania efforts, is still an undeveloped, inflexible, unstable market. The number of transactions in it is still small, where one party is mostly the Savings Bank, and the volume of transaction carried out does not constitute any significant amount. In fact, for many years the state budget has continuously been the "absorber" of excess reserves. The banking supervision restrictions have impeded banks with large lending capacity (NCB and SB) to finance the economy, and therefore, all their excess reserves are transformed into budgetary spending. This situation has enabled that even the treasury bill market be a market dominated by the Savings Bank, which is reflected in maintaining a

relatively high difference between the treasury bills yield and banks' cost. Though for some time the market is regulated through repo sale-purchase, it is unclear whether there exist any optimal level on excess reserve position in the system.

## II.2. INFLATION IN ALBANIA AND INFLATION TARGETING REGIME

The series of inflation in Albania, though taking part in the group of the most long-lived series of macroeconomic indicators, is still considered as being new in age. This has to do with the history of establishing market economy relations in our country, a history that started a decade ago. Talking practically about inflation or consumer price jump before '90 in Albania was nothing else but heresy. Whereas today, not only do we talk about it but we are also able to measure it, control it satisfactorily, analyze it ever more and project the implementation of adopting monetary policy regimes for forecasting it. The latter one has to do mainly with the ambitious project of the Bank of Albania to control inflation in a mid-term period by means of inflation targeting.

In general, the literature recommends that a period of 2 to 3 years with low inflation should precede the adopting of inflation targeting regime, considering as low an inflation rate that fluctuates from 1-3 per cent. It is reasonable that in the way to projecting such a regime, there should be studied the relationship between actual inflation and inflation stipulated in the government programs. The study of deviations and trends of this indicator, on the one hand, and its relation to the factor "money supply" on the other, should constitute the preliminary basis of central bank research to issue the arguments that support and oppose the adopting of such a regime.

Given the above theoretical considerations, it is noticed

(in Graph 1) that the actual inflation has been lower than inflation target, in all cases, except '1996, while for some years, including 1999, it has been far from inflation target. A similar phenomenon, but with opposite direction, has occurred even with the increase of money supply (measured by monetary aggregate M3 (see Graph 2), where it is observed that in all cases the actual increase of aggregate M3 is greater than the programmed range.

Graph 1: Annual rate of actual inflation and its target (in %) (1993 – 2002).
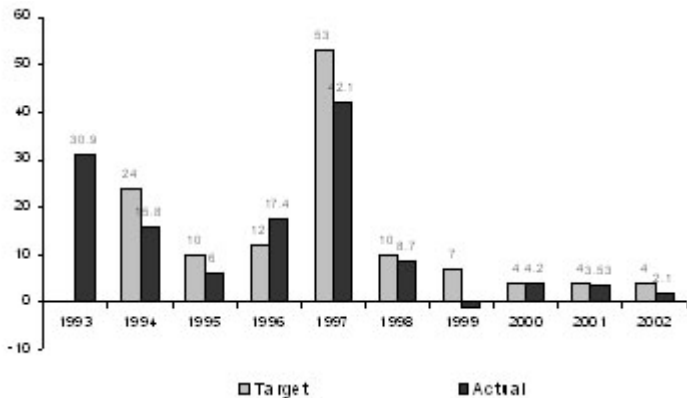
Graph 2: Money supply increase as a twelve-month change (in %) (1993-2002).
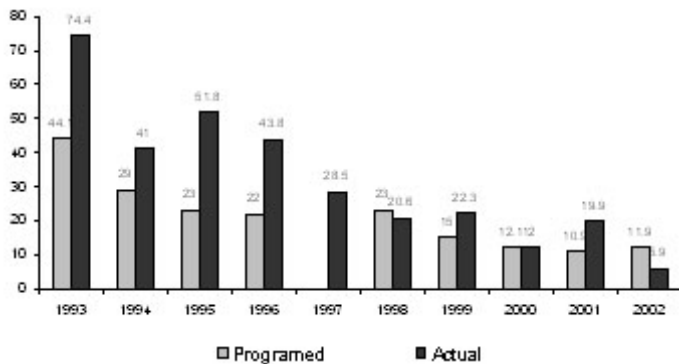
The two graphs present a kind of paradox: the money supply increase higher than the programmed level has led to a reduction of inflation below the target?!

Different researchers[1] have concluded that the relation between money and inflation is weak: other factors are deemed to influence more strongly on inflation, exchange rate being the most important one.

Nevertheless, finding the answer to the above questions is really an integral part of a strategy compiled on inflation targeting principles. Based on the so-far inflation, we may state that there exist the premises for applying an inflation targeting regime.

Box 1: Some history…

Inflation started to be measured in December 1993, on the basis of a basket of goods and a consumption structure that resulted from the survey of the budget of Albanian households in 1993.

Graph 3 : Annual and monthly inflation rate (1994-2002) in %.

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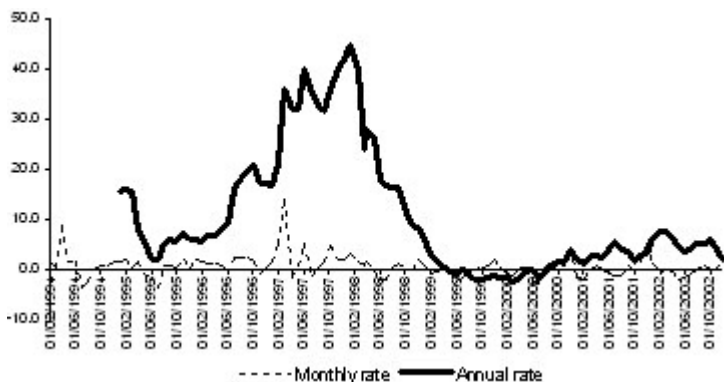
[1] Herder & Mytkolli; Kunst & Luniku (1998); Kolasi, Çeliku & Hashorva, 2001.

Since that time until now inflation has pursued a way in the form of a spiral. After reaching the one-digit level at the end of 1995, there was a threefold jump a year later and until the end of 1997 it reached the highest peak ever recorded until then, to 42 per cent. This shock derived as an inevitable result of the crisis triggered by the collapse of pyramid schemes in Spring 1997.

Year 1998 was a period of recuperating it and putting it under control by the central bank. Not more than after a year, in December 1999, its annual rate 8.6 per cent was reached. Year 2000 was generally featured by the annual inflation rate with negative value, that is a whole period of "quietness" for it. But, this quietness did not continue for long. In fact, since year-end 2000 the central bank warned that the country's economy was entering into a stage where inflationary pressures were being intensified. Furthermore, the Bank of Albania research evidenced the upward tendency of inflation: its behavior in time was warning of increasing rates, which became even more underlined as the time passed by. Though under a constant and very cautious control, the high annual inflation rates marked during some months of `2001 and `2002 in general can not be left without mentioning.

Year 2002 marked an innovation in inflation measuring process. Now, the basket of consumer goods and their respective weights do no longer belong to '1993. Inflation of this year is measured on the basis of a review of the goods basket and their relevant weights. The survey of the households' budget in 2000 highlighted structural changes, statistically important in the consumption of our families. Since December 2001, the substitution of the old basket with a new one, assessed as reflecting more realistically the consumption structure within the household budget, constitutes the basis for measuring inflation.

III. TRANSMISSION MECHANISM

Given the above analysis, it is concluded that the relations of inflation with other macroeconomic indicators and the detailed analysis of these relations would enable the finding of monetary

policy instruments that convey its signals more rapidly and more effectively, in order to keep inflation in its target rate. The entirety of such relations is reflected in monetary policy transmission mechanism scheme, which describes the paths of monetary policy decisions.

III.1. FEATURES OF TRANSMISSION MECHANISM: CASE OF ALBANIA

Given the above analysis, it is concluded that the relations of inflation with other macroeconomic indicators and the detailed analysis of these relations would enable the finding of monetary policy instruments that convey its signals more rapidly and more effectively, in order to keep inflation in its target rate. The entirety of such relations is reflected in monetary policy transmission mechanism scheme, which describes the path of monetary policy decisions towards an inflation target.

As it was also treated above, the monetary transmission mechanism in Albania is presented to some extent as unclear, and as having a low efficiency.

Some of the factors that are deemed to have determined and still determine such development stage of transition mechanism are:

*   Dominant position of the Savings Bank in some aspects: in holding deposits in lek, in treasury bills market, in money market, etc;
*   Restricted role of credit in lek;
*   Somewhat high difference between credit rates and deposit rates;
*   Limited inter-bank market activity;
*   High amounts of cash in the hands of the households (lek & foreign currency);
*   Income on immigrants' remittances (income in foreign currency);
*   Monetary control is achieved by using direct instruments of control at most of the decade.

In spite of the above problems, efforts are made by different researchers time after time, who have resulted in empirical studies and analysis, explaining the process of inflation formation in economy and the factors that have strongly influenced on this indicator[2]. Furthermore, the efforts are finalized even in compiling various schemes of monetary transmission mechanisms.

Currently, it is believed that the repo rate plays the role of the primary instrument, while the targeting of minimum monetary indicators still continues (quantitative restrictions on the asset side).

III. 2. TRANSMISSION MECHANISM: ITS EMPIRICAL APPROXIMATION IN THE CASE OF ALBANIA

In the following you will find an appropriate form of monetary transmission, an alternative that wanders around some economic goals that are considered as more important, to conclude to an empirical approximation explaining the current mechanism of monetary policy transmission.[3]

Figure 1: Monetary transmission mechanism scheme.

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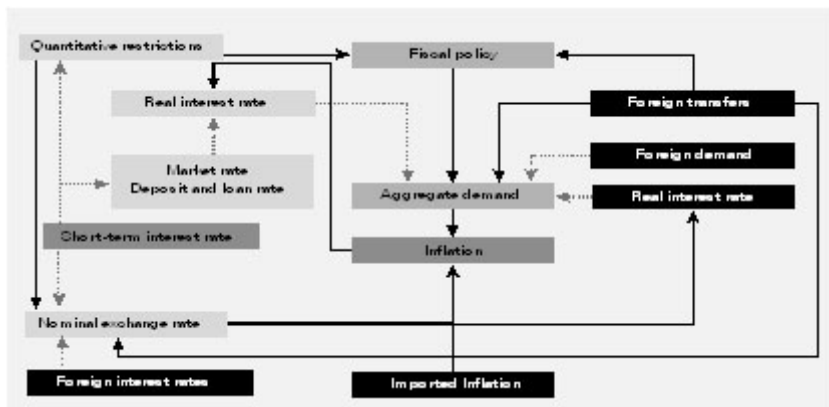
[2] Mc.Neilly Schiesser (1998); Helbirt & Domac (1998); Karla (1999); Mytkolli & Haderi (1999); Svensson (1999); Levin (2000); Kolasi (2000); Kolasi, Çeliku & Hashorva (2001); Sanfey, Muço & Luçi (2001); Hledik 2001, etc.

[3] The basic scheme is worked out by T. Hledik (2002), but it is enriched with some additional elements by the authors, highlighting the use of monetary variables.

Some details as regards to Figure 1 would clarify the transmission mechanism:

First, the broken lines indicate links that are not argued well yet, while the full lines indicate transmission channels to a certain extent efficient;

Second, there is evidenced a weak relation between short-term interest rate and inflation;

Third, it is accepted, and it is verified to a certain degree that the nominal exchange rate, fiscal policy, transfers from immigrants, etc., exert a more complete impact on aggregate demand and on inflation itself;

Fourth, even though the nominal exchange rate is not a nominal anchor, yet it seems that the short-term interest rate behavior influences it;

Fifth, there is noticed the lack of capital, security, fixed assets market, etc.

The above scheme serves us to outline a small macroeconomic model. To make it, we have made use of the experience applied in modeling the monetary transmission mechanism for small and open economies.

Albania's case may be considered as one among them, due to the fact that though Albanian economy has had a satisfactory growth during the previous decade[4], yet it can not be asserted that domestic economic developments are conveyed with considerable impacts even on other countries. This aspect notwithstanding, our economy is considered as an open one due to the high range of imports.

The model is considered as simple, since it tries to modestly capture the most important links between the main indicators in Albanian economy, to a certain level of aggregation. The econometric estimation of the model is applied on a structural form, constructed on the basis of quarterly data or time series.

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[4] Year 1997 is excluded.

Data Problem

We would emphasize here the problem incurred with the data needed to build models in general and concretely the model offered. It is assessed that one of the most problematic aspects in economic modeling is the "emptiness of economic statistics" that can be translated into:

- Complete absence of indicators, a problem which is mostly sorted out by substituting them through intermediate or even calculated indicators;
- Partial lack of indicators, that may be sorted out to some degree by statistical approximating techniques, underlining the interpolate and extrapolate ones; statistical estimates of indicators, which convey in themselves a certain degree of approximation;
- Adjustment of indicators frequencies, converting them from the annual periodicity to quarterly or monthly and vice-versa. Even in this case, the degree of approximation is well acceptable;
- Frequently underlined lack of stationary position, which mostly encroaches the enduring forecasting in the mid- and long-run, an obvious problem in Albanian macroeconomic series. The presence of a non-stationary state is minimized in the current model. Nevertheless, under the conditions of short time series, the process that "repairs" the non-stationary position to some extent, reactivates simultaneously the aspect of data restriction.

Though we have faced all the above problems, or even other specific problems in the modeling process, the efforts to minimize them have not lacked, reducing, at the same time, the inefficient estimation risks.

Furthermore, if necessary, the data are subjected to the process of seasonal regulation before starting the estimation process.

Basic assumptions used in estimation:

The variables participating in the model are measured as deviations from their historical mean, thus bringing more appropriate information to be applied in the structural forms of models. Also, such ways of measurement result more efficient in using the least square method (LS), a method that is also used in macro-model estimates, which tries to identify from the quantitative viewpoint the links showed in Figure 1. In this way, the basic assumptions that allows the use of LS are met more satisfactorily.

While the basic assumptions of applying the estimation method (LS) are assessed to be fulfilled, the presence of some economic nature assumptions, which find space even in Albania's case, is also deemed as necessary.

Among the basic assumptions, we mention:

(i)   Interest rates have an important effect on aggregate demand, through the impacts they exercise on changing the deposit interest rates;

(ii)   The impact of short-term interest rates on the nominal exchange rates, due to the effect of currency substitution is very strong;

(iii)   A significant role in transmission mechanism should be played by monetary aggregates. The output gap[5] is substituted in the equation of Philip curve by the real money gap M3;

(iv)   Supposing that quantitative restrictions are the main

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[5] According to conclusions reached by Svensson.

contributors in controlling the base money, and that the currency multiplier does not change, the M3 monetary aggregate is used as a variable in the model;

(v)   Given the difficulty in identifying the currency with the largest significance in Albanian economy, the effective exchange rate (NEER and REER) is used as a variable;

(vi)   The lending interest rates are neglected as long as the credit to economy is rather limited.

Introduction of the structural model on monetary transmission mechanism

The identification of links takes place through selecting the equation system.

Equation (1):

$$y_t = \alpha_1 \cdot y_{t-1} + \alpha_2 \cdot r_t + \alpha_3 \cdot g_{t-1} + \varepsilon_{1t}$$

This equation indicates the link between the product (GDP) and exogenous variables, such as: the preceding quarter output evidenced by a lag (-1); the interest rates on banking system deposits; the total government expenditure effected during the preceding quarter, that is with a lag (-1).

LM Equation (2):

$$m_t = \beta_1 \cdot m_{t-1} + \beta_2 \cdot y_{t-1} + \beta_3 \cdot g_{t-1} + \beta_4 \cdot e_{t-1} + \varepsilon_{2t}$$

The above relation estimates the dependence between demand for money and the variables placed on the right side of equation (2), which have a lag that is estimated to be of one quarter ago (-1). Concretely, it implies that the demand for money depends on the overall product, government expenditures, as well as the nominal exchange rate of the preceding quarter.

Philips Curve Equation (3):

$$\pi_t^{cpi} = 0.1 \cdot E_t(\pi_{t+1}^{cpi}) + (1-0.1) \cdot \pi_{t-1}^{cpi} + \gamma_1 \cdot m_{(t-1)} + \gamma_2 \cdot \pi_t^e + \varepsilon_{3t}$$

It is one of important equations and at the same time difficult to be estimated and identified from economic viewpoint, facing the problem of lack of reliable statistical data.

On the other hand, it considers also the expected inflation rates to a certain extent.

The basis of this equation is the assumption that the pressures from domestic demand side are generated by the output, which based on the basic assumptions is replaced with the money (m_t)

On the other hand, it is verified that inflation is also a derivative of imported inflation, an important element of total inflation, as long as:

- Total imports occupy about 80 per cent of foreign trade volume;
- It is estimated that a considerable part of goods participating in the CPI measuring basket, are imported.

Considering the two above aspects as very important elements, it is deemed that the impact of import prices, not only should not be neglected as a factor, but it should also be measured. In absence of a long-term measurer proved for it, this impact is identified through the exchange rate marked with ($ð^e_t$) in the current model.

UIP Equation (4) – a:

$$e_t = 0.15 \cdot (E_t(e_{t+1}) - \lambda_1 \cdot i_t + \lambda_2 \cdot i_t^*) + (1-0.15) \cdot e_{t-1} + \varphi_t$$

This equation is a possible version of the condition of

uncovered interest parity (UIP). It does not aim at reflecting the expected behaviors of foreign investors, as long as the capital movement is still low in Albania.

This equation assumes that the current level of exchange rate is mostly determined by its past values (by risk premium) and to some degree, even by the expectations that relate even with the future developments of short-term interest rates. It tries, in a certain way, to capture the way the household' and banks' portfolio is built, based on the concept "Select between domestic currency and foreign currency depending upon expected developments!".

Real Interest Rate Equation (5):

$$r_t = i_t^{dep} - \pi_{t+1}^{cpi}$$

It determines the real deposit rates, based on the assumption of inflation expectations.

Deposit interest Rate Function (6):

$$i_t^{dep} = 0.5 \cdot i_{t-1}^{dep} + (1 - 0.5) \cdot i_t^{policy} + \varepsilon_{6t}$$

There appear, through the above links, some inefficient aspects of money market in Albania. Among them, we highlight:

- The short-term interest rate change is transmitted in deposits interest rates gradually and incompletely;
- It is verified out of estimates derived from simulation that only 70 per cent of the effect of interest rate change is transmitted to deposit interest rates within a quarter. The rest of effect is transmitted later on and therefore more slowly. This effect is evidenced in the reaction function (7).

Reaction function (7):

$$i_t^{policy} = 0.3 \cdot i_{t-1}^{policy} + (1 - 0.3) \cdot (2 \cdot E_t(\pi_{t+k}^{Qi}) + 1 \cdot y_t)$$

This function determines the central bank's reaction. It indicates the way the variables are returned to their equilibrium position by manipulating one instrument. This function is adjusted or is approximated to the Taylor rule. The only reason that the expected inflation is included in the model is that the monetary policy reaction function has better policies when series of inflation expectations takes part in it. It has two important features:

- Lags in interest rates on the right side smooth the central bank's reaction from any shock effect;
- The bank reacts by changing its interest rate against:
  - any expected deviation of inflation from the target (the following quarterly k;
  - any deviation of economic growth.

On the other hand, the function is estimated as a standard norm, and to some extent even intuitive one. For k=0, the rule takes a more standard but somewhat "myopic" view of the Taylor rule simply because it is not forward-looking in the medium and long run.

Instead of the conclusion.

The inflation forecasting and its maintaining under control is a process that faces challenges, which are more difficult to overcome in transition economies. The case of Albania testifies, on the one hand, the facing of a variety of problems, and on the other, the indication that obvious efforts are made to keep inflation under control, reaching their climax in other

ambitious steps, such as the adopting of inflation targeting regime for a mid-term period. The monetary transmission mechanism scheme explained above is one of the possible alternatives offered. Notwithstanding the problems relating mainly to the data, information, current phase of the banking and inter-banking system development, current knowledge level in macroeconomic modeling, as well as other problems of economy development in general and banking system development in particular, it outlines, to a certain extent, the path of monetary policy decisions to inflation forecasting.

Is it the best and the only alternative?

Undoubtedly, the answer to this question is negative due to some reasons:

First, "the absolute good" does not exist in its philosophical concept. There may exist room for further improvements in the model presented, through its enrichment with data, concepts and new experiences;

Secondly, the indicating in the model of necessary adjustments that should be made in the banking system and market is one of the key issues of functioning and moving forward the transmission mechanism scheme of monetary policy decisions. If the latter ones will not be absorbed by the market and its economic agents, such schemes will remain inert: They will lack the oxygen needed to liven up and to intensify the movement of our central bank's decisions, in the right time and place, towards an efficient monitoring of inflation.

"PROGRESS IN THE TRANSITION OF EASTERN EUROPE: CASE OF ALBANIA"

Luigi Passamonti, Financial Sector Network, World Bank

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PROGRESS IN THE TRANSITION OF EASTERN EUROPE: CASE OF ALBANIA –ABSTRACT,

An incentive to dollarize or eurorize the economy the financial economy with its attended risk for both of us as we have seen in some countries in another region of the world and also the reduced policy flexibility for the authorities. So, effectiveness of monetary policy transmission and financial sector development are very much intertwined, being really two facets of the same issue.

That is they provide contest and the infrastructure for sustainable financial and economic growth. In a country like Albania that is quickly bringing its institutions public and private to deliver, more austerely to exist one can design a financial sector development strategy that maximizes for the longer term the effectiveness of monetary policy.

Where to start? I would say as presenting yesterday? As much as for one of the policy to give credit it has to be delivered by an independent central bank free of political influence. Also banks, commercial banks have to be free from political influence if they are to respond to changed market conditions. Monopolistic or oligopolistic behaviors by banks create stickiness by customers. But also, may create a market power that weakens the hand of the central bank in steering money market rates in the desired direction. On contrary competition allows a transmission to a policy final guidance.

The third I think is credit deepening. Credit deepening means that one has to enhance the legal and informational framework for credit operations. Here we come probably to the core of the interface between monetary policy transmissions, which is unless companies increase their reliance on bank financing for their operations by leveraging themselves up as the balance sheet can prudently carry.

For monetary policy to be effective in terms of the microstructures, credit has to be significant management viable that the entrepreneurs have really considered credit both in terms of credibility, in terms of price, significantly viable that can affect investment and production decisions.

WHY UNILATERAL EUROIZATION MAKES SENSE FOR (SOME) APPLICANT COUNTRIES

Jacek Rostowski

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WHY UNILATERAL EUROIZATION MAKES SENSE FOR (SOME) APPLICANT COUNTRIES.

1. KEY ELEMENTS OF THE UNILATERAL EUROIZATION PROPOSAL.

Andrzej Bratkowski and I first presented our proposal for unilateral euroization (UE) three and a half years ago [Bratkowski and Rostowski 1999]. Comments by some economists indicate that the details of our proposal have not always been understood clearly. This is why we wish to begin by restating the main elements of the proposal.

We propose that in transition countries applying for EU membership, the domestic currency should be replaced as quickly as is practicable by the euro.[1] This means that domestic cash in circulation and in bank vaults would be replaced by euro notes and coins, which would be bought using a country's international reserves. At the same time all domestic currency denominated bank deposits, private contracts, wages and tax obligations would be re-denominated into euro at the "conversion rate" chosen by the government of the country concerned.[2] We wish to make it absolutely clear that we are **not** proposing, and never have proposed, the introduction of a "Polish euro" or of a "Czech euro" – i.e. of a new currency which would be different from that created by the European Central Bank (ECB).

We believe that it would be most beneficial for some transition applicant countries (TACs) if unilateral euroization were implement with the acceptance of the European Union (what we call "consensual unilateral euroization"). Thus, by "unilateral euroization" we mean that euroization would be

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[1] The technical preparations would probably take about one and a year.

[2] Whether the euro would become a country's "national currency" or whether there would cease to be a national currency in the TAC after the abolition of the złoty or crown is a legal question which we leave to the lawyers. From an economic point of view it is a secondary matter.

implemented by buying the necessary euros using a country's international reserves and before the country becomes a member of the Economic and Monetary Union (indeed, possibly before it becomes a member of the European Union). We do not mean that UE should be implemented without prior discussions with the EU, and without attempting to obtain EU acceptance of it. At present the EU is opposed to unilateral euroization. We believe that this EU opposition is not well grounded in EU law or in the interests of current EMU member states [on the former see Appendix 1, on the latter Bratkowski and Rostowski 2001]. It should therefore be possible to convince the EU as to the merits of unilateral euroization for both sides, and to agree terms which would obviate any well-founded concerns that the EU or the ECB might have. TACs should therefore start talks aimed at convincing the EU to change its stance, while at the same time preparing the legal and institutional basis for the change.[3] Failure in these negotiations would not mean that TACs would have to give up the idea of UE (it could still proceed with "non-consensual unilateral euroization"). However, it might be better under such circumstances to adopt a currency board arrangement instead. Such a system is very similar to UE, but would be slightly less beneficial [Rostowski, 2001a].

Finally, our proposal for UE is a response to the acute "problems of success" which face advanced transition economies as they approach EU membership. Successful market reforms in the TACs and the perspective of EU accession lead to expectations of rapid growth. This in turn means that domestic residents wish to save less so as to smooth consumption, while foreign investors are willing to provide the financing needed to bridge the gap between savings and investment. The result is high capital account surpluses and their corollary high current account deficits,

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[3] For instance, setting up the Banking Sector Liquidity Fund which we discuss below.

which makes the TACs very susceptible to capital inflow "stops" (reversals are not necessary) leading to currency crises. In the case of Poland the current account deficit has been around 5-8% GDP over the last three years, which is usually considered well within the "danger zone" in which a currency "stop" may threaten due to fears of un-sustainability by investors.

Neither monetary nor fiscal policies can be *counted on* to keep these developments in check. Under a floating exchange rate regime, contractionary monetary policy will cause the domestic currency to appreciate, which on the traditional Mundell-Fleming view is likely to increase the CA deficit even further. Expansionary monetary policy will lead to faster inflation and will make the achievement of the Maastricht inflation criterion impossible. Under a fixed exchange rate, monetary policy is not available as an instrument. Fiscal policy (which can be used with either floating or fixed exchange rate regimes) may also prove ineffective in improving the CA, as a tightening of the fiscal stance may simply make foreign lenders more willing to lend to domestic private sector borrowers (we know that foreign investors do nowadays look at the overall indebtedness of a country's residents, both public and private). Expansionary fiscal policy would, in the traditional way, increase aggregate demand and thus tend to increase the CA deficit.

Given the difficulty of reducing high CA deficits, many TACs are very exposed to the risk of a sharp depreciation of their currency, commonly called a currency crisis. In countries with high levels of "liability dollarization/euroization" [Calvo, 1998] such crises will lead to increases in the real debt burden and to depression (Indonesia is a recent example).

In the rest of the paper we shall not repeat the above arguments in favour of unilateral euroization *in extenso*. Those who are interested are referred to our previous papers

[Bratkowski and Rostowski, 2001 and Rostowski 2002]. Sections 2 to 5 deal with some new monetary, fiscal and exchange rate *policy* considerations (including consideration of which of the TACs already constitute an optimum currency area with the EMU countries). Sections 6 to 8 deal with the fiscal and financial costs and benefits of UE. Appendix 1 deals with some of the legal and political aspects of EU opposition to UE.

2. THE EFFECTIVENESS OF MONETARY AND FISCAL POLICY IN THE ABSENCE OF UE IN THE RUN-UP TO EU AND EMU MEMBERSHIP.

It cannot be denied that fiscal policy *may* be effective in limiting CA deficits. The existence of the countervailing effect we describe means that a given fiscal tightening will have that much smaller an impact on the CA. Thus the shift of the US to a fiscal surplus during the 1990s did not prevent its CA deficit from growing. We suspect that, given normally low interest rates, a very large fiscal tightening would be needed in many countries to reduce the CA deficit to a supposedly safe level of about 5% of GDP. Such a tightening (of say 4% points of GDP) might often not be politically feasible. This does not mean that we are not in favour of fiscal tightening, we are. But we wish to see it for its own sake, in order to free resources for private sector development, and not to achieve a doubtful improvement in the CA. In the meantime, CA improvement cannot wait.

Recent events in Poland suggest that monetary policy *can* be used effectively to improve the current account. Very high real interest rates during 1999-2000 (on occasion in excess of 13 percent when deflated by the CPI and of 16 percent when deflated by the PPI) have limited aggregate demand sufficiently to reduce the CA deficit to about 5% of GDP in 2001, in spite of a large nominal - and massive real -

appreciation of the z³oty against the euro during the period. However, the cost has been considerable, with real GDP growth decelerating from over 6% in 1997 to about 1% in 2001.[4]

Thus, the traditional path to EU and EMU accession either exposes fast growing applicant countries to a high risk of currency crisis, or forces them to grow far more slowly than they could with unilateral euroization. Since real convergence is one of the purposes of EU accession for the TACs, the orthodox path is at variance with the ultimate goal, something which cannot be desirable. This is the crux of our argument.

3. OPTIMUM CURRENCY AREA CONSIDERATIONS.

Asymmetric risks are a danger if a country and the monetary union it proposes joining are not part of an optimum currency area (OCA). Our view is that many TACs satisfy the OCA conditions *to the same degree as present members of EMU*, or are very close to doing so. Since the TACs are committed by their acceptance of the *acquis communautaire* to joining the EMU at some stage, what is good enough for the EMU's current members should be good enough for the TACs. Even if some of the TACs satisfy OCA conditions a little less than current EMU members, this merely exposes them to slightly higher risks from idiosyncratic shocks than current EMU members are exposed to. In making a choice on UE, these slightly higher risks must be set against the very high costs described above of keeping one's national currency in the pre-accession period.

The main reason we think that many TACs are close to satisfying OCA requirements to a similar degree as current EMU members is their very high level of trade integration

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[4] Given the size of the real appreciation of the z³oty, even this lower CA deficit may turn out not to be adequate protection against a currency crisis.

with EMU countries. Trade with other members of a currency area as a share of GDP is a good indication of the extent to which idiosyncratic shocks to a country's economy are likely to be amortized by its trade with the rest of the currency area. Trade with other members of a currency area as a share of total trade is a good indication of the extent to which a country would be exposed to movements in the exchange rate of the common currency against the currencies of "third countries". Thus Table 1 shows that in 1999:

1.   **All of the TACs** traded a higher share of their GDP with EMU countries than did the weighted average of EMU members in the year preceding the launching of the euro;
2.   **All of the TACs** traded a higher share of their GDP with EMU countries than six of the current 12 EMU members (including the four largest Germany, France, Italy and Spain);
3.   **All of the TACs** traded a higher share of their total trade with EMU countries than two EMU members, and **six** of the TACs traded a **higher** share of total trade with EMU than **all but two** current EMU members

Thus, if these ratios were the only criteria for satisfying OCA requirements, we could already conclude that many TACs satisfy them.

It is argued [e.g. Fidrmuc and Schardax, 2000] that a higher share of intra-industry (II) trade within a currency area will lead to more synchronous business cycles, because industry specific supply or demand shocks are then more likely to be symmetric across countries. We therefore measure intra-industry trade with EMU/GDP for EMU members and applicant countries, and find that seven TACs have a share of II trade with EMU/GDP which is higher than that of three EMU members.

A. Table 1
Degree of trade integration of TACs with EMU compared to that of EMU countries

	EMU trade/ GDP	Intra-industry EMU trade/ GDP(estimated)*	EMU trade/ total trade
Belgium-Lux.	81.4	59	56.8
Hungary	73.2	43	68.7
Czech Republic	65.1	43	61.7
Estonia	62.0	24	45.1
Slovenia	61.8	37	67.1
Slovakia	58.9	29	56.8
Netherlands	48.8	38	47.9
Ireland	44.2	22	33.2
Bulgaria	39.3	13	54.2
Portugal	38.5	19	67.1
Austria	37.6	26	63.2
Romania	34.7	10	66.4
Latvia	30.9	7	46.8
Poland	27.6	12	58.5
Lithuania	26.5	6	36.0
Spain	25.5	17	58.3
France	21.7	18	51.9
Germany	20.8	17	43.8
Finland	20.7	10	34.0
Italy	19.5	12	49.3
Greece	17.4	5	53.4

Source: Eurostat. Data is 1999 for accession countries and 1998 for EMU countries.
* The shares of intra-industry (II) trade with EMU countries in GDP were estimated by taking the 1997 shares of II trade with the EU in Fidrmuc and Schardax [2000] and applying them to columns 2 and 4.

However, it needs to be remembered that inter-industry trade also contributes to the convergence of business cycles in a currency area. Although it need not protect a country from an asymmetry of industry-specific shocks with the rest of the area, it will nevertheless reduce the asymmetry of aggregate shocks. Thus, an increase in aggregate demand in EMU (but not in a particular TAC) will spill over to the TAC through increased demand for its exports, whatever the nature of these, and an asymmetric increase in aggregate costs (for instance as a result of increased energy prices which affects the TACs more than EMU) will be partly cushioned by the smaller fall in EMU output and therefore demand.

Thus, it is hardly surprising that studies show that business cycles are more correlated between the advanced TACs and Germany than between important EMU members. Boone and Maurel [1999], using de-trended unemployment, show that between 55% (Poland) and 86% (Hungary) of the advanced TACs' cycles are explained by German cycles, whereas only 43% of Spanish and 18% of Italian cycles can be explained in this way. Fidrmuc and Schardax [2000] find that Poland's industrial production is as closely correlated with Germany's as is Austria's, and more so than those of Switzerland or Italy. Hungary and Slovenia's industrial outputs are more closely correlated with Germany's than is that of Italy, although those of the Czech Republic and Slovakia are far less correlated.

It should be repeated, however, that synchronicity of business cycles is not in itself a requirement for a small country to adhere to a much larger currency area. Thus, *ex ante,* if shocks are mainly demand-generated, a small country whose autonomous aggregate demand is negatively correlated with that of a large currency area may benefit from acceding to it. Downturns in domestic demand will be offset by increases in demand in the rest of the area, reducing overall output variability. Joining the currency area will increase trade with

it, and may therefore increase the smoothing effect by more than the elimination of the exchange rate effect reduces it.[5] *Ex post* this would result in fluctuations becoming more correlated.

4. INFLATION AND EXCHANGE RATE MISALIGNMENT AFTER CURRENCY CONVERSION.

Wójcik [2000] worries about exchange rate misalignment as a result of inflationary inertia after the domestic currency is converted into euro. Our solution is a simple up front devaluation at the moment of euroization [Rostowski, 2001b]. Wójcik claims this will make inflation "harder to control". This is clearly only the case if the "pass-through" effects of a devaluation are large.[6] But if they are then devaluation will not affect the real exchange rate much, freedom to devalue is worth little, and one may as well euroize.

Furthermore, our recommendation is based on the existence of high rates of labour productivity growth in the TACs.[7] On the one hand this generates the problem in the first place, because rapid expected GDP growth is what causes residents to wish to be large net borrowers, and foreigners to be willing to be large net lenders to (or investors in) the country. On the other hand, rapid labour productivity growth means that a mistake in initially setting the conversion rate for the domestic economy, such that a margin of output does become uncompetitive, is likely to be made up quickly.[8] Of course, this suggests that TACs with a long record of relatively slow labour productivity growth, such as the Czech Republic, may have less to gain and more to lose if they adopt UE.

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[5] The "exchange rate smoothing effect" is due to the fall in the value of the currency of the country in which demand falls relative to that of the country in which demand rises.

[6] There will, clearly, be some inflationary effect of the up-front devaluation, our point is that we do not expect it to be large.

[7] In the absence of the very tight macroeconomic policies required to contain the CA deficit within safe limits.

[8] We are grateful to Eduardo Borensztein for this point.

The argument made by some opponents of UE, that the rate of labour productivity growth is irrelevant, because trade unions will force real wages to rise by more than productivity gains so that unit labour costs increase whatever the rate of productivity growth, is not a convincing argument for exchange rate flexibility. Unions which are strong and clever enough to appropriate more than the full amount of labour productivity growth are likely to be strong and clever enough to enforce wage increases which will compensate their members for any real depreciation!

Finally, we see no reason why the credibility of the regime should be dramatically undermined, as suggested by Wójcik, just because the euroization is *unilateral*. While we fully expect UE to be somewhat less credible than full EMU membership, we expect it to be somewhat *more* credible than a currency board arrangement, such as exists in Estonia, Lithuania or Bulgaria. And currency boards have proved very credible, far more so than soft-pegs of the ERM variety. We expect UE to be more credible than a traditional currency board in a *non-applicant* country for two reasons:

1. Although a domestic currency could in principle be re-created to enable depreciation, the technical preparations would be long and complicated and impossible to keep secret, giving speculators a large amount of warning. This would in itself reduce the benefits to a government contemplating such a move, and therefore speculators' expectations of such an event. In currency boards the domestic currency already exists, so all that needs to be changed are the constitutional provisions which set up the CB arrangement. Thus, with euroization the "poison pill" defense against speculation is even stronger than in the (strong) case of a currency board.

2.   UE would be expected to last only a relatively short time (say five years) before the TAC concerned would join EMU as a fully-fledged member.[9] Also, it would be absurd for a country whose strategic goal is EU and EMU membership (within about 4 and 6 years respectively) to reintroduce a national currency.

Generally, the credibility of the UE regime would be reflected in the interest rates which would obtain under it. We return to this absolutely central matter in Section 6.

5. SATISFYING THE MAASTRICHT INFLATION CRITERION.

There is considerable confusion regarding the implications of UE for TAC's ability to fulfill the Maatricht Inflation criterion (MIC). Fast growing countries such as the TACs usually exhibit the Harrod-Balssa-Samualson (H-B-S) effect, with the prices of non-tradeables rising faster than the prices of tradeables, and the rate of increase in the relative prices of non-tradeables being faster than in slower growing countries.[10] This means that if tradeables price inflation in a TAC were the same as in the EMU (as would be the case under UE), then overall inflation would be higher – possibly sufficiently higher to make it impossible for TAC to fulfill the MIC. With a flexible exchange rate inflation can be lowered to the required level by allowing the domestic currency to appreciate (at present the so-called "reference value" which defines this level is: 1.5% above the average inflation rate in the three best performing countries of the EMU). This would put downward pressure on domestic tradeable goods prices, as well as reducing domestic non-

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[9] This factor does not make UE more credible than a currency board in an advanced TAC expected to shortly join the EU and EMU.

[10] This is a result of faster growth of labour productivity in their tradeables sector than in: (1) their non-tradeables sector; and (2) the tradeables sector of slow growing countries such as the EU.

tradeable goods inflation. Since this option would not be available under UE or a currency board, their opponents claim that either of these systems would make satisfying the MIC and therefore joining the EMU impossible for many years (maybe for as long as two decades) [Gomu³ka 2001].

We disagree strongly with this view. In the first place all that will have to be done under UE is to reduce domestic demand sufficiently for non-tradeables' price inflation to fall sufficiently for average inflation to satisfy the present "reference value" of the MIC. In the case of Poland non-tradeables for which prices are market determined account for about 30-40% of the CPI basket. Thus, if inflation in the three best performers in EMU were to be 1.5% (see fn.11), then the reference value would be 3%, and if tradeables' and non-tradeables' inflation were the same within the EMU, then the maximum level of non-tradeable goods' inflation which would still allow Poland to satisfy the present reference value of the MIC would be 5.25-6.5%. This does not seem to be an unimaginably low level to achieve through a tightening of fiscal policy. Should traded goods' inflation in the EMU (and Poland) be lower than the 1.5% assumed above, then the allowable level of non-traded goods' inflation in Poland would be even higher.

As discussed, with a floating exchange rate a temporary tightening of monetary policy will result in nominal appreciation of the currency and downward pressure on both traded and non-traded goods' inflation. In the traded goods sector this may require domestic nominal price *reductions*. [11] Under UE

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[11] They would certainly need to rise less than in the three best performing EMU member states. Given that the ECB target for average inflation in the EMU is 2%, inflation in the 3 best performers is likely to be 1.5%. Even in the EMU, tradeable goods inflation will, if anything, be lower than average inflation, leaving practically no room for stable tradeable goods prices. The key question is: how large a tradeable goods recession would a country need to bring about a modest fall in domestic nominal tradeable goods prices under a flexible exchange rate? The answer might be: not a very large one. With labour productivity growth rapid, prices of tradeables could fall while wages in the tradeable goods sector continued to rise (but not quite as rapidly as before).

the non-traded (services and construction) sector would bear more of the costs of the temporary reduction in inflation below trend which the MIC requires. This could be achieved by a temporary "social pact" restraining wages in the non-traded sector and limiting the growth of administratively set prices or by a temporary tightening of fiscal policy, or by a combination of all three.[12] A reduction of domestic aggregate demand would suspend the functioning of the H-B-S effect, which operates through employers in the traded goods sector (which has rapid labour productivity growth) competing for employees from the non-traded. This pushes up wages, costs and prices in the non-traded sector. It is important to stress that in both cases (a floating exchange rate and UE) the contraction would be quite short-term (one to two years) since the reference value of the MIC needs to be satisfied for only one year. It therefore seems to us that this problem has been blown up out of all proportion.

Furthermore, we recommend that after accession to the EU, new members should argue for an adjustment of the MIC. The criterion itself merely requires "lasting and sustainable convergence of inflation rates" as defined by the reference value. However, the reference value itself can be changed by the European Council[13], and does not require changing the Treaty. Given that most new members will be affected by the H-B-S effect, and that some will have currency boards[14], a

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[12] Gotz-Kozerkiewicz [2000] as arguing that cost recovery requires remaining administrative prices to be freed, and that this may cause the real exchange rate to appreciate beyond its equilibrium level. First, "cost-recovery" can be delayed for a year or two, usefully putting downward pressure on the price index, just when a country wishes to join EMU. Second, in an economy with rapid labour productivity growth achieving "cost-recovery" prices should not be a problem for competitiveness. Third, most remaining administered prices are for non-tradeable services rather than goods, so their removal will have a small effect on competitiveness, mainly hitting households. Finally, for a given budget deficit, removing price controls removes the need for subsidies to their producers, reducing taxes on other firms and thus increasing the competitiveness of those firms. If the taxes to finance price controls are paid for by consumers, then their removal changes nothing. The real exchange rate will deteriorate only if consumers paid the taxes to finance the price controls, while firms will pay the higher free prices.

[13] Although only then current EMU members will be able to vote.

[14] At the least Estonia, Lithuania and Bulgaria (which is expected to join after 2008).

strong lobby will exist for adjusting the MIC so that it applies only to tradeable goods inflation. Such calls will be all the more persuasive since the MIC calls for "sustainable convergence". Yet because of the H-B-S effect, fast growing countries such as Ireland have only been able to satisfy the MIC reference value for a short time before entry into EMU, after which they have exceeded it by considerable margins. Like fast-growing EMU members, countries which have unilaterally euroized can have inflation in excess of the present MIC reference value only as a result of the H-B-S effect, since the prices of their tradeable goods will be the same as in the EMU.[15] Therefore, a country which has euroized, has its fiscal accounts under control and is growing fast (showing that it retains competitiveness in its traded goods sector) can be said to have satisfied the spirit of the MIC, even if it cannot satisfy the present reference value. Thus, not only is there likely to be a significant lobby in favour of changing the MIC after 2004, but there are also strong objective reasons for doing so in the case of countries which will have unilaterally euroized or which have a well-established currency board.

Of course, UE only makes sense for those TACs which are capable of maintaining basic fiscal discipline. This is (correctly!) a requirement for EMU membership. UE will reduce the costs of servicing public debt. It is our assumption that this relief would be used to reduce the fiscal deficit rather than to increase public expenditures while maintaining the deficit at an unacceptably high level. We see UE as a better (less painful) route to EMU than the traditional one. We do not see it as way of avoiding the need for EMU membership with all its constraints. The current fiscal problems of the Czech Republic, Hungary and Poland cast doubt both on their ability to achieve EMU membership and to benefit from unilateral euroization. UE can help put a country's

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[15] They could also have high demand driven inflation in the non-tradeables sector if they had a large increase in their budget deficit. But this would likely put them in breach of the Maastricht fiscal deficit criterion, barring entry into EMU for that reason.

fiscal house in order, but it cannot, and should not, be a substitute for fiscal discipline or rapid EMU membership. We are constantly reminded by the opponents of euroization that it is not a panacea, and all we can do is humbly agree.[16]

6. WILL INTEREST RATES FALL UNDER UNILATERAL EUROIZATION?

One of the most striking points in Wójcik [2000] is the claim that unilateral euroization need not lead to a reduction in medium and long term interest rates, because the abolition of the domestic currency, although it leads to the abolition of currency risk in lending by foreigners to domestic residents, may increase their default risk. This could happen because devaluation is no longer available as a tool to increase the competitiveness of domestic producers. Interest rates on loans to domestic businesses might therefore actually rise on balance, as might rates on loans to the government (whose tax revenue depends on the profitability of domestic business). This argument is illustrated using the case of Argentina. Wójcik points out that in the late 1990s real interest rates were similar in Argentina and Poland, implying that Polish rates need not fall after euroization, since Argentina had a currency board arrangement "hard-pegged" to the US dollar with many similarities to unilateral euroization. But Wójcik does not say just how exceptional the situation of Argentina is. The country exchanges only 16% of its trade and 2.7% of its GDP with the United States[17]. This contrasts with 58.7% and 27.6% respectively in the case of Poland's trade with EMU countries. In fact, Argentina is one of the countries in the whole world which *least* satisfies conventional OCA criteria for establishing a currency union with the United States.[18] It is this, together

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[16] Nor have we ever claimed, though others have, that euroization will necessarily be a catalyst for structural reforms.

[17] Argentina even trades 60% more with the EU than with the US!

[18] There are other, non-conventional, non-trade criteria, which Argentina may satisfy better, see Mundell [1973].

with fiscal irresponsibility, which has exposed Argentina to the problems described. However, we have seen (Table 1) that Poland and many other TACs satisfy the OCA requirements at least as well as about half of the existing EMU members. Thus, the Argentine example, while polemically useful is in practice irrelevant, unless one wishes to argue - as many US economists have - that the present EU itself is far from being an optimum currency area. If one believes this, then it may be that TACs should *never* join the EMU since they are unlikely to become even more integrated in terms of trade than they are at present.[19] However, in that case, neither should they join the EU, since ultimate EMU membership is a *requirement* of EU membership.

7. ABSENCE OF A LENDER OF LAST RESORT UNDER UNILATERAL EUROIZATION.

We have addressed this argument at length in Bratkowski and Rostowski [2000], where we made some of the following points:

1. Monetary expansion is, of course, inconsistent with any fixed exchange rate system (unless the expansion is very modest). Nevertheless, as Goodhart et al. [1998] point out, LOLR need not involve any monetary expansion. The central bank can lend to an affected bank, and at the same time undertake liquidity reducing open market operations, so that the money stock remains unchanged. Under euroization, although the central bank is unable to increase the money supply, LOLR can be provided by the government guaranteeing loans to the stressed bank (as long as the government itself is solvent). The money supply would remain constant, but the distribution of liquidity would be

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[19] Except in the share of intra-industry trade to GDP.

changed in the direction desired by the authorities.

2. In countries with currency board arrangements (CBAs), LOLR is in any case very limited, and this will not change as a result of euroization.

3. Pure LOLR activity is aimed at preventing the illiquidity of *solvent* banks. In many TACs foreign owned banks held over half of all bank assets in 1999 [EBRD 2000]. The foreign owners should know the financial condition of these banks sufficiently well to provide them with liquidity when they are illiquid but solvent.

Table 2
Foreign Bank Ownership by Assets

Albania	20.0	Hungary	56.6
Bulgaria	12.4	Lithuania	59.8
Croatia	83.2	Poland	70.0*
Czech Republic	70.0	Romania	52.6
Estonia	97.0	Slovakia	50.0

Sources: IMF World Economic and Financial Surveys and EBRD Investment Profiles (2001).
* By mid-2001 63% of deposits in Poland were held by banks with foreign majority ownership.

4. For the remaining, domestically owned, banks we have suggested the creation of a "Banking Sector Liquidity Fund" (BSLF), into which the international reserves of the National Central Bank remaining after euroization would be placed. In the case of Poland, after allowing for a modest 10% up front devaluation of the z³oty at the time of conversion, we have "coverage" by the BSLF of 100% of sight deposits and 25% of total deposits (including the foreign currency deposits for which there is no LOLR or BSLF at present). What is

more, in a crisis the BSLF would only need to supply liquidity to Polish controlled banks. Even at today's share of foreign ownership in Polish banks, this more then *doubles* the BSLF's "coverage" of deposits to some 270% of relevant sight deposits and almost 70% of relevant total deposits.[2021] Finally, we should note that the share of deposits at foreign controlled banks in Poland is growing fast due to the purchase of Polish banks by foreigners. When the share reaches 100% there will be no need for a BSLF at all.

5.   In countries with very high shares of foreign currency deposits (such as Croatia, where the share is about 90%), LOLR is already limited by the level of the central bank's international reserves and its ability to increase them by borrowing.

6.   As for solvency (rather than liquidity) crises, these require recapitalisation rather than LOLR support. They therefore depend on the *solvency* of the government of a country (as "borrower of last resort") rather than on the *liquidity* of the central bank. Most, though not all, TACs are borrowers in good standing.

8. THE SEIGNORAGE COSTS OF EUROIZATION.

It is usual to calculate both a "flow" and a "stock" seignorage cost of adopting a foreign currency. The "flow cost" is the loss of revenue resulting from the fact that during the period of euroization (between the abolition of the domestic currency and entry into EMU as a fully-fledged member) the central bank of a euroized country will no longer receive

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[20] Incidentally, this disposes of the worry that the absence of a national LOLR would give foreign owned banks a competitive advantage.
[21] The existence of a funded deposit insurance scheme further reduces the danger of illiquidity at solvent banks (whoever they may be owned by) - as well as reducing the likley need to recapitalise insolvent ones.

interest on that part of its international reserves which have been exchanged for the domestic cash which has been withdrawn. This loss of seignorage revenue definitely exists, and in most TACs it varies between 0.5% ad 1% of GDP. Although it has to be reduced when the central bank engages in a policy of sterilized intervention (which introduces sterilization costs, that have to be set against seignorage revenues).

The "stock seignorage cost" of adopting a foreign currency is that which results from the need to exchange the existing stock of domestic currency notes and coins for foreign notes and coins. In the case of Poland, this would be about 6.5% of one year's GDP, a very large amount. However, this "stock" cost is not in fact borne in the case of euroization, where only the "flow seignorage cost" is relevant. This is because upon joining EMU, a country's National Central Bank (NCB) will be obliged to transfer to the ECB all of the income from the assets which correspond to (or "back") its monetary liabilities. This revenue from all the NCBs which are members of the European System of Central Banks (ESCB) will then be redistributed to NCBs on the basis of their share in ECB capital.[22] Each NCB's share in the capital of the ECB depends in equal proportions on the population and GDP of its country, and is thus *completely independent of the NCB's monetary liabilities.*[23] A TAC which has previously euroized unilaterally, and has bought in all of its monetary liabilities in exchange for euro notes and coins,[24] will thus enter EMU *without any monetary liabilities.* As a result, it will not need to transfer *any* income to the ECB, yet it will receive the same income from its share in ECB capital as it would had it not euroized first.

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[22] After deduction of ECB expenditures.

[23] After the expiry of a transitional period. This period is due to end before any TAC joins EMU, be it by the traditional route or after a period of unilateral euroization.

[24] Which it buys with its international reserves.

This system for the redistribution of seignorage revenue is equivalent to the NCBs having to transfer to the ECB assets corresponding to their monetary base. Put even more simply, it is equivalent to the NCBs having to *buy* the euros used to replace their monetary base from the ECB.[25] A unilaterally euroizing country merely completes this transaction before joining EMU, rather than at the moment of joining. This is why no "stock seignorage cost" of euroization exists for such countries.

9. SUMMARY.

There will be no "stock seignorage cost" for unilaterally euroizing applicant countries. The suggestion that short-term interest rates may not fall as a result of euroization is weakly grounded. The example of Argentina is not apposite, as on traditional criteria that country clearly does not form an optimal currency area with the US, to which its currency was "hard-pegged". On traditional OCA criteria, most TACs do belong to an OCA with EMU countries to the same extent as a number of current EMU members. On some criteria they do so to a greater extent than the majority of current EMU members. The absence of an unlimited LOLR capability after euroization should not increase the risk to the banking system significantly in the majority of countries in which there is a large share of foreign ownership of banks, or in those in which there is a large share of foreign currency denominated deposits, or in countries which have currency board arrangements. For domestically owned banks with previously domestic currency denominated deposits, there is the possibility of establishing a Banking Sector Liquidity Fund.[26]

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[25] Since a monetary union occurs after this transaction, the base can be bought by the NCB from the ECB for any good quality assets including domestic ones. International reserves need not be used.

[26] As well as the existence already now of deposit insurance schemes in some countries.

Any initial exchange rate misalignment at the time of conversion can and should be avoided by an "up-front" devaluation and will be in any case to be eroded over time if there is faster productivity growth in TACs than in the present euro zone. Monetary and fiscal policy *may* be effective as a means of limiting dangerously large current account deficits. But the question is rather whether it *will* be *reliably* effective. We believe that we have shown that one cannot count on that. As a result, without euroization TACs are at severe risk from "capital inflow stops" and currency crises.

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APPENDIX1. THE LEGAL ASPECTS OF UNILATERAL EUROIZATION.

In the European Commission's Note [August 2000], it is claimed that the sequencing of steps to the adoption of the euro is set out in the Treaty of Amsterdam, that this sequencing is therefore part of the *acquis communautaire,* and that it must therefore be accepted by EU applicant countries as it stands. What is more, since unilateral euroization (UE) does not conform to this sequencing UE cannot be adopted by applicant countries. If this were indeed the case, then we would favour the adoption of currency boards (CBs) by those countries for which we have recommended UE. Currency boards are now accepted by the EU as a suitable path to EMU. The same arguments advanced for UE hold for a CB, only the benefits are slightly smaller. Interest rates are likely to be slightly higher under a CB than under UE, and speculation is more likely against a CB since it is easier to abandon. However, with a CB less seignorage is foregone than with UE.

Nevertheless, it is our view that on a close reading the Amsterdam Treaty does *not* set out a sequence of steps which have to be undertaken before a country adopts the euro, and that therefore such a sequence is not part of the *acquis.* Applicants will be admitted to the EU as Member States with a derogation regarding the EMU. This derogation is defined (art. 122(3) of the Treaty) as the country not being subject to articles 104(9) and (11), 105(1), (2), (3) and (5), 106, 110, and 112(2)b of the Treaty, as well as Chapter IX of the Statute of the European System of Central Banks (ESCB). These articles relate to a country's membership of the ECB, the ESCB, its liability to sanctions should it break the fiscal deficit requirements of the Treaty[27], its right to vote in the European Council on exchange regime agreements between EMU and

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[27] Previously the "Pact for Stability and Growth", which is now part of the Treaty.

non-Community countries and on the EMU's exchange rate policy, as well as being subject to the *requirement* that *only* euro notes be legal tender on its territory.

None of these things will happen as a result of UE. The candidate will evidently not accede to EMU institutions, nor will it have the right to vote on EMU exchange rate policy. It will not be subject to sanctions for failure to abide by the fiscal deficit limits of the Treaty, nor will it be *required* to make euro notes the only legal tender on its territory. If it *decides* to make euro notes the only legal tender on its territory, this will be a free choice, not because of the requirement of the Treaty. An applicant which unilaterally euroizes therefore fully meets the Treaty's definition of a Member State with derogation from EMU. Thus UE does *not* fail to conform to the *acquis*.

From our point of view, the biggest problem is presented by art.123(5). This states that if it is decided to abrogate a member State's derogation from EMU (i.e. to admit it to EMU institutions on the basis of it having fulfilled the Maastricht convergence criteria set out in art.121(1)), then the Council shall in agreement with the Member State[28] concerned "adopt the rate at which the euro shall be substituted for the currency of the Member State...". Clearly if a national currency does not exist then "the rate at which the euro shall be substituted" for it cannot be adopted, either by the Council or anyone else. However, the EU should accept that this paragraph applies only to those countries which actually have a national currency upon entering the EU, but that it does not apply to those which do not have such a currency. Indeed, if a country's *national* currency is already the euro, as would be the case after unilateral euroization, it would be strange - to say the least - to suggest that some rate other than 1:1 should be

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[28] The Council acts with the unanimity of the member States, on a proposal of the Commission and after consulting the ECB.

adopted. We believe that if the EU becomes convinced that UE is in the interests of applicants and not against the interests of Member States, then they will adopt such an interpretation of art. 123(5).

One final point needs to be mentioned. Art. 123(5) states that at the abrogation of the derogation, apart from adopting the rate at which the euro shall be substituted for the national currency of the Member State concerned, the Council will also "take the other measures necessary for the introduction of the euro as the single currency in the member State concerned." We believe that this does not rule out UE, because UE means adopting the euro as a country's national currency. We only have the "introduction of the euro as the *single currency* [our italics] in the Member State concerned" when that State comes to participate in the common institutions which determine the EMU's monetary and exchange rate policies. This of course will not happen upon UE, but only once the derogation is abrogated.

The reasonableness of our interpretation of the Treaties is supported by the noticeably softer line on euroization which was taken by the Ecofin Council of Finance Ministers meeting on November 7 2000, and which has been subsequently confirmed by the Nice Summit of December 16 2000. Unlike the Commission's note discussed above, the Ecofin's Conclusions [Ecofin 2000] does not state that UE is illegal for applicants, merely that it "would run counter to the underlying economic reasoning of EMU in the Treaty." After stating that "participation in ERM2 before adoption of the euro[29] is a legal requirement" the Opinion continues: "The only clear incompatibilities *vis-à-vis* the ERM2 that can be identified already at this stage are fully floating exchange rates, crawling pegs and pegs against anchors other than the

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[29] i.e. before "abrogation of the derogation" as defined above.

euro." Finis, with no mention of euroization.[30] The red herring of the supposed illegality of unilateral euroization seems to have finally been laid to rest by Pedro Solbes (the Commissioner responsible) himself, who in an interview on 13 September 2001 in Budapest stated: "We never said that unilateral euroization is illegal." [Solbes 2001].

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[30] European Commission [2000] on the other hand went on at this point to say: "Euroization is of course excluded by the Treaties."

INFLATION TARGETING IN THE CONTEXT OF IMF-SUPPORTED ADJUSTMENT PROGRAMS
*MARIO I. BLEJER, ALFREDO M. LEONE, PAU RABANAL, and GERD SCHWARTZ**

INFLATION TARGETING IN THE CONTEXT OF IMF-SUPPORTED ADJUSTMENT PROGRAMS

MARIO I. BLEJER, ALFREDO M. LEONE, PAU RABANAL, and GERD SCHWARTZ*

This paper argues that the IMF's traditional monetary conditionality—a ceiling on net domestic assets of the central bank and a floor on its net international reserves—should be adapted in IMF-supported adjustment programs with countries that have a framework of explicit inflation targets for the implementation of monetary policy. This adaptation should aim at enhancing correspondence and consistency between the monetary objectives of the central bank and the targets established under the IMF-supported adjustment program, as well as between the different instruments used to achieve the policy objectives and targets. The paper reviews various general options in this regard, and, using the case of Brazil as an example, demonstrates how these options may be implemented in practice. JEL: E52, E31, E17.

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Over the past decade, the staff of the IMF has frequently been engaged in assessing the functioning and effectiveness of inflation targeting in IMF member countries that adopted this scheme as their monetary policy framework. As inflation targets were first embraced by various industrialized economies, however, this involvement was restricted to the IMF's surveillance function—that is, it was part of the macroeconomic analyses performed during the regular annual consultations between the IMF and its member countries and not associated with IMF lending operations.

More recently, however, a number of emerging market economies have abandoned their fixed exchange rate regimes and moved toward a flexible exchange rate system with an explicit inflation targeting framework for monetary policy. In this context, it became increasingly likely that the IMF would face a situation in which it would be called upon to provide financial assistance—and therefore agree on a financial program—with a country that is using, or has decided to adopt, explicit inflation targets as the key component of its monetary policy framework. Indeed, shortly after adopting a floating exchange rate regime in mid-January 1999, the Brazilian authorities announced their intention to put in place a formal inflation targeting framework and, in the months that followed, the framework was implemented in the context of the ongoing IMF-supported adjustment program.

These developments posed particular analytical and practical challenges in terms of the operational procedures of the IMF in its financial relations with its member countries. The challenge resulted from the need to reconcile the inflation targeting framework with the conceptual and practical aspects

of *conditionality*. Conditionality is the device utilized by the IMF in its financial programs, to establish safeguards that would help to maintain a country's external viability and ensure that its resources are only used temporarily. This, in turn, implies the adoption of so-called *performance criteria*—that is, formal quantitative targets on a defined number of variables, agreed between the member country and the IMF. The evolution of these variables is subject to verification, and fulfillment of these criteria is the condition for a disbursement to take place. In the monetary policy area, performance criteria in IMF-supported adjustment programs (henceforth IMF programs) have traditionally been set in terms of specific quantitative limits on the evolution of certain monetary variables. Typically, a floor is set for the level of net international reserves (NIR) and a ceiling is established on the net domestic assets (NDA) of the central bank.

At first sight, therefore, it would appear that the inflation targeting framework, by the very nature of its operating procedures, may not be compatible with the traditional quantitative monetary conditionality framework usually embodied in IMF programs. This is so because the actual implementation of inflation targeting is largely based on the premise that an independent central bank can use, at its own discretion, its various policy instruments, in the proportions considered appropriate in each particular circumstance, to ensure the attainment of its inflation goal. This seems to clash with a scheme that sets explicit and somewhat rigorous quantitative objectives for key monetary variables.

In these circumstances, and considering that it is the prerogative of each member country to adopt a monetary policy framework of its choice, the IMF faced the question of whether and how to adapt monetary conditionality to the specific features of monetary policy under inflation targeting. In general, it was concluded that, in principle, inflation targeting

could be accommodated within the traditional structure of monetary conditionality in IMF programs, given that this conditionality focuses primarily on a program's balance of payments objective. At the same time, it was also recognized that it may be desirable to modify and supplement traditional monetary conditionality by introducing features that reflect the specific functioning of the inflation targeting framework.[1]

A main objective of this paper is, therefore, to consider the issues that arise from the adoption of inflation targeting in the context of the conditionality embodied in IMF programs, and to discuss a number of options for adapting the monetary conditionality of the programs to these particular cases. The next section briefly reviews in more detail the role of monetary conditionality in IMF programs.

1. IMF PROGRAMS: THE ROLE OF CONDITIONALITY

In IMF programs, conditionality refers to the linkage between the achievement of a set of policy objectives and the continuous access to its resources.[2] The policy objectives are agreed between the IMF and the authorities of the member country, and, while the specific objectives vary from country to country, attaining a viable balance of payments position is the sine qua non target in every program. In this sense, conditionality has a double objective: it helps countries to maintain or regain financial discipline, and it provides a safeguard for the IMF's financial resources—that is, it helps ensure that the temporary financial support provided by the IMF can be repaid over a reasonably short period of time. The

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[1] A number of internal documents were prepared and discussed within the IMF to clarify the various aspects of this approach. Some of the considerations and arguments raised in these discussions are reflected in various parts of this paper.

[2] The word "conditionality" does not appear in the IMF's Articles of Agreement and the concept evolved in stages. For a discussion of the legal aspects of the development of IMF conditionality, see Gold (1979), Guitián (1981); each discusses the evolution of conditionality from an economic point of view.

specification of the policy objectives and calibration of the quantitative targets should ensure that the need for financing is only temporary and that the borrowed funds will be repaid. Put another way, conditionality provides a yardstick for evaluating whether the policies that are being carried out are moving the country toward the achievement of the main policy objectives, in particular a sustainable external balance. By doing so, conditionality also ensures the temporary use of Fund resources.[3]

The effective implementation of conditionality does not involve day-to-day monitoring of a country's macroeconomic policies but requires a mechanism for assessing whether policies are on track for achieving their stated goals, or whether they need to be adjusted in response to unanticipated shocks, changes in economic relationships, or other new information. The monitoring mechanism in IMF programs consists of a set of explicit criteria—particularly *performance criteria*, but also *indicative targets* and *structural benchmarks*—that should be met if a country wishes to make further drawings under the program. These performance criteria typically refer to key macroeconomic variables—fiscal and monetary policy outcomes, including fiscal balances (for example, overall or primary balances), indebtedness (for example, public sector debt, public external debt, and its short-term component), and monetary variables, such as NIR and NDA[4]—that indicate whether macroeconomic policies are on track. Also, IMF programs may include indicators related to certain structural reform measures (for example, structural benchmarks). While

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[3] Analogies could be drawn between IMF lending to countries and central bank lending to troubled financial institutions, as both are ultimately aimed at maintaining or regaining financial stability and supporting economic growth. In both cases, specific contractual arrangements (such as conditionality) are intended to help, among others, to contain moral hazard (that is, the borrower's incentive to take on more risk after obtaining financial support), and to safeguard an orderly repayment of the borrowed resources. See Goodfriend and Lacker (1999) for a discussion related to central bank lending.

[4] Usually, NDA are defined to equal base money minus NIR.

performance criteria permit a backward-looking assessment of policies, periodic program reviews, which are often carried out quarterly, provide for a forward-looking overall assessment of the program vis-à-vis the government's stated macroeconomic policy objectives.

Quantitative macroeconomic performance criteria in IMF programs do not rely on a specific macroeconomic model. They do, however, make use of various balance-sheet identities that link monetary and fiscal variables with the balance of payments to ensure that the program is internally consistent. In general, these performance criteria may best be thought of as signaling devices that flag a possible need for corrective action in case of deviations.

2. MONETARY CONDITIONALITY: THE TRADITIONAL APPROACH AND ITS IMPLICATIONS FOR INFLATION TARGETING

Monetary policy conditionality has been at the core of IMF program conditionality. As mentioned above, it has traditionally relied on two performance criteria: a ceiling on central bank's NDA and a floor on its NIR.[5] Rooted in concepts that arise from the so-called "monetary approach to the balance of payments," and originally applied mostly in the context of fixed exchange rates, where the balance of payments has to adjust to monetary disequilibria, this methodology has come to be used under different monetary policy frameworks. Its primary focus has always been to ensure that a program maintains or leads to external viability rather than to impose tight control over inflation. In this context, performance criteria that set a floor on NIR are designed to indicate whether a program is likely to achieve its external objective. On the other hand, the ceiling on NDA could be seen as an additional protection,

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[5] While these have been by far the most common variables used in the design of monetary conditionality, in many countries other monetary aggregates have been targeted, and, in some cases, subceilings for specific types of domestic assets were also implemented.

since it seeks to ensure that the external objective is not jeopardized by excessive credit expansion or by sterilized intervention (that is, by compensating unprogrammed NIR losses through additional credit creation), which is particularly relevant under fixed exchange rate regimes. In general, this framework is rooted in the assumption that the demand for base money matters from a macroeconomic perspective, and that it is stable and predictable.

In practice, the expected functioning of the NIR/NDA performance criteria would be as follows. An anticipated, or baseline, path for NIR is projected and a floor for NIR is set at or somewhat below the baseline. At the same time, the NDA ceiling is set at a level that, in conjunction with the projected evolution of velocity, is consistent with the NIR baseline. If a country's actual NIR were to start falling toward the agreed NIR floor—maybe because of a sudden external shock— monetary policy would need to be tightened, usually through open market operations, to help stop further NIR losses. In contrast, as long as actual NIR remain close to their baseline, the ceiling on NDA effectively limits base money expansion, thereby preventing monetary policies from putting additional pressure on the external balance and fueling inflation. More generally, the NIR/NDA mechanism sets off warning signals that there is a need for policy action, usually to tighten monetary policies, when NIR fall too low or when there is an oversterilization of unprogrammed sales of NIR. By providing a simple automatic signal, the framework helps country authorities to bring about needed policy actions that it may be reluctant to carry out otherwise. Still, the NIR/NDA framework does not prevent larger-than-programmed NIR increases from fueling monetary expansion and, thus, potentially inflation. A general overview is provided in Table 1.

Table 1. General Overview on the Functioning of the NIR/NDA Mechanism

		Net Domestic Assets (NDA)	
		Higher than programmed	Lower than programmed
Net International Reserves (NIR)	Higher than programmed	Only the NIR target has been met. Usually, this reflects an overexpansion of base money, even beyond nonsterilization of the higher-than-programmed NIR; it could also reflect a flawed initial projection of base money. Policy action: tighten monetary policy to reduce NDA.	The targets for NIR and NDA have been met. There may be a need to reassess if the initial program projections may have been flawed, and, if needed, reprogram future targets accordingly. No immediate policy action is needed; discretion over monetary policy is retained (for example, the framework allows a sudden surge in NIR to be accompanied by a commensurate increase in base money).
	Lower than programmed	The targets for NIR and NDA have not been met. This reflects insufficient monetary tightening (NIR losses have been oversterilized). Policy action: tighten monetary policy to reduce NDA and help prevent further NIR losses.	Only the NDA target has been met. In theory, further NIR losses could be sterilized as long as actual NDA remains below the NDA ceiling. In practice, monetary policy should be kept tight to help stem further NIR losses. There is a need to reassess targets and policies. Were there flaws in the initial base money projections used to derive the NDA ceilings? Are exchange rate policies and/or fiscal policies sustainable? Future targets may have to be reprogrammed.

Different views may reasonably be held on the appropriateness of the traditional NIR/NDA framework under an inflation targeting regime. As for the NIR floors, for example, it could be argued that they no longer have a place in this context, given that inflation targeting goes hand-in-hand with floating exchange rates.[6] However, while under inflation targeting the central bank would not be expected to use its NIR to stabilize the exchange rate per se, it may react to movements of the exchange rate to the extent that they are perceived to threaten the inflation target. As most floats are not pure floats, tradeoffs between domestic objectives (that is, inflation) and external objectives (that is, external

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[6] Note though, that some inflation targeting countries maintain managed floats, sometimes even with exchange rate bands. This could potentially lead to conflicts between the policy objectives regarding the inflation target and the exchange rate.

viability) may be unavoidable, at least conceptually. Thus, even under flexible exchange rates, retaining a NIR floor simply reflects the fact that one important aspect of an IMF program is to safeguard external viability, independent of the monetary policy framework.

In contrast, it could be argued that retaining a ceiling on NDA under inflation targeting could help prevent large departures from the inflation objective—that is, NDA ceilings could reinforce a country's commitment to a flexible exchange rate policy and limit sterilized foreign exchange market intervention and base money expansion when the external position is weak.[7] This view implicitly assumes that there exists a stable relationship between NDA and inflation. In most inflation targeting countries, however, it has been difficult to find robust empirical evidence on the existence of such a relationship. Hence, NDA ceilings would neither provide adequate guidance to monetary policies aimed at meeting an inflation target, nor would they provide a helpful trigger or focus for discussions on the monetary policy stance in an IMF program context, given the strong likelihood of false alarms.

Similarly, it could also be argued that maintaining NDA ceilings in an inflation targeting context could help to strengthen the credibility of the inflation target by protecting the central bank from pressures to monetize fiscal deficits. IMF programs always contain fiscal conditionality, however, which is the more direct (and therefore better suited) instrument to help ensure fiscal sustainability—that is, to ensure that there is no "fiscal dominance," which is commonly considered a precondition for successful implementation of inflation targeting.[8]

More generally, with a central bank that targets inflation

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[7] Such safeguards would seem especially relevant when country authorities view exchange market pressures as essentially short lived.

[8] For an analysis of strategic and operational issues relevant to the implementation of inflation targeting frameworks, see Blejer and others (2000).

and an IMF program that focuses on the quantity-based framework of NDA ceilings, there would not necessarily be a clear correspondence between the monetary objectives underlying a program and the relevant instruments to achieve the inflation targets. In addition, communication with the markets and the public regarding the stance of monetary policy could easily become confusing. This is important because inflation targeting, by its very nature, relies critically on transparency of the central bank's policy actions. Since, as already pointed out, inflation is usually not primarily a function of NDA or its components, it is unlikely to respond predictably or immediately to changes in NDA or base money.

As a result, retaining a NDA ceiling—or any additional monetary target (such as exchange rate bands or caps on money growth)—could easily result in conflicting signals, and therefore confuse markets when there is, in fact, no need to change monetary policy from the point of view of the inflation objective.[9] For example, one may easily conceive a situation where actual NDA exceeds the NDA ceiling, while both actual and projected inflation are still within their target. Should monetary policy be tightened in these circumstances, or should the NDA ceiling be revised upward? Since inflation is the target, an upward adjustment of the NDA ceiling seems to be the only appropriate course of action. Similarly, when actual NIR is running significantly above the NIR floor while base money is close to the projected baseline, monetary policies could only be eased to the extent that the inflation objective is not jeopardized. In general, as shown in Table 2, when inflation is the overriding objective, having a NDA ceiling may be considered somewhat superfluous or, at least, a nonbinding constraint.

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[9] Also see, for example, Rudebusch and Svensson (2002) for a discussion of potential problems of "two-pillar" frameworks, where monetary policy is geared toward meeting both an inflation objective and another objective, such as money growth.

Table 2. Monetary Conditionality with NDA and Inflation Targets

		Inflation Target (IT)	
		Threatened	Not Threatened
Actual NDA Relative to Programmed	Higher than programmed	NDA and IT give the same signal: tighten monetary policy.	NDA and IT give a different signal: NDA suggests tightening; IT suggests no tightening is needed.
	Lower than programmed	NDA and IT give a different signal: IT suggests tightening; NDA suggests no tightening is needed.	NDA and IT give the same signal: no tightening of monetary policy is needed.

In light of these various considerations, current thinking—as will be discussed below in the context of the Brazilian program—would hold that NIR floors would continue to be needed to safeguard an IMF program's external objectives, but that NDA ceilings would not necessarily be the preferred choice for monetary conditionality.

3. OPTIONS FOR IMPLEMENTING AND STRENGTHENING MONETARY CONDITIONALITY UNDER INFLATION TARGETING

Inflation targets provide an anchor for inflation expectations. While important issues remain as to when and under what conditions inflation targeting would be preferred to an exchange-rate based stabilization, an increasing number of countries have abandoned fixed exchange rates and moved toward formal inflation targeting.[10] In light of the inconsistencies that may arise when applying traditional monetary conditionality under inflation targeting, it was felt that monetary conditionality should be modified to reflect more

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[10] As argued by Schaechter, Stone, and Zelmer (2000), the foundations for successful full-fledged inflation targeting are built on the following: a strong fiscal position and entrenched macroeconomic stability; a well-developed financial system; central bank instrument independence and a mandate to achieve price stability; a reasonably well understood transmission mechanism between monetary policy actions and inflation; a sound methodology for constructing inflation forecasts; and transparency of monetary policy to build accountability and credibility. However, largely it still remains to be seen to what extent the absence of any of these elements, including during the initial phases of an inflation targeting regime, may limit the ultimate success of inflation targeting.

closely the main parameters of decision making under inflation targeting. Ideally, under inflation targeting monetary conditionality should be geared toward evaluating the monetary policy stance vis-à-vis the government's announced inflation target. This would require an extremely good understanding of all the elements involved, however, including, for example, the transmission channels and the precise parameters of monetary policy and the external environment.

Moreover, monetary conditionality should primarily apply to specific policy actions and policy instruments (for example, interest rates), since country authorities cannot commit to achieve a particular level of a variable over which they do not exercise some decisive degree of control (for example, interest rate spreads). It could be argued that, ideally, monetary conditionality should involve the various parameters of a *policy reaction function*—that is, the summary forward-looking rule governing the policy responses to projected deviations of inflation from the inflation target. Following this reasoning, a potential conditionality device for IMF programs under inflation targeting could consist of an operational rule for reacting to actual or expected deviations from the targeted inflation path. This rule should, again ideally, be a simple but robust reaction function that relates changes in an instrument (for example, interest rates) to deviations of inflation from its target. Note that this would be far more specific, and therefore restrictive in terms of the policy response, than the conditionality under the NIR/NDA mechanism, which simply sets off a warning signal that policies need to be tightened without specifying by how much. In practice, it would be impossible to specify the exact timing and size of the response parameter—that is, to determine in advance by how much and when interest rates should be adjusted when projected inflation deviates from its target by a given amount. Also, while a very specific reaction function may work in one program, this may not be sufficiently

general and flexible to accommodate different approaches to inflation targeting, and therefore, given the IMF's commitment to provide equality of treatment to all its members, this could possibly entail some problems of cross-country comparability.

Despite these limitations, and while it may neither be possible nor even desirable to specify in advance a very precise policy reaction function, at least not for the purpose of monetary conditionality in an IMF program context, it would still seem useful to have a simple forward-looking mechanism for gauging the monetary policy stance vis-à-vis the inflation target. In this context, it could be useful to consider simple monetary policy rules, such as Taylor rules for the short-term interest rate or a McCallum rule for the monetary base. In general, such rules are only of limited use in guiding policy decisions, because it could easily be counterproductive for the monetary authorities to commit to a simple instrument rule in pursuing their ultimate target, the inflation outcome.[11] It is generally acknowledged, though, that simple policy rules may serve as rough benchmarks for good monetary policy,[12] which makes them interesting as a potential conditionality device in an IMF program context. In other words, simple policy rules can serve as a starting point for thinking about whether the monetary policy stance is appropriate, but mechanically applying them would not be recommendable for a policymaker facing real-time decisions.

In general, monetary policy rules are quite flexible to encompass a range of relevant information. A simple Taylor rule,[13] for example, can be expressed as $r = r^* + \alpha(Y - Y^*) + \beta(\pi - \pi^*)$, where r is the nominal short-term interest rate, r^* is an estimated nominal equilibrium

[11] Also see Svensson (2002).
[12] See, for example, Svensson (2001) or Kozicki (1999) for overview.
[13] See Taylor (1993) for the original formulation.

interest rate that is consistent with the target inflation rate (that is, $r^* = \bar{r} + \pi^*$ with $\bar{r}$ being the equilibrium real interest rate and   being the relevant inflation target); Y is output and Y^* is capacity output; B is inflation (either actual or projected); and " and $ are coefficients, with $\alpha \neq 0$ (and typically between 0 and 0.5, depending on the degree to which the output gap figures in the central bank's reaction function) and   (and typically between 1.5 and 2, so that the nominal short-term interest rate moves significantly in response to deviations of inflation from the inflation target). In an open economy, one could add a number of other variables in this rule, for example, the external current account or the foreign output gap. Also, the rule could include other variables that reflect conditions in the domestic economy such as the government's budget balance or other fiscal variables. In fact, within this context it is also feasible to include in a Taylor rule different inflation measures, like in the following rule:

$\pi^{**} > 0$

$r = r^* + \alpha(\gamma(\pi^a - \pi^*) + (1 - \gamma)(\pi^P - \pi^*))$, where   is actual inflation and π^P is projected inflation and $0 < (< 1$. Moreover, one could include competing inflation projections in a similar fashion. Hence, Taylor rules are very flexible and can be specified to encompass a number of country-specific considerations.

As a rough check on the monetary policy stance in an IMF program context, it would probably be important to specify monetary policy rules somewhat cautiously, and to reduce the likelihood of false alarms. For example, for a Taylor rule one could choose $\bar{r}$, the equilibrium real interest rate that underlies   , to be slightly lower than the best available estimate based on historical data; this would allow for some limited flexibility on interest rate policies. Alternatively, one could use a range of equilibrium interest rates to generate Taylor rule "bands"

analogous to target bands for inflation.

However, given that a key element in a simple monetary policy rule is the parametric reaction to deviations between actual or projected inflation and the inflation target, an obvious weakness of such an approach is that it would not react to shocks to variables that are omitted from the rule—for example, a Taylor rule would only show a reaction to an external shock if that shock was, in one way or another, part of the rule. Also, simple linear policy rules, like the ones discussed here, would not be adequate for judging the stance of monetary policy in special circumstances, for instance when a country is just exiting from a period of high inflation.

Given the limitations, in an inflation targeting context, of both the traditional quantitative NDA ceilings and of simple monetary policy rules, and considering the difficulties that would exist in specifying and agreeing in advance on a detailed monetary policy reaction function, there appears to be an enhanced role for regular periodic *policy reviews* that would include a detailed assessment of monetary policy in the context of inflation targeting. In this regard, the IMF program would still need to specify an inflation path consistent with the official inflation targets. While official inflation targets tend to be annual, however, the program would establish more frequent, say quarterly, intermediate inflation targets. In the context of the regular IMF program reviews, current and projected inflation would be compared with the target path, and agreement on specific policy actions would be reached whenever the outlook suggested that inflation objectives were likely to be missed.

4. ADAPTING MONETARY CONDITIONALITY TO INFLATION TARGETING IN BRAZIL

Brazil was the first inflation targeting country with an IMF

program, and it took some time to tailor the program to the floating exchange rate regime with the nominal inflation target. In part, this reflected the need to take into account the institutional constraints that require similarity of treatment and, hence, a high degree of comparability of IMF programs across countries.

Initially, the program with Brazil relied on traditional monetary conditionality—a NIR floor and a NDA ceiling—although it introduced some interesting innovations as well. In general, as shown in Table 3, whereas the initial program in December 1998—still under the fixed exchange rate regime—relied mainly on a strict NDA ceiling for conditionality in the monetary area, the NDA ceilings were made less binding after Brazil adopted the inflation targeting framework, and were completely phased out in June 2000 with the inflation targeting framework fully established. In contrast, while the initial program included a NIR floor that was intentionally fixed at a low (or nonbinding) level to allow the Central Bank of Brazil (BCB) to use part of its actual NIR to defend the fixed exchange rate, if needed, the NIR floor became the key instrument of conditionality in the first few reviews in 1999, in an environment where uncertainty concerning the new monetary policy framework (and with it the new nominal anchor for inflation expectations) was still considerably high. In July 1999, shortly after Brazil had formally established its inflation targeting framework, the NIR/NDA conditionality was supplemented with a general consultation mechanism on inflation targets. In November 1999, less than six months after the inflation targeting framework had been put in place, the IMF program incorporated a formal consultation mechanism on inflation to supplement the floor on NIR.

Table 3. Brazil: Overview on Monetary Policy Conditionality Under the Stand-by Arrangement, 1998–2001

	NDA Ceiling	NIR Floor	Inflation Targets
Initial SBA (December 1998)	NDA ceilings were specified on the basis of a specific sterilization rule, with a sterilization parameter that were to become more restrictive as NIR were to continue dropping further and further below the projected NIR baseline path and toward the NIR floor.	Nonbinding performance criterion on NIR consisted of a low floor of U.S.$20 billion.	
First & Second Review (March 1999)	NDA ceilings were retained, and specified using the projected baseline paths for the monetary base and NIR (with a small cushion).	No explicit NIR floor. An implicit NIR floor was specified in the form of maximum monthly intervention limits for the sale of international reserves by the BCB; these intervention limits were only cumulative in part, i.e., to the extent that they were not used in a given month, only a part of the nonused intervention room could be carried over to the next month.	
Third Review (July 1999)	NDA specified on the basis of the NIR floor rather than the NIR baseline, which abandoned the idea of sterilization of NIR losses if actual NIR were to drop below the NIR baseline as long as they remained above the NIR floor.	The performance criterion on the NIR floor was specified with an overall intervention room of about U.S.$3 billion relative to the NIR baseline.	Included a general consultation clause on the implementation of the inflation targeting framework, but without reference to any specific path for targeted inflation.
Fourth Review (November 1999)	The NDA ceiling was downgraded from a performance criterion to an indicative target; it continued being specified on the basis of the NIR floor.	The performance criterion on the NIR floor was established with an intervention room of about U.S.$2 billion relative to a fairly conservatively estimated NIR baseline.	Included a specific consultation clause on the inflation target, with a linearly declining quarterly inflation path for the 12-month rate of CPI inflation and a two-tiered consultation mechanism.
Fifth Review (March 2000)	Refrained from establishing NDA ceilings beyond June 2000.	The performance criterion on the NIR floor was established without strict reference to the estimated NIR baseline, but instead was fixed at a flat monthly level of U.S.$25	The linearly declining inflation target path and the two-tiered quarterly consultation mechanism on inflation were retained unchanged.

The progressive shift away from NDA ceilings following the adoption of the inflation targeting framework reflected the need to adapt the program to the changes in the monetary policy regime. The shift also reflected the growing realization of the fact that base money did not appear to play a significant role in the monetary transmission mechanism in Brazil.[14] In particular, seasonalities, remonetization under the *Real Plan*, and the effects of tax changes have been quantitatively more important and statistically more significant determinants of the demand for base money than the traditional variables, income, or the interest rate.[15] In fact, the demand for base money seemed not very sensitive to interest rates at all.

The formal consultation mechanism on inflation, introduced in the November 1999 review of the program, was based on the annual central inflation target and the tolerance bands that had been announced by the Brazilian government.[16] Under the program, a simple linear quarterly path was established,

[14] In general, main transmission channels of monetary policy are the exchange rate, wages, asset prices, and aggregate demand. In Brazil, and in light of the economic conditions that have prevailed since inflation targeting was adopted in mid 1999 (that is, the fairly high real interest rates, tight fiscal policies, relatively subdued aggregate demand, and negative real wage growth), the exchange rate would appear to have been the main actual channel of transmission to inflation. This would be consistent with recent findings that suggest that the unwinding of real exchange rate misalignments in the context of a depreciation has been the most important determinant of inflation in developing economies (Goldfajn and Werlang (2000); for Brazil see also Schwartz (1999)). Of course, in a floating exchange rate regime, the exchange rate itself is not a policy variable. For a discussion of the transmission mechanism of monetary policy in Brazil, see Rabanal and Schwartz (2001a).

[15] To establish NDA ceilings, the demand for base money was estimated as the sum of its two parts: currency issued and reserves on demand deposits. Currency issued was modeled as a function of a linear trend (to capture the ongoing remonetization of the economy), various seasonal dummies (for example, for December, January, and February), and lagged dependent variables. Demand deposits were modeled as a function of seasonal dummies, dummies for tax effects (for example, changes in the tax on financial transactions (CPMF)), and the nominal interest rate. Reserves on demand deposits were derived by applying an effective reserve rate to the projected level of demand deposits. In the short term, these projections fared quite well, but larger deviations from the econometric estimates occurred when there were shifts in seasonalities (for example, carnival in March instead of February), or when special factors, like tax changes (for example, in the CPMF) or the Y2K "bug" did not have the anticipated effects.

[16] Specifically, the announced inflation target was 8 percent at end-1999, 6 percent at end-2000, and 4 percent at end-2001, each with a tolerance band of +/–2 percentage points around the central target.

where the central inflation target declined by 0.5 percentage points each quarter.[17] Also, the program established a two-tier "consultation band" around the central target: an "outer band" with a width of +/–2 percentage points around the central target path, and an "inner band" with a width of +/–1 percentage points around the central target path. Accordingly, and this was the innovation in conditionality, the Brazilian authorities would informally consult with IMF staff on the appropriate policy response if the observed 12-month rate of IPCA (a consumer price index) inflation were to go outside the inner band; they would more formally consult with the IMF Executive Board on the appropriate policy response if the observed 12-month rate of inflation were to go outside the outer band.

How well did this mechanism work? Figure 1 shows Brazil's actual inflation performance in relation to the established consultation bands during 1999–01. In general, the BCB met its official inflation targets for both end-1999 and end-2000. The consultation mechanism on inflation with the IMF staff was triggered twice, first in September 2000, when the 12-month rate of consumer price (IPCA) inflation reached 7.8 percent, thereby exceeding the program's 7.5 percent ceiling of the inner band, and then again in June 2001, when the 12-month rate of IPCA inflation reached 7.4 percent, thereby exceeding the program's 6.9 percent ceiling of the inner band. The consultation mechanism with the IMF Executive Board did not have to be invoked, as deviations from the central target path remained within the +/–2 percentage-points.

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[17] A linear path was chosen mainly for simplicity. Another simple option would have been to establish a path for the target 12-month inflation rate on the basis of inflation that has already happened, and then simply add to that one-quarter of the year-end inflation target. For example, at the beginning of 2000, the target for, say, June 2000 could have been established by adding to the already known inflation outcome for July–December 1999, one half of the year-end target for 2000.

Figure 1. Brazil: 12-Month Rate of Consumer Price Inflation (IPCA) and IMF Program Consultation Bands on Inflation

Source: IBGE and IMF Staff estimates

The first consultation with IMF staff largely resulted from a temporary surge in monthly inflation rates in July and August 2000, due to unanticipated supply shocks that abated in September 2000; core inflation had already remained relatively more subdued throughout the third quarter of 2000. In line with expectations, and facilitated by the continued firm stance of monetary policy, the rate of inflation in consumer prices declined in the fourth quarter of 2000 to match the official 6 percent target by end-2000. The second consultation with staff largely resulted from the passthrough to domestic prices that reflected the significant weakening of the Brazilian Real against the U.S. dollar during late 2000 and in the first half of 2001, in the context of the lingering crisis in Argentina. These events ultimately caused Brazil to enter into a new stand-by-arrangement (SBA) with the IMF in late 2001, rather than letting the arrangement expire in December 2001.

While the consultation mechanism has been useful in drawing attention to events that could threaten achievement

of the government's official inflation target, the mechanism itself, which relies exclusively on comparing actual inflation outcomes against a target path, can be criticized for being largely backward looking. In the case of Brazil, it had become clear well ahead of time that the September 2000 and June 2001 ceilings for the inner band would in all likelihood be missed. More generally, the need for policy action would usually be expected to come well before the activation of the program's trigger mechanism for consultation. These considerations may argue in favor of using a more forward-looking monetary conditionality device.

5. ACTUAL POLICIES AND TAYLOR RULES: AN APPLICATION TO BRAZIL

For illustrative purposes, this section explores the usefulness of some simple Taylor rules as an option for strengthening the monitoring of the monetary policy stance in the context of an IMF program in a country operating under an inflation targeting framework. The basic idea is simple: if it were possible to conclude that a simple monetary policy rule provides a rough indication of the appropriateness of a country's monetary policy stance vis-à-vis the inflation target, then it could usefully be employed as an automatic trigger mechanism for consultations in an IMF program context. To the extent that the monetary policy rule includes forward-looking elements (for example, inflation expectations), it could represent a more timely mechanism than the consultation mechanism that is currently included in the program with Brazil. For purposes of illustration, we use, as an example, the experience of Brazil during its first 18 months under inflation targeting. Given the BCB's general success with inflation targeting, we ask whether a simple Taylor rule would have provided a useful assessment of the monetary policy stance.

Figures 2 and 3 show the actual interest rate, the annualized

overnight interest rate ("SELIC rate"), plotted against two alternative Taylor rules, with different values for the " and $ parameters. In the first alternative, ", the parameter on the output gap, equals 0.5, and $, the parameter on the deviation of actual inflation from target, equals 1.5. The second version is an "aggressive" Taylor rule, where only the deviation of inflation from target features in the rule ($ = 2). Figure 3 differs from Figure 2 in that it includes an interest smoothing parameter D, which is set equal to 0.6.[18] Initially, in both Figures 2 and 3 the actual 12-month rate of inflation is used in the simple Taylor rule. The Taylor "bands" shown in these two figures are generated by different assumptions on the equilibrium real interest rate $\bar{r}$, ranging from 10 percent to 12 percent. For the purpose of the exercise, the potential output growth rate was assumed to be 4.5 percent; a lower potential growth rate (of, say, 4.0 percent) would have resulted in a smaller output gap, and therefore kept the Taylor band at a slightly higher level.

Figure 2. Brazil: Taylor Rules with Current Inflation

2a. The SELIC and a Simple Taylor Rule (a=0.5, b=1.5) No Interest Rate Smoothing

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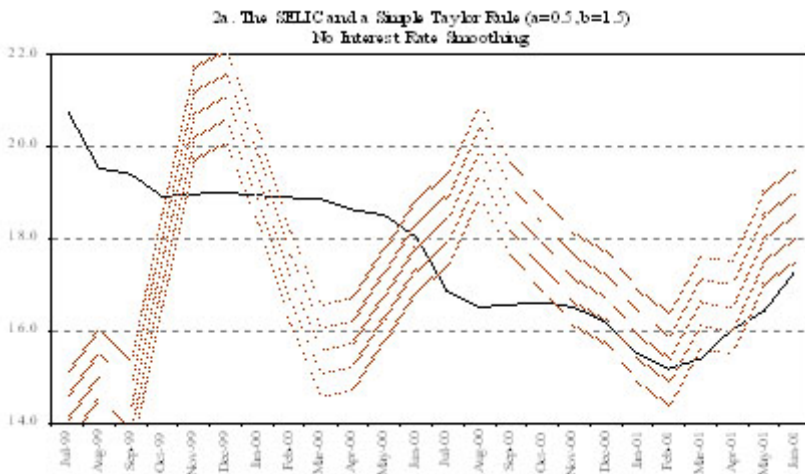
[18] The interest smoothing parameter introduces some inertia into the Taylor rule by mitigating the extent to which the central bank reacts to new information. See the Appendix for further detail on the exercises that were carried out.
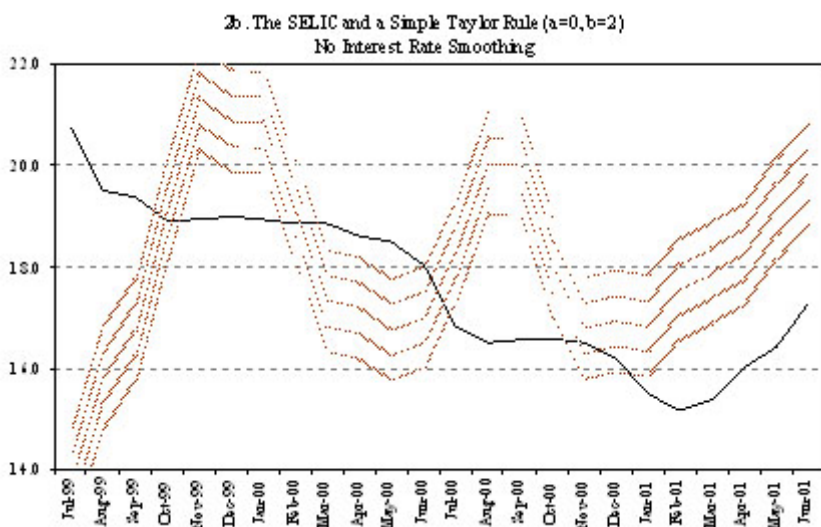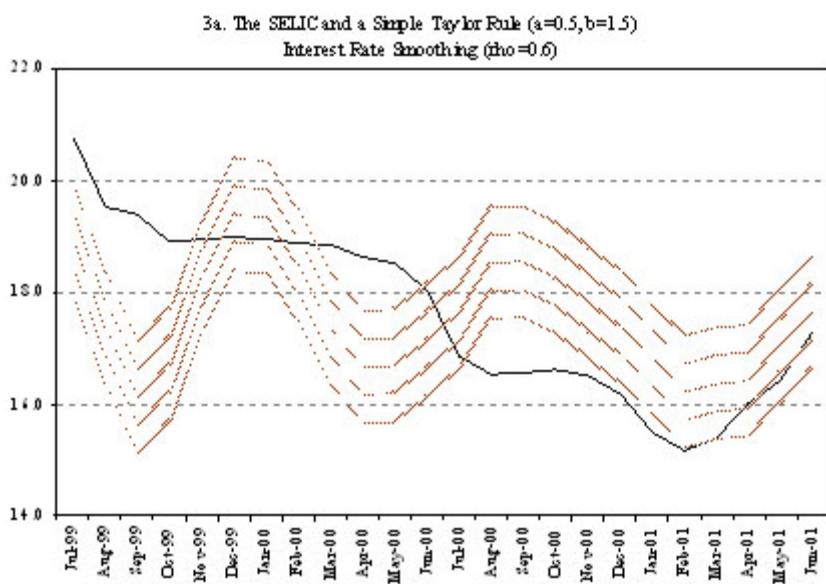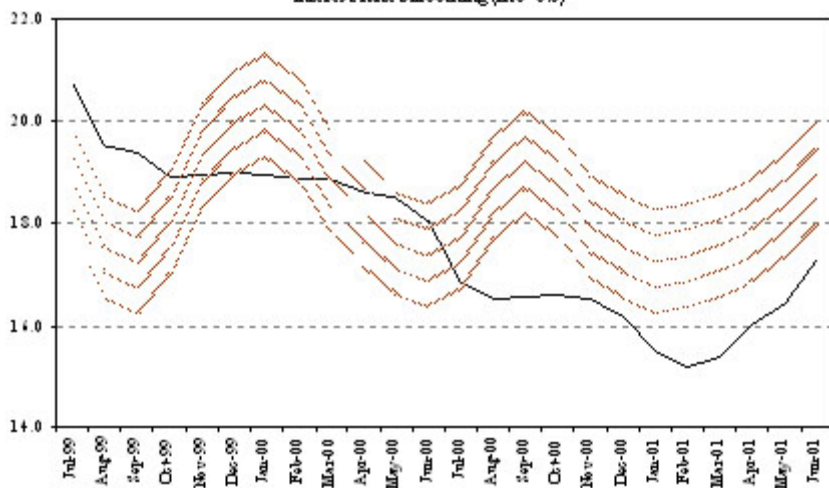
2b. The SELIC and a Simple Taylor Rule (a=0, b=2)
No Interest Rate Smoothing

Figure 3. Brazil: Taylor Rules with Current Inflation

3a. The SELIC and a Simple Taylor Rule (a=0.5, b=1.5)
Interest Rate Smoothing (rho=0.6)

3b. The SELIC and a Simple Taylor Rule (a=0, b=2)
Interest Rate Smoothing (rho=0.6)

In both Figures 2 and 3 we can clearly distinguish several, fairly short, subperiods during July 1999–June 2001. In general, the BCB followed a fairly cautious approach, where its main policy instrument, the SELIC rate, was kept broadly at or slightly above the level suggested by the Taylor bands, maybe with the possible exception of late-1999/early-2000. Starting in mid-2000, however, following a period of inflation surprises related to increased external uncertainties and a negative agricultural supply shock, and as the BCB continued to reduce the SELIC rate in late 2000, the Taylor bands would probably have suggested keeping the SELIC rate at the slightly higher level than what was actually done by the BCB, particularly when growth considerations are ignored (" = 0). In light of the likely inflation outcome for 2001, with the year-end inflation target of 4 percent (with a +/–2 percent tolerance interval) likely to be missed slightly, the Taylor rule would have helped to trigger discussions early on.

Initially, during July–September 1999, the BCB kept the SELIC rate at a higher level than what a simple Taylor rule

would have suggested on the basis of the relatively low passthrough that had occurred in the first couple of months after the real was left to float. When the inflation targeting framework was launched in July 1999, inflation was at a very moderate level but expected to rise. Concerned about an increasing passthrough (given the existing transmission lags), and having to establish its reputation, the BCB initially adopted a tougher policy stance than what would have been suggested by a simple Taylor rule without expectational variables. In addition, caution during this early period also seemed warranted due to a deterioration in inflation expectation in early July 1999 that was brought about by an adjustment of government-managed prices.[19]

The second period runs from October 1999 to January–February 2000, when inflation had already picked up significantly, peaking in December 1999. During that period, the BCB basically "remained put," and, in particular, it did not raise the SELIC rate as would have been suggested by a simple Taylor rule. The increase suggested by a simple Taylor rule would have been particularly large without interest smoothing (Figure 2), whereas with interest smoothing (Figure 3), and depending on the value that is used for the equilibrium real interest rate (), the suggested increase would not necessarily have needed to be large. It is clear that, although in the last quarter of 1999 inflation was higher than expected, this was perceived as transitory by the Brazilian authorities. This view was also supported by market surveys, which continued to show that year 2000 inflation was expected to be significantly below 1999 inflation. As a result, the actual SELIC rate was kept slightly below the rate suggested by a simple Taylor rule without expectational variables.

A third period runs from about February 2000 to June 2000,

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[19] Also see Fachada (2001) for details.

when inflation continued on a downward trend and remained in line with the inflation target. The BCB acted cautiously during this period, with the actual SELIC rate held basically constant at 18.5 percent until June 2000, also in light of new external uncertainties (including, for example, increases in oil prices and stock market volatility), and some domestic uncertainties relating to pending Supreme Court Decisions (concerning the revaluation of the some savings accounts that had been underindexed for inflation in the late 1980s and early 1990s). Due to the reduction in actual inflation, the actual SELIC rate remained, in general slightly above the bands of our simple Taylor rule, as shown in Figures 2 and 3.

A fourth period runs from mid-2000 to about September 2000, when, following the positive inflation surprises during the first half of 2000, the BCB reduced the SELIC rate by 100 basis points in June 2000, then by a further 50 basis points in early July, and again by another 50 basis points later in July. As a result, in a 30-day period, the short-term interest rate was lowered by 200 basis points to 16.5 percent. Interestingly, just as the BCB lowered the SELIC rate during June and July of 2000, the simple Taylor rule would have suggested increasing interest rates. This largely reflected an unexpected negative agricultural supply shock that had pushed up food prices due to adverse weather conditions, and an increase in inflation due to the strong adjustment of government-managed prices in a single month (July 2000), which included price adjustments of oil derivatives, electricity and telecommunication services. It also reflected the fact that the output gap was rapidly narrowing as average real GDP growth went from 0.8 percent in 1999 to 4.4 percent in 2000. However, the BCB essentially read these developments as factors that would not call into question meeting the year's inflation target, and that could be addressed by holding the back on further interest rate reductions. In essence, this

interpretation was correct, as, during the last quarter of 2000 the Taylor band fell back to levels that had prevailed earlier in the year, as the July–August surge in food prices was winding down. During this period, the actual SELIC rate remained broadly within or just below the Taylor bands shown in Figures 2 and 3.

Starting in early 2001 and for the first half of the year, the simple Taylor bands signaled a need to increase interest rates, generally to levels above the ones maintained by the BCB, particularly when ignoring output considerations (which, in early 2001, showed an economy that was slowing down considerably in light of external factors and domestic energy rationing, thereby again opening an output gap). For example, a simple Taylor rule with no output considerations and no interest smoothing (Figure 2, lower panel), would, in an IMF program context, have triggered a consultation on the monetary policy stance in the first quarter of 2001, when the BCB had continued lowering the SELIC rate while the Taylor rule itself would have suggested an increase. With an actual 2001 inflation outcome of 6.7 percent, which was outside of the +/–2 percent tolerance interval around the year-end inflation target of 4 percent, a Taylor rule would have helped to trigger discussions already in the beginning of 2001, if not earlier, when, arguably, the BCB reacted too slowly to the need to raise interest rates.

This simple exercise may be interpreted in different ways, depending on the intended use of the Taylor rule. Simple mechanistic rules are not useful in policy making, a fact that is amply highlighted in the recent literature, including on the still rather new Brazilian experience.[20] Policy decisions have to be made on the basis of more complex considerations, and rules and models can only be one input in these decisions. Monetary policy rules are even simpler than standard models

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[20] See, for example, Bogdanski, de Freitas, Goldfajn, and Tombini (2001).

used by central banks to gauge their own policies, and even these models are still considered "small-scale"[21] compared to potentially more complex ones.

At the same time, however, simple rules—even of the type just discussed—may provide a rough first evaluation of a policy stance. This is probably also one of the reasons why the U.S. Federal Reserve Bank of St. Louis, for example, has been publishing the results of simple Taylor rules and McCallum rules in its monthly economic reports.[22] Simple Taylor rules may only be expected to perform satisfactorily in an environment where relatively low inflation has already been achieved, and where the overall macroeconomic environment is fairly stable (for example, continued tight fiscal polices, and a stable exchange rate). In a more unstable or uncertain environment, other variables should be included in the Taylor rule to make it more "realistic." Making monetary rules more realistic would not necessarily mean making them more complicated. In general, central banks do not only react to current levels of specific variables but also to their expected future levels—they are clearly forward looking. Since the different channels of transmission of monetary policy are known to operate with some lags, all central banks forecast the behavior of inflation in one way or another. These expectations or forecasts could be put to use in the Taylor rules.

Accordingly, in Figures 4 and 5 we employ again a simple Taylor rule but use market projections of inflation, as derived from the BCB's daily survey on market expectations.[23] In these examples, the main elements remain qualitatively unchanged

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[21] See Bogdanski, Tombini, and Werlang (2000) for the case of Brazil. Also see Rabanal and Schwartz (2001b) for a review of the inflation forecasting performance of the small-scale model used by the BCB.
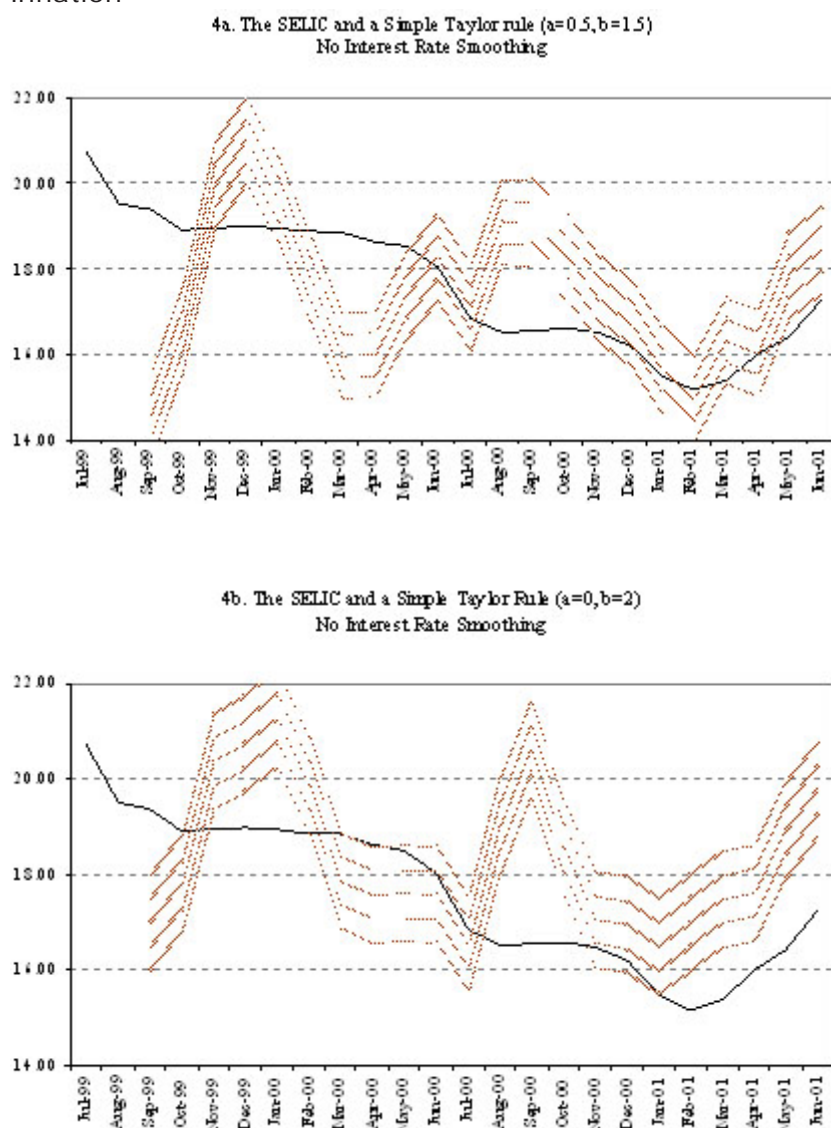
[22] See the Federal Reserve Bank of St. Louis (1999–2000).

[23] For the purpose of the Taylor rules, the expected inflation for a given month was generated by using the average expected inflation for that month, as shown in surveys carried out by the BCB in the month immediately preceding that month.

from the previous analysis, also because expectations matched actual outcomes fairly closely. In general, there were again three periods where, if it had been employed in an IMF program context, a Taylor rule would have triggered an early consultation on the monetary policy stance.[24] First in late 1999, when the expectations of a higher future passthrough from currency depreciation to inflation peaked together with actual inflation; second in mid-2000, when Brazil experienced, among others, and agricultural supply shock that again pushed up inflation expectations; and third in early 2001, when inflation expectations took off, also in light of the domestic energy crisis and the substantial weakening of the exchange rate, in part reflecting the lingering concerns about Argentina. While the first two eventually turned out to be more transitory elements that could be accommodated by the inflation target without necessarily changing the policy stance, the latter had a more lasting impact, and eventually required the BCB to tighten its policy stance, albeit too late to keep the 2001 inflation outturn within the target range. A priori, however, each of these events would reasonably have been a good occasion to review the monetary policy stance in an IMF program context, and a Taylor rule could have been used as one option for triggering such consultations.

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[24] See, for example, Figure 4 (lower panel).

Figure 4. Brazil: Taylor Rules with Market Expectations of Inflation

4a. The SELIC and a Simple Taylor rule (a=0.5, b=1.5)
No Interest Rate Smoothing

4b. The SELIC and a Simple Taylor Rule (a=0, b=2)
No Interest Rate Smoothing

Source: BCB and authors' estimates.

Figure 5. Brazil: Taylor Rules with Market Expectations of Inflation

5a. The SELIC and a Simple Taylor Rule (a=0.5,b=1.5)
Interest Rate Smoothing (rho=0.6)

5b. The SELIC and a Simple Taylor Rule (a=0,b=2)
Interest Rate Smoothing (rho=0.6)
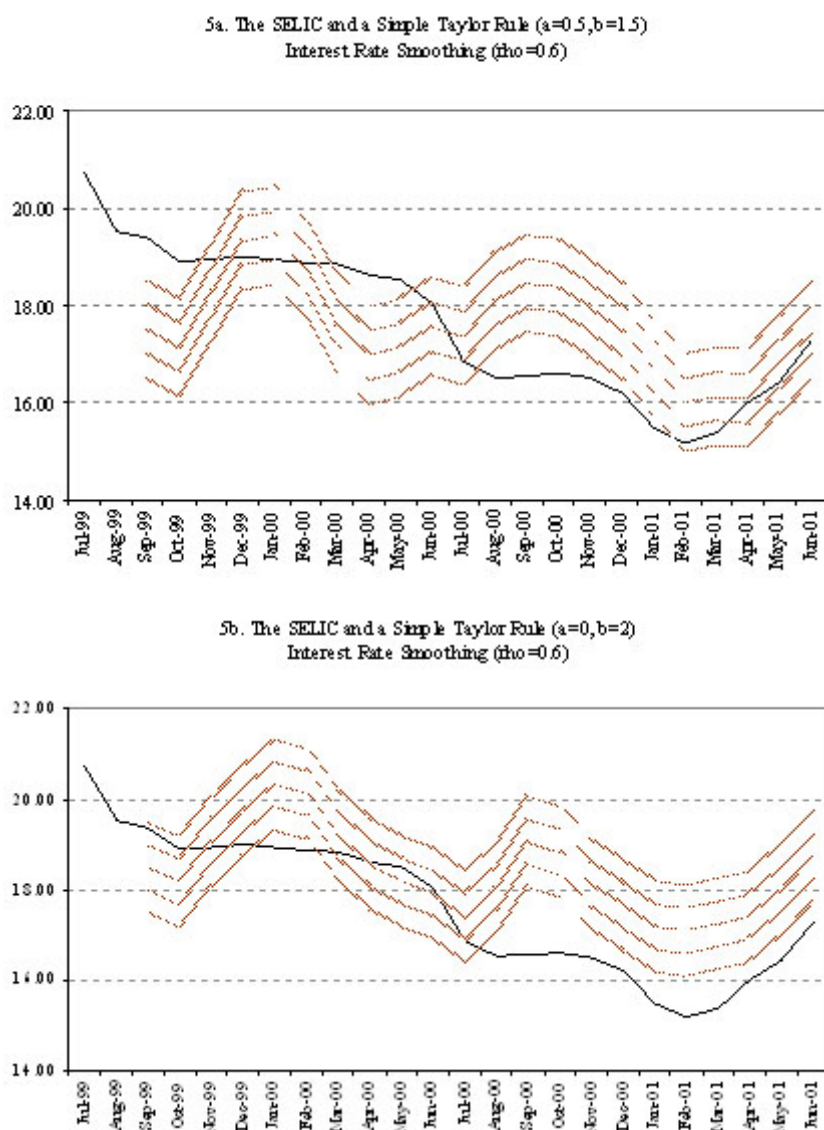
Source: BCB and authors' estimates.

6. CONCLUDING REMARKS

In IMF programs, conditionality links the achievement of a set of policy objectives to continued access to Fund resources. Conditionality provides a yardstick for evaluating whether the policies that are being carried out are moving the country toward the achievement of stated policy objectives, in particular a sustainable external balance. By doing so, conditionality also safeguards the temporary use of the IMF's resources. Traditionally, program conditionality in the monetary area has relied on two performance criteria: a ceiling on the central bank's NDA and a floor on its NIR. The primary focus of this approach has always been a program's external viability, rather than inflation. The main role of the NIR floor is to indicate whether an IMF program is likely to achieve its external objective, while the ceiling on NDA seeks to ensure that this objective is not jeopardized by excessive credit expansion or by sterilized intervention—that is, by compensating unprogrammed NIR losses through additional credit creation. The framework assumes that the demand for base money matters from a macroeconomic perspective, and that it is stable and predictable.

As argued in this paper, in program countries that carry out their monetary policies on the basis of explicit inflation targets, it would seem helpful to adapt traditional monetary conditionality to take into account the specific features of inflation targeting. This would help to improve the correspondence between the monetary objectives of the central bank and the targets of the IMF-supported adjustment program, and the instruments that are used to achieve these targets and objectives. By the same token, it would also facilitate communication of central bank policies to the markets.

Clearly, as a first step, a program could include, as was the

case in Brazil, the government's inflation target itself. Often, this may require specifying the target in some more detail than the official target. For example, most countries operate with annual inflation targets; however, as IMF programs are frequently monitored on a quarterly basis, additional quarterly inflation objectives may have to be added. Furthermore, there needs to be a mechanism for consultations that allows for program reviews to take place if inflation goes off track. This, in turn, would require establishing parameters around the targeted inflation rate that would trigger such reviews. In the case of Brazil it was decided to establish consultation bands around the central target, where, depending on the size of the deviation from the target, consultations with either IMF staff or the its Executive Board would be triggered.

A potential drawback of monitoring a program on the basis of inflation outcomes—for example, on the basis of the actual 12-month rate of inflation vis-à-vis the target 12-month rate of inflation—is that this is largely backward looking, that is, the inflation outcome itself offers no guidance as to the appropriateness of the stance of monetary policies. Hence, inflation targets in the context of an IMF program work much in the same way in which they are used by the government: they are a parameter that helps to carry out an ex-post analysis of central bank policies. However, to be able to say something about the appropriateness of the current monetary policy stance, it is not enough to look at actual inflation. This raises the question whether there are additional options for strengthening monetary conditionality under inflation targeting in the context of an IMF program.[25] This could either be achieved by regular frequent consultations or by a forward-looking trigger mechanism for consultations between the country authorities and the IMF.

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[25] Knight (1999) also provides suggestions on IMF conditionality in the context of inflation targeting.

One option that has been explored in this paper, and on which further analysis would be desirable, is to consider simple monetary policy rules, such as Taylor rules or McCallum rules, as a potential trigger mechanism for such consultations. While simple policy rules would not be a useful device for policymaking, they do provide a rough first evaluation of a policy stance. To illustrate the point, we tested various simple Taylor rules, using the experience of Brazil in its first two years under inflation targeting as an example. The results of the exercise suggest that simple mechanical rules may indeed provide a rough initial yardstick on the appropriate level of interest rates, particularly in an environment where relatively low inflation has already been achieved, and where the overall macroeconomic environment is fairly stable (for example, continued tight fiscal polices, and a stable exchange rate).

To strengthen conditionality, and, in particular, to help monitor the stance of monetary policies vis-à-vis a government's inflation target, Taylor rules or other rules that provide for a rough evaluation of central bank policies are an area that could usefully be explored further. In general, to be useful in an IMF program context, the rules should be kept simple, and forward looking, in the sense that they should include inflation expectations.

Taylor Rule Exercise for Brazil

We use a simple Taylor rule for Brazil during 1999–2001 to compare actual policy outcomes with rule-based policy prescriptions. Using monthly data, the rule we use takes the standard form, with and , where is the annualized overnight interest rate (SELIC) in period t; D is the interest smoothing parameter with ; is the output gap in period t; is the 12-month inflation rate in period t; is the inflation target applicable to period t; is the equilibrium nominal interest rate; and is the equilibrium real interest rate. Parameters " and $ are the parameters of the Taylor rule, were, for simplicity, we choose those suggested in Taylor's original formulation with " equal to either 0 or 0.5, depending on whether or not output considerations can be assumed to be part of the central bank's objective function, and $ being either 2 or 1.5, accordingly.

In general, we use monthly end-of-period data for the SELIC rate and the other variables in the model. The output gap was first estimated by fitting a linear trend on the natural logarithm of monthly GDP, as estimated by the BCB. This yielded a relatively low potential real output growth, and we consequently used values in the range of 3–4 percent as being more realistic assumptions. The value of the equilibrium real interest rate was initially assumed to be 12.0 percent, but we then used values in the 10.5 percent to 12.5 percent range to generate the Taylor rule bands.

The inflation target for each month is a linear extrapolation of the quarterly targets for December 1999 to June 2001 that were used under the IMF program. For the period before December 1999, when inflation was still low, we used the lower band of the target range to derive the Taylor rule and then linearly increased it to reach 8 percent (the central target) in

December 1999. Hence, for July 1999, we assume that the BCB did set its inflation target in the lower limit of its annual band for 1999 (6 percent), and that it increased this linearly to reach the inflation target of 8 percent in December 1999. However, using the December 1999 target for the period leading up to December 1999 did not change the outcomes qualitatively. Expected inflation for a given month (used in Figures 4 and 5) is the inflation expectation for the month at the beginning of the month, calculated as the average market expectation according to the BCB survey; other definitions of inflation expectations did not alter the results significantly.

We consider four policy rules: the original Taylor rule (with " = 0.5 and $ =1.5), a more aggressive rule that only targets inflation (" = 0, $ = 2), and for both rules we consider the case of no interest rate smoothing (D = 0) and with interest rate smoothing (D = 0.6). Choosing D = 0.6 would seem to strike a balance between having a fairly high degree of interest rate smoothing and letting the effect "die out" after only a few periods.

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SEVERAL MACRO-ECONOMETRIC PATTERNS FOR THE ALBANIAN ECONOMY OVER THE TRANSITION,

Drini Salko Myslym Osmani

SEVERAL MACRO-ECONOMETRIC PATTERNS FOR THE ALBANIAN ECONOMY OVER THE TRANSITION,
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1. THE PROBLEM

The transition period has always deserved deep-going analyses. These analyses have been conducted periodically by various individuals, scholars and institutions related to economic developments. These studies and analyses have contributed to the recognition of realities, the taking of measures and the drafting of the necessary policies for the country's economic development.

We have the impression, anyway, that microeconomic analyses have basically resulted in the presentation of the indices and factors of macroeconomic growth, the examination of their development and the comparison among them. Various publications produced by central institutions have been devoted to macroeconomic analyses. We do think, however, that genuine macro-econometric analyses are evidently missing. There is a gap concerning particularly the analyses aimed at the gauging, be it partly accurate, of the effect and effectiveness of the macroeconomic development factors.

With reference to the above, our paper deals with *the lack of quantitative estimations pointing to the effect of factors and indices of macroeconomic development.*

2. THE PURPOSE AND OBJECTIVES

The purpose of this research paper is to identify and evaluate some of the most important relations among the macroeconomic indices, the quantitative impacts and the effectiveness of some of the fundamental development factors in Albania over the last decade.

The paper identifies the following specific objectives:

- Evaluation of Albania's investment and tax-payment efforts by building patterns that help make their forecasts.
- Gauging of the impact of the national revenues variable on consumption (marginal trend of consumption), contributing a more or less stable assessment for it.
- Measuring of the impact of the variable of the exchange rate of the US dollar into the Albanian lek.
- Estimation of the impact of the variable of the exchange rate and that of the budget expenses on the level of consumption prices.

3. THE METHOD AND DATA

The econometric modelling is the chief method employed to write this paper. The data used to that effect have been published by the Bank of Albania and the Ministry of Finances mainly during 1992-2001. These data concern the following indices:

Consumption, investments, budget expenses, tax income, volume of exports and imports, exchange rate of the US dollar into the Albanian lek, and the index of the consumption prices.

Table 1: Data on the macroeconomic indices on a yearly basis.

| Years | PBB (current prices) | Taxes | Expen. | Of which: | Investments of the budget Investments of the budget | Private investment | Internal consumption | CPI |
| Years | PBB (current prices) | Taxes | Expen. | Of which: | Investments of the budget | Private investment | Internal consumption | CPI |
t	(Yt)	T	G	Consump.	I	I		% (P)
1992	50697	8466	23422	10494	2129	5000	22275	76.4
1993	125334	20805	50635	17421	11280	12000	62699	100
1994	184293	29487	61001	25985	6266	17139	106153	115.8
1995	229793	30333	77210	30562	19073	22520	130063	122.8
1996	280998	30067	87952	34844	17703	30910	162136	144.2
1997	341716	33488	100806	38614	15036	41006	199904	204.8
1998	460631	56658	125752	46984	24413	49748	285131	222.6
1999	506205	65300	142244	49102	32401	56189	307772	220.3
2000	539210	84117	170390	51764	36127	66323	302497	229.6
2001	594346	102228	185436	55869	44576	74293	3346 17	237.7
				Years 1992 and 1993 for investments have been interpolated				

Table 2: Data on several indices on a quarterly basis (mil US dollars)

No	Period	Exports	Imports	Exchange rate	CPI
1	T1 1994	28	98.6	100.7	103.4
2	T2 1994	31.2	136.9	99.2	115.7
3	T3 1994	30.9	148.2	87.8	112.3
4	T4 1994	51.8	171.6	91	114
5	T1 1995	42	163.5	93.8	119.8
6	T2 1995	51.1	177	92.7	121.8
7	T3 1995	57.3	150.4	92.1	117.2
8	T4 1995	54.5	188.8	92.8	121.3
9	T1 1996	68	208.4	92.6	127.4
10	T2 1996	57.1	209.6	108	131.9
11	T3 1996	56.5	225.2	109.2	138.4
12	T4 1996	62.1	278.8	102.9	143.9
13	T1 1997	34.2	143.9	127.8	159
14	T2 1997	42.2	114.5	162.1	177.7
15	T3 1997	41.3	171.1	159.5	184
16	T4 1997	40.9	264	146.4	200.2
17	T1 1998	42.2	176.8	150.1	215.3
18	T2 1998	49.3	198.1	156.4	220.2
19	T3 1998	53	196.1	148.9	214.7
20	T4 1998	63.4	240.6	141.2	219.5
21	T1 1999	72.9	185.6	140.9	223.5
22	T2 1999	78.4	250.1	141.2	220
23	T3 1999	58.6	252.1	133.9	213
24	T4 1999	65.5	250.1	134.1	216.5
25	T1 2000	61.7	227.3	139	220
26	T2 2000	68.5	257.3	143.5	218.9
27	T3 2000	63.5	261.1	144.2	212.3
28	T4 2000	62.2	324.3	148.2	222.2

4. SEVERAL MACRO-ECONOMETRIC PATTERNS AND FINDINGS

We have striven to identify the most important patterns from the perspective of explaining the Albanian complex reality. They have at the same time proved to be useful and have been employed for various purposes, mainly in analyses and forecasts. These models are:

Model of consumption (C_t) depending on the income Y_t:

$$C_t = -5641.1 + 0.91191 \, Y_t + e_t$$

with the determinant coefficient 99.3 per cent. This model indicates that when national revenues increase one lek, consumption increases 0.91 lekë. Hence, about 91 per cent of increase in national revenues during 1992-2001 were turned into personal consumption. This model once again confirms the low saving or investment rate in Albania because of the low incomes.

The model of augmentation to consumption DC depending on the augmentation to income $(DY)_t$:

$$DC_t = -672079 + 64564 \text{ in } (DY)_t$$

with the determinant coefficient 94.4 per cent. This model shows that when the addition to the national revenues increases 1 per cent the addition to national consumption increases 64564.

Keynes' expanded model of national revenues:

a)   *The model with me structural equations*:

$$C_t = -2528.9 + 0.586579Y_t - 0.252636I_t + e_t$$
$$I_t = 8211.1 + 0.18528Y_{t-1} + w_t$$
$$T_t = -8008.3 + 0.16078Y_t + v_t$$
$$Y_t = C_t + I_t + G_t$$

b) *The model with reduced equations:*

$$Y_t = 70260.2 + 0.96738Y_{t-1} + e'_t \quad R^2 = 97.9\%$$
$$T_t = 3288.1 + 0.15554Y_{t-1} + v'_t \quad R^2 = 88.8\%$$
$$I_t = 8211.1 + 0.18528Y_{t-1} + w'_t \quad R^2 = 96.1\%$$
$$C_t = 38684.3 + 0.567445Y_{t-1} + e'_t \quad R^2 = 95.4\%$$

The model with structural equations indicates that:

When investment remains unchanged, 59 per cent of the national revenues go for personal consumption. When investment increases 1 lek consumption decreases 0.25 lekë. About 18 per cent of the national revenues of the previous year are put in investments. Nearly 16 per cent of the augmentation to the national revenues are paid to the budget in the form of taxes.

The model of reduced equations shows that:

The annual national revenues depend to a large extent (97.9 per cent) on the national revenues realised the previous year. About 89 per cent of the payable taxes in a year depend on the revenues realised in the previous year through their impact on the revenues in the current year. Consumption in a year depends largely on the revenues made in the previous year through its impact on the revenues of the current year. This is due to the consumers' inclination to rely for consumption also partly on the revenues acquired previously and not on the current revenues.

Proceeding from these patterns we could consider three important issues:

- The society's overall investmentefforts. Very few efforts are put into investment.
- The nation-wide tax burden. The society bears a relatively small tax burden.
- The trend in national consumption. The Albanian society is a consumption society not in the terms of large consumption, but in the terms of the large part of incomes that are spent.

The model of investments depending on the augmentation to the national revenues:

$$I_t = 8211.1 + 0.18528 \ (DE)_t + e_t \quad R^2 = 96.1\%$$

Every additional lek making to a difference in the national revenues accrued between two neighbouring years is accompanied by a nearly 0.18 lekë increase in investments. The augmentation to the national revenues determines investments in the current year in the range of 96 per cent.

Two patterns for taxes: the inverse model into Y_t and the multiplication model:

$$T_t = 1/(0.000005639 + 5.7/Y_t) \quad \text{with } R^2 = 99\%$$

This model is interpreted with difficulty, but it can be a very good model to be used in forecasting the tax incomes on account of the great value of the determination coefficient.

$$T_h = 0.389226 Y_t^{0.917836} e_t \quad \text{with } R^2 = 93.4\%$$

This model allows us to make an analysis of the flexibility of the tax incomes depending on the national revenues. According to it, when national revenues increase 1 per cent, tax incomes are expected to increase nearly 0.92 per cent.

Two patterns for the consumer's price index (CPI):

$$CPI_t = 19.73 + 0.786919 \text{ (exchange rate)}_t + 0.00029266M_{3t} + e_t$$

with a determinant coefficient 94.6 per cent. This model is not "cleaned" of multicolinearity between the exchange rate and currency totalling M_3, therefore it can only be used for forecasting of prices in general. The following model is devoid of multicolinearity among the variables, and can be used for analyses by making use of the information contained in its coefficients:

$$CPI_t = -26.86 + 1.49975 \text{ (exchange rate)}_t + 0.000347 \text{(expenses)}_t + e_t$$

with a determinant coefficient 84.3 per cent. We can approximately and quite confidently say that, when the exchange rate of the US dollar into the Albanian lek increases 1 lek, with the lek being devalued to the tune of one unit, then prices rise nearly 1.5 per cent overall on the understanding that the budget expenditures should be considered constant. When budget expenditures increase one unit (million), then prices go up about 0.000347 per cent.

1. Two patterns for the foreign trade:

The model of quarterly export depending on the exchange rate of the US dollar into the Albanian lek:

$$E_t = 33.95 + 0.182999(\text{exchange rate})_{t-4} + e_t$$

with $R^2 = 17.7$ per cent, and with a level of credibility of 96 per cent. This pattern shows that export in a given quarter of a yeardepends rather on the exchange rate in the preceding three months. This is proof that exports should be conducted in a more organised way and on the basis of long-term contracts. When the exchange rate of the US dollar into the Albanian lek increases 1 lek, then at the end of the three coming years export increases 0.18 value unit.

The model of the quarterly import depending on the exchange rate of the US dollar:

$$I_t = 95.78 + 0.92357 (\text{exchange rate})_{t-2} + e_t$$

This pattern results in a plus sign before the coefficient before the variable $(\text{exchange rate})_{t-2}$ The other models with lag give one or more than two, as well. **This means that in our reality the devaluation of currency should not be related directly to reduced imports but also to increased exports.**

5. LIMITATIONS AND SUSPICIONS

Although the results obtained from the econometric analysis of the data are statistically reliable, with a security level of of more than 95 per cent, several limitations and suspicions should be borne in mind:
- The series the data used are relatively scarce, and they have prevented the multi-factorial models employing more than two factors from being built.
- Several indices may be affected by the inaccuracies that may be attributed to the shortage of the stabilised systems for their calculation, subjectivism or indirect

calculations (interpolation/extrapolation). We have calculated several indices, such as consumption, in an extrapolating way.

- Auto-correlation in the dynamic series. This phenomenon tends to reinforce the ties among the economic indices. Nonetheless, we have tried to avert this phenomenon in advance with a view to obtaining as truthful results as possible.
- Control of the market forces during transition. During transition several indices have been kept under control for years such as the interest rate, and a number of prices, which inhibit the establishment of natural ties among the indices.
- During the transition period major structural changes have taken place. They have had an impact on the prices, inflation, taxes, and products. These changes split the period made subject to analysis into non-homogenous sub-periods, which has not been taken into account in our analysis also on consideration of the technical difficulties so as to exclude the difference in structure as a development factor.

Nevertheless, we share the opinion that all these do not deprive these analyses of their importance and usefulness. In given cases they may influence the accuracy or reliability of the results, but not to the extent of making them unreliable. These results should only be considered as an average with an acceptable variation range. Therefore, they might serve for making a relatively good quantitative characterisation of some of the macroeconomic developments of the last decade.

6. CONCLUSIONS

Several conclusions can be drawn from the above analysis:

- Albania has a very high consumption rate amounting to about 91 per cent. This is an index of the insufficient and indirect economic growth, being evidence of a low investment rate.
- The macroeconomic accelerator is worth of 0.18 lekë investment for 1 lek annual increase in the national revenues. This speaks of low growth over the transition period.
- The increase in the national revenues to the extent of 1 per cent is accompanied by an increase in taxes to the tune of 0.92 per cent, hence almost equal, which is indicative of ever greater improvement in the effectiveness of the tax system.
- The level of the consumption prices depends significantly (94.6 per cent) on the exchange rate and the currency totalling M_3. The 1 lek increase in the exchange rate is accompanied by the increase in the consumption prices worth of 0.8 per cent, whereas the M_3 increase by 1 billion lekë is accompanied by a 0.3 per cent rise in prices.
- The increased exchange rate is accompanied by a growth in exports at different periods of time. The 1 lek increase in the exchange rate in three preceding quarters influences the current growth in exports to the tune of 0.18 million dollars.
- Use of the built models helps forecast the level of internal net production, the investments, the tax incomes, the exports and the level of prices.

CENTRAL BANKS : BEHAVIOUR IN A CRISIS,
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1. INTRO

"The Asian crisis (that erupted in July 1997) resulted in a region wide economic meltdown with drastic currency devaluations, widespread insolvency… shattered financial markets, sharp depreciation of asset values, economic downturn and surging unemployment." (Chen 1999) Chen goes on to say, "The unprecedented scale, depth, and severity…". (Italics added) But how can we know that? There is no doubt that in 1997 and 1998 there was considerable turmoil in financial and related markets, in different parts of the world. And there are continuing problems in many countries at the present time. These types of problems all tend to be classified as "financial crises". A typical response to such events is to assume that there are things wrong with these markets and then to call for closer supervision and tougher regulation. Thus for example, in the September 1999 issue of the IMF Survey we read: "The financial crises in East Asia in 1997-98, followed by those in Russia and Brazil in 1998-99, have underscored the need for changes in the global financial system that will reduce the risks posed by institutional weaknesses and volatile capital flows… Strengthening financial systems through better financial market supervision and appropriate mechanisms for managing bank failures…" (p.3). Knee-jerk responses in the US to recent corporate scandals have been to appoint new kinds of accounting regulators.

2. CRISES

It is important to distinguish among the different types of

crises and define them carefully, before embarking on any prescription for their alleviation or avoidance. In the last decade or so there have been all kinds of problems: asset booms (in, for example, stock markets and property) and collapses in these; capital flight and currency crises; debt crises - - recurrent financial crises from the inability to service borrowing - and perhaps some debt deflation; bank failures; and genuine financial crises. None of these is new in economic history, and neither is it likely that they will disappear. In some cases problems in a banking system have led to currency depreciation. But it can just as easily go the other way, with perhaps doubts about the fiscal position leading to worries over the currency hence to capital flight and on to problems in a banking system. One type of problem does not however, lead inevitably to another. This should surely direct attention to possible deficiencies in different parts of the system rather than to attempt to change the system as a whole. Such an approach should consider the extent to which they go together, and ideally establish what the causal links are, direct attention to the fact that financial crises need to be carefully defined and when they are, their solution can be set out. Some define crises rather widely to embrace almost any large change in prices. Yet if wealth holders choose to behave in a certain fashion and, for example, speculate on currency movements, they may profit hugely but they must be prepared to bear the costs of the risks as well. That is a problem for them but not a financial crisis.

Which of these different types of crises matters for the central bank? Doubtless it is sensible to look at them all. There may be some value in watching them as indicators of other activity. But in fact it is only a financial crisis that the central bank can make a serious attempt at preventing, alleviating, or curing. Some of the others may trigger red alert but the central bank is not in a position to take action.

Take for example asset prices. Do asset price falls matter? It may appear at first glance that they do. Since banks are concerned with asset prices by virtue of the fact that they lend on collateral and that collateral is frequently property. They are therefore potentially vulnerable to asset price change. However, "correct" prices are not knowable and equilibrium impossible to determine. Forecasting is out of the question. While in principle it may be correct for the central bank to allow for such price change in its behaviour in practice it cannot be done. Much is currently being written on this subject but long-run empirical studies suggest asset prices do not matter. For example, in a study of US stock markets (1830 – 1988) Wilson, Sylla, and Jones (1996) reported that there was no support for the hypothesis that stock market crashes caused banking panics in the period 1866-1813. And interestingly, in the same study they found that volatility of stock market returns had not increased over time.

A related concern with falling asset prices is that they may produce debt deflation. Where this occurs does it matter? In a specific study of the relationship between collapsing asset prices and financial instability in the U.S. Eichengreen and Grossman found that the resulting debt deflation did not matter in the great depression in the sense that it added nothing to the explanation of the severity of the depression to the widely discussed effects of money. In fact when a wide range of debt deflation experience was analysed across countries and time (see Capie and Wood 1997) the striking feature that emerged was that it was difficult to find significant macroeconomic consequences of fluctuations in asset prices.

What about currency crises? A consensus has emerged over the last decade or so among most economists that pegged exchange-rate systems cannot work without capital controls. But capital controls cannot be enforced in the modern world. So the solution to the exchange-rate problem is to

have a floating system. In spite of the problems attaching to floating exchange rates most countries seem to want to us them and operate an independent monetary policy. The latter is currently an inflation target. There will from time to time be the extreme inconvenience of a rapidly changing exchange rate. (In the late 1990s sterling's real effective exchange rate moved by more than 25 per cent.) There will be countries who choose to escape the uncertainty which that brings who may opt for a currency board or perhaps a monetary union, but in the main floating rates should become the norm. However, the main point is that if there is an exchange-rate problem (in the sense of a rapidly changing price) there should be an exchange-rate solution.

3. WHAT IS A FINANCIAL CRISIS?

To return then to the one kind of crisis that matters to central banks - the financial crisis. A financial crisis is best defined as the circumstances in which there is a threat to the money stock. Banks in fractional reserve systems take deposits and make loans and by doing so they multiply the stock of money. When they fail, or take steps to reduce their assets, they reduce the stock of money. But in the economy wages and prices are generally "sticky"; that is, they do not adjust quickly, and that being the case a fall in the stock of money has a damaging impact on the real economy – output falls. If one bank fails there is a danger of suspicion spreading that the system as a whole is less sound than it might be. That could lead to others failing, as depositors remove their funds. This brings the danger of a major collapse in the stock of money and hence of a severe recession in the economy. Avoiding financial instability of this kind is a key concern for public policy. So a financial crisis is where there is a threat to the money stock and it can be detected by changes in the way in which

the public holds its money and in how the banking system keeps its reserves. This means that the failure of one institution is not in itself a financial crisis.

There have been genuine financial crises, of the kind just defined, around the world since the beginning of modern monetary economies with fractional reserve banking systems. In eighteenth century England they were frequent. In the nineteenth century they continued. Their typical pattern was that a boom would develop to a point where bank reserves were seriously threatened. Interest rates would rise and that would choke off the wilder activity, but it also raised doubts over whether cash could be obtained. If such fears arose panic would develop.

Nevertheless, there continue to be different schools of thought on financial crises. Some take a narrow focus and emphasise the banking system and at the other end of the spectrum there are those who are prepared to consider price movements in almost any asset. Schwartz (1984) made a useful distinction here, between what she called 'real' as opposed to 'pseudo' crises. She wrote, "A financial crisis is fuelled by fears that the means of payment will be unobtainable at any price and, in a fractional reserve banking system leads to a scramble for high-powered money. It is precipitated by actions of the public that suddenly squeeze the reserves of the banking system…. The essence of a financial crisis is that it is short-lived, ending with a slackening of the public's demand for additional currency" (p.12). In other words this is quite different from the failure of one financial institution, and it helps to distinguish between financial crises and other crises. It also contrasts with a disinflation which is likely to be long and drawn out. Thus many of the phenomena of recent times that have been called financial crises have been pseudo crises: stock market collapse, property price collapse, Britain's leaving the ERM and the price of sterling slumping, and the

failure of Barings (1995), to take just some at random. A financial crisis occurs when the stability of the banking system is threatened. It is only in that circumstance that the use of money threatens to disappear and the financial structure is threatened. Not only is this distinction between real and pseudo helpful for directing attention to what actually happened, and what the ramifications might have been, it is useful too for concentrating attention on the solution. The solution, which we return to at greater length in a moment, is for the lender of last resort to provide the system with immediate and sufficient liquidity to allay the panic.

In times of panic, or of events that might be believed to lead to panic, from wherever that derives, the public will take the precaution of holding higher amounts of currency than deposits. They do this for fear that the financial system will fail and that their institution will be part of that and that they therefore lose their deposit. The currency ratio will therefore rise sharply. In the same way banks who see problems ahead will try to safeguard themselves from prospective difficulties and will hold higher cash reserves to try to satisfy the demand from their customers. The reserve ratio should therefore rise noticeably. The combined effect of the change in the two ratios is to greatly diminish the money multiplier and so produce a collapse in the money stock. When the authorities see the threat of such a pattern evolving they can supply all the monetary base necessary to keep the money stock on an even keel. When it is known that they will do this that in itself helps to allay the panic.

4. HOW SHOULD THE CB ACT?

The central bank should act to avert a panic by acting as the lender of last resort. The lender of last resort is a very useful concept when clearly defined. However, it is a term

that invites interpretation, is sometimes misunderstood or on occasion distorted. In its most useful form it means the ability to provide funds on any scale and to do this quickly and decisively. It is the fact that central banks have the power to create high-powered money that allows them to be the lender of last resort. The purpose of a lender of last resort is to ensure stability in the financial system, to avert panic by taking appropriate action.

This was all set out a long time ago by several commentators but most notably, Henry Thornton, and Walter Bagehot. Henry Thornton has been described as the father of the modern central bank. His classic monograph Paper Credit (1802) is the source of his principal ideas. Joseph Schumpeter called it the Magna Carta of central banking.

The essence of central banking for Thornton is contained in the following quotation:

"To limit the amount of paper issued, and to resort for this purpose, whenever the temptation to borrow is strong, to some effectual principle of restriction; in no case, however, materially to diminish the sum in circulation, but to let it vibrate only within certain limits; to afford a slow and cautious extension of it, as the general trade of the kingdom enlarges itself; to allow of some special, though temporary, enquiries in the event of any extra ordinary alarm or difficulty, as the best means of preventing a great demand at home for guineas; and to lean to the side of diminution, in the case of gold going abroad, and of the general exchanges continuing long unfavourable; this seems to be the true policy of the directors of an institution circumstanced like that of the Bank of England. To suffer either the solicitations of merchants, or the wishes of government, to determine the measure of the bank issues, is unquestionably to adopt a very false principle of conduct." (Paper Credit, p. 259.)

This is a remarkably clear statement given its date, and

the state of development in the money market. It describes the ideal daily operation of a central bank. But how should the bank behave in a crisis? Thornton accepted the danger of the failure of one bank leading to the spread of fear and possibly panic and the failure of many banks - a common occurrence in the England he was describing, that of the late eighteenth century when there were hundreds of small banks. "If any one bank fails, a general run upon the neighbouring ones is apt to take place, which if not checked in the beginning by a pouring into the circulation a large quantity of gold, leads to very extensive mischief." (Paper Credit p 180.)

Thornton even allowed that several institutions could fail but that the central bank may nevertheless not feel the need to save them:

"It is by no means intended to imply, that it would become the Bank of England to relieve every distress which the rashness of country banks may bring upon them: the bank, by doing this, might encourage their improvidence. There seems to be a medium at which a public bank should aim in granting aid to inferior establishments, and which it often must find it very difficult to be observed. The relief should neither be so prompt and liberal as to exempt those who misconduct their business from all the natural consequences of their fault, nor so scanty and slow as deeply to involve the general interests. These interests, nevertheless, are sure to be pleaded by every distressed person whose affairs are large, however indifferent or even ruinous may be their state." (p 188.)

Thornton placed the emphasis on responsibility to the market and not to an individual institution with the central objective is to prevent the collapse of the money stock.

Bagehot was the great developer and expounder of these views in the nineteenth century. He first wrote on this subject in 1848 in the first article that he published. He was writing first of all about the previous year's financial crisis and

commenting inevitably on the Act of 1844. His article is remarkable for one so young (he was only 21 at the time) and is worth quoting at length.

The currency argument is this: "It is a great defect of a purely metallic circulation that the quantity of it cannot be readily suited to any sudden demand; it takes time to get new supplies of gold and silver, and, in the meantime, a temporary rise in the value of bullion takes place. Now as paper money can be supplied in unlimited quantities, however sudden the demand may be, it does not appear to us that there is any objection on principle of sudden issues of paper money to meet sudden and large extensions of demand. It gives to a purely metallic circulation that greater constancy of purchasing power possessed by articles whose quantity can be quickly suited to demand. It will be evident from what we have said before that this power of issuing notes is one excessively liable to abuse because, as before shown, it may depreciate the currency; and on that account such a power ought only to be lodged in the hands of government.... It should only be used in rare and exceptional circumstances. But when the fact of a sudden demand is proved, we see no objection, but decided advantage, in introducing this new element into a metallic circulation." (Bagehot in Stevas vol. 9 p. 267) (This could surely be extended readily to a currency board in the current context.)

These remarkably clear statements are still valid today. What emerges from this is that the lender of last resort is there because, first it is the ultimate source of cash. It can therefore provide all the required liquidity. The liquidity should be provided to the market as a whole and the lender should not bailout individuals. The ideal way to do this is to act anonymously. Additionally, there should be no commercial rivalry that would deflect it from its task.

It is important to stress that it is the peculiar position of

the monopoly note issuer and holder and provider of the ultimate means of payment that allows, almost obliges, it to behave as the lender of last resort. That is the only institution that can supply without limit (but at an increasing price) the ultimate means of payment. It is the knowledge in the markets that supply cannot run out which serves to assure the market and allay the panic. And if this position is made known in advance the picture is complete.

The bank should not try to rescue any one institution. Besides, it is worth pausing to consider what could reasonably be meant by "bail-out". Central banks in general do not have the capital resources to salvage single-handedly an institution of any significant size - significant in the sense that it could have damaging consequences for the rest of the system. And if the central bank were to discount inferior assets of an individual institution in difficulty, then if these assets were marked to market the central bank would be seen to be damaging its own capital/asset ratio. If this in turn required government assistance in the raising of more capital, the central bank would in effect have taken a fiscal decision, something it should surely not be doing. Thus, all the central bank can really do is oversee or organise a rescue operation, perhaps putting pressure on others to subscribe new capital.

Another problem is said to arise over the size of some financial institutions. It is sometimes argued that one particular institution is too large to be allowed to fail. Too big to fail is a cost benefit concept. Generally speaking for banks of a certain size the benefits of saving them - to the rest of the system and the economy as a whole - are reckoned to outweigh the costs of them failing. However, while the costs of failing are relatively short term and susceptible to some calculation, the benefits to the system of the salutary lesson of allowing them to fail must be seen as very long term and almost impossible to measure. But the likelihood is that the benefits of allowing

failure will outweigh the costs. A substantial benefit is likely to be improved prudent behaviour on the part of other institutions.

How can the ideal operation of the last resort be achieved? It is possible that a key element in this story is that anonymity is highly desirable in the execution of the lender of last resort function. The lender of last resort supplies funds to the market in times of need. It does not supply individual institutions. In its proper form it should not engage in bailing out firms of any kind be they banks or non-banks. Therefore, if the operation could be carried out where the identity of those seeking funds was not known to the Bank that would be ideal. This was achieved by a particular mechanism in England and similar approaches have been recommended for other countries such as the United states.

A central bank assumes the function of lender of last resort when it accepts responsibility for the banking system as a whole and that should override any residual concern with its own profitability. It is the appreciation of how they should behave in a crisis, rather than any individual act of rescue, that should date the acceptance of the role.

5. THE ROLE OF REGULATION/SUPERVISION

Is there any room left for regulation or supervision? The principal functions of the central bank are to provide for monetary and financial stability. Monetary stability is more easily taken care of via some relatively straightforward operating procedure. Financial stability is more complicated. For one thing there is no measure of financial stability or instability. And it is concerned with extreme and uncertain possibilities. Nevertheless, as we have argued it can be accomplished by means of the lender of last resort. That is aided by a well-behaved banking system and it is preferable

if banks have learned how to behave appropriately and recognise the potential costs of poor behaviour. Yet, for a variety of reasons calls for regulation are diverse and frequent and persistent.

It is never straightforward to say from where regulation derives. There is a long-running debate in economics over whether it is ideas that dominate or interest groups in the shaping of regulation. Where it was once innocently accepted that regulation was the outcome of politicians concerned about consumer welfare there has been a big switch to the view that it is largely the product of firms who set out to improve their own position by limiting the competition - rent-seekers. Resulting regulation is unlikely to be ideal policy.

Even if we accepted for the moment that regulation was the result of well-meaning government would it necessarily be the optimal policy. The reasons given for introducing regulation are almost invariably plausible: health, physical safety, financial security, and so on. But in spite of heavy regulation these are not always achieved. Countless examples can be given but here are just two from the non-financial world. In the US, airline regulation was extensive to provide maximum passenger safety. When the industry was deregulated new firms entered and airline profits fell, as would have been readily predicted by an economist. But safety improved. Accidents per passenger mile fell. In other words less regulation brought greater safety. Another example can be found in what was formerly the most highly regulated economy in the OECD - New Zealand. They too deregulated what had been extremely heavily regulated transport sector. The quality of transport services improved hugely and the costs to the consumer fell. Thus regulation can have the perverse effect of delivering the opposite outcome to that desired.

An example from the financial world can be found in the United States following the great depression of 1929-33. One

of the knee-jerk responses to these events was to introduce deposit insurance. But the negative role that played in the savings and loans collapse forty years later reminds us of the far reaching effects that such regulation can have.

Even if regulation delivered the outcomes desired we must consider at what cost it is achieved. If the costs exceed the benefits then it is clearly not worth it. Even if we simply considered the costs of compliance it would become clear that they were such as to damage the financial system. But moving beyond that there are the costs of limiting competition, or distorting appropriate portfolio diversification. An example of the latter can again be found in the US where regulation prevented banks from branching and so left them exposed to the particular vagaries of what were often highly specialised local economies. That produced frequent bank failures which in turn called forth more bank regulation leading to other unforeseen difficulties somewhere later down the line.

And on the question of costs the other calculation to be made is who bears the cost. It usually turns out to be the consumer.

The British experience from the middle of the nineteenth century until the outbreak of the Second World War is testimony to the benefit of light regulation. Banks were allowed to look after their own affairs. There were no financial crises in that period and the system proved to be extremely robust.

Should there nevertheless be supervision? If the Central Bank is to be an effective lender of last resort there may be a case for it having special access to the key information of the banks. But that is about as far as it goes.

What I have argued nevertheless requires a central bank to have the necessary reputation to be able to carry the policy through. Reputation is not quickly or easily acquired. Substitutes for reputation can perhaps be approximated in

independence coupled with transparency and accountability.

6. WHAT TO DO AFTER THE CRISIS PASSES

Once a crisis is over some plan for extracting the extra cash injected should be implemented otherwise the excess money will be translated into inflation. There was no such plan in Britain in 1914 nor was there in the subsequent years, and this is part of the explanation for the extent of the inflation experienced in the course of the next few years.

In 1914 London suffered its first financial crisis for a very long time – possibly for a long as half a century. 1914 was different though. It arose as a direct result of the war, there was no preceding boom, and it was comparatively short-lived. When war became a probability in late July, selling speeded up on the Stock Exchange, exchange rates became more volatile, and foreigners were unable to make remittances to the London acceptance houses. Banks in London started calling in loans they had made to the stock market.

The root cause of the crisis was a failure of remittance. London was a massive creditor to most of the rest of the world and that included the enemy. British stockbrokers were owed money by foreigners, but in late July foreign stock exchanges were closing, moratoria were being declared, and debts became irrecoverable at least for the foreseeable future. The London banks had lent money to the brokers "on the margin". That is they had called for securities as collateral for the loans to an amount 10 per cent to 20 per greater in value than the loan. When security prices began to fall that margin was eroded and the banks, not unreasonably, began to call in the loans. The brokers sold more securities in order to repay the loans but of course in the process drove security prices down further and so on. This is a well-known pattern in such circumstances.

In late1914 there were serious problems for the British banking system and the Bank of England's response was appropriate. But the failure was to extract the extra monetary base when the crisis passed and inflation inevitably followed.

The clearest case of crisis which called out for the authorities to inject high powered money was in the great depression of 1929-32 in the U.S. There were several waves of bank failures and what was required was for the authorities to increase the quantity of high powered money. The currency deposit/ratio rose sharply, and while it is true that the authorities raised the amount of base money, it was nevertheless hopelessly insufficient and the broad money stock fell precipitately. In the forty-three months from September 1929 to March 1933 that marks the depression, bank deposits fell by $18,044m or 42.4 per cent. In just four months from October 1930 to January 1931 the currency/ deposit ratio moved from 8.7 per cent to 9.9 per cent. But over the whole period the currency/deposit ratio rose from 8.6 per cent to 22.7 per cent and the banks' reserve/deposit ratio rose from 7.65 per cent to 11.87 per cent. These are dramatic changes which meant the money multiplier fell from a high of 6.7 to a low of 3.6 between these dates. Some idea of the scale of H to be injected can therefore be guessed at. In recent paper Bordo, Choudri, and Schwartz (1999) argue that while for most countries the gold standard prevented the authorities raising H, this was not true for the U.S. where there were huge gold reserves. At the two critical points, October 1930 to February 1931 and from September 1931 to January 1932 the Fed could have prevented the banking panics *without endangering convertibility*.

The lesson of the great depression was not to allow such a collapse again. When the prospect appeared to threaten, in 1987 when the stock market collapsed after a long boom, the Federal Reserve immediately injected the required amount of

monetary base and when the danger of financial crisis passed they took out the extra liquidity.

7. CRISIS MANAGEMENT

There were occasions when the Bank organised the rescue of an ailing institution. For example, the classic case was Barings in 1890. There had been a boom in Argentina in the mid 1880s and that country's credit rating had been improving from that point. Capital flowed in. Poor harvests in 1889 and problems servicing debt contributed to the resulting coup in July 1890. There was some default. Barings had underwritten large bond issues and it became clear that they were liable for large amounts.

Barings was a huge financial institution and the government pressed the Bank to provide support for Barings, along with other leading banks. The Bank in turn asked the government for a guarantee. Suspension of the 1844 Act was discussed but Lidderdale (the Governor) rejected that idea lending further weight to the view that this was not a liquidity crisis but rather one firm in difficulty. The Bank arranged a lifeboat operation. But this does not qualify as lender of last resort action. At most it might be described as an aspect of crisis management – operating to keep the system on an even keel and prevent anything that looked like a disturbance to the calm that had long prevailed in the system.

CONCLUSION

The role of central banks is surely clear. After providing for long-term monetary stability by for example, adhering to a specified growth rate for the money stock, or to targeting price stability, their key function is to avoid the sharp fluctuations that result from crises. They should do this by

behaving as a lender of last resort of the kind described. Other problems such as excessive exchange-rate volatility should be tackled by other means and by other institutions.

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TURKEY'S 2000-2001 FINANCIAL CRISIS AND THE CENTRAL BANK'S POLICY IN THE AFTERMATH OF THE CRISIS

Fatih Özatay, Deputy Governor of Bank of Turkey

TURKEY'S 2000-2001 FINANCIAL CRISIS AND THE CENTRAL BANK'S POLICY IN THE AFTERMATH OF THE CRISIS[1]

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1. INTRODUCTION

The Turkish economy was hit by two crises in the last decade. The first one occurred at the beginning of 1994, at which time there was a managed float. The second crisis erupted in the second half of November 2002 in the midst of an exchange rate based stabilization program. In response to the turmoil, a new letter of intent was presented to the International Monetary Fund (IMF) by the government, which calmed market pressure. However, at the end of December the interest rates were almost four times higher than the levels at the beginning of November and five times higher than the pre-announced (at the outset of 2000-02 program) year-end depreciation rate of lira. This unsustainable situation ended on February 19, 2001 when Prime Minister Bülent Ecevit announced that there was a severe political crisis, which had ignited an equally serious economic crisis in the highly sensitive markets. On that February date, overnight rates jumped to unprecedented levels of 6,200 percent. Three days later the exchange rate system collapsed, and Turkey declared that it was going to implement a floating exchange rate system.

The following section briefly discusses the underlying reasons behind the crisis. Monetary policy in the post-crisis period is analyzed in the third section. The last section presents developments in the aftermath of the crisis.

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[1] Prepared for the "Bank of Albania in the Second Decade of Transition" conference that is going to be held on December 6, 2002 in Tirana. This note heavily draws on "F. Özatay and G. Sak (2002), Banking Sector Fragility and Turkey's 2000-01 Financial Crisis" which is forthcoming in Brookings Trade Forum 2002, edited by D. Rodrik and S. Collins.

2. UNDERLYING REASONS OF THE CRISIS

Analyzing the 2000 data, one would immediately observe poor macroeconomic performance. The public sector borrowing requirement, ratio of public debt to GNP, current account deficit, inflation level, and the ratio of liabilities of financial sector to official reserves were all high. Moreover, the lira was appreciated in real terms. However, this analysis would be a misleading picture of the Turkish economy. Turkey started to implement an IMF-supported program at the beginning of 2000. This program addressed macroeconomic imbalances and succeeded (to some extent) in reversing the negative trend. Relative to 1999, there was a sharp decline in both in the inflation and real interest rates as well as a significant increase in primary surplus. Consequently, the ratio of debt to GNP and public sector borrowing requirement decreased.

It is true that the rising current account deficit and real appreciation of the lira was a source of increasing concerns. However, an important part of the current account deficit was due to external shocks-rising oil prices and appreciation of the U.S. dollar against major European currencies. And, there was a built-in exit strategy from the crawling peg system, which was the main factor behind appreciation. Moreover, the program envisaged a further fiscal tightening for 2001 that would have been one of the remedies to the current account program.

Without a fragile banking system and triggering factors, the high current account deficit and real appreciation of the lira would not be enough on their own to precipitate the 2000-01 crisis. There was risk accumulation in the banking system in the period preceding the crisis. For example, there was an increase in currency and maturity mismatches as well as a rise in non-performing loans. Hence the banking system was

highly vulnerable to capital reversals. However, the risk accumulation was not homogenous throughout the system. There were two different types of dichotomization: private versus state banks and within the private banks. While the state banks were more open to interest rate risk, private ones were prone to exchange rate risk. Within the private banking system there were some mid-sized banks that were heavily concentrated in government debt instruments business. Moreover, they were carrying these instruments by borrowing in the extreme short term.

Given the weakness in the banking system, it is no surprise that the crisis triggering factors closely related to the banking sector and its practice of carrying government debt instruments portfolios. Main igniting factors were the delays in reforming the banking sector and the actions that caused the dichotomy in the banking sector to come to the surface. This environment made things extremely difficult for state banks, which were suffering from duty losses. These banks that had been heavily dependent on overnight funds found themselves in a position not to be able to do business as usual.

The root cause of the banking system fragility was the high public sector borrowing requirement and the way it was financed. There was no close link between rising deficits and inflation, beginning as early as the 1990s. The main reason was that the budget deficits were primarily financed through government securities. However, the sustainability of this financing mechanism was conditional on the continuation of demand for government securities. In the absence of a program that would have reduced borrowing requirements, a halt in demand would have forced authorities to monetize and hence would have caused a jump both in the exchange rate and inflation rate. This led economic policymakers to try to prevent a decline in demand for government securities. These policies, coupled with the upward trend in banks' government

debt instruments portfolios, increased the vulnerability of the banking system.

3. MONETARY POLICY IN THE AFTERMATH OF THE CRISIS

Both the Turkish banking system and corporate sector were severely impacted by the 2000-01 crisis. The immediate re-capitalization needs of the state-owned banks and the banks taken over by the Savings Deposits Insurance Fund (SDIF) led to a jump in the domestic debt stock, which was already too high. Meanwhile, rapid depreciation of the exchange rate had the potential of starting a new inflationary process. Additionally, policymakers lost their credibility. The undersecretary of Treasury resigned, as did the Central Bank governor. To overcome these problems, Turkey announced a new, IMF-supported program in May 2001. The new program had three pillars: fiscal and monetary discipline; structural reforms; and a substantial amount of external financial support.

Following the 22nd of February, the Central Bank set its short-term priorities so as to remove defects in the payments system, to make the financial system function again and to provide stability in financial markets. After easing the tensions in the market, the main priority became price stability in line with the Central Bank's new law.

3.1. OPERATION OF RESTRUCTURING OF STATE-OWNED BANKS

The Central Bank played a key role in the operation of restructuring of state-owned banks. The Treasury issued government securities amounting to 25.8 quadrillion Turkish liras (approximately 23 billion dollars) and gave them to state banks to fulfill its liabilities to these banks. The state banks, in turn, raised funds by selling these securities to the Central Bank, or carrying out repo transactions with the Central Bank.

The Central Bank purchased 14 quadrillion Turkish liras worth of these securities in April and May and had started to roll-over the remaining part of the liquidity needs of these banks at 7- and 14-day maturity repo transactions.

In this way, the public sector banks repaid all of their short-term liabilities to the market. Their duty losses were also terminated by the use of these funds. The Central Bank's balance sheet was heavily affected by this operation. In the remaining months of 2001, the excessive liquidity arising from the banking sector operation was withdrawn by open market operations. Hence, to avoid the inflationary effects of the operation, the Central Bank controlled base money by the implementation of monetary targeting, which imposed some restrictions on the classical aggregates of the Central Bank balance sheet.

3.2. Operations in the Foreign Exchange Market

In the beginning of the floating exchange rate regime, the Bank declared that the exchange rate would be determined by market dynamics and it would not intervene in the exchange rate markets except in cases where exchange rates display an instantaneous and highly volatile pattern. Indeed, since August 2001 the Central Bank intervention in the market was almost nil. However, until mid May 2001, the Central Bank conducted regular foreign exchange sales auctions. Between May 17 and July 11, FX sales auctions were conducted whenever required without pre-announcing the amount. After July 11, the monthly program of FX sales auctions was pre-announced. Main underlying reason of these auctions was to sterilize the excess liquidity in the market caused by the use of external financing, which was provided by the IMF to make the Treasury's domestic debt payments. In this context, 2.8 billion U.S dollars worth of FX was sold between July 11 and

November 30, 2001. On November 30, it was announced that FX sales auctions would not be conducted after that date.

At the beginning of 2002, the Central Bank announced that, based on its projections there was an increasing probability of reverse dollarization. The Bank made it clear that under these conditions it was going to open pre-announced foreign exchange buy auctions. In fact, reverse dollarization increased in the first quarter of 2002, and the Bank opened these auctions as it promised. However, not to interfere with the level of the exchange rate it designed a specific auction mechanism. By the increase in political uncertainty in summer months, these auctions were halted.

3.3. NOMINAL ANCHORS

From May 2001 to late 2001, base money was the only anchor of the monetary policy. Since late 2001, the Bank has been using two nominal anchors. First one was again base money. However the Bank did not see monetary targeting as a sufficiently powerful anchor. Taking into consideration the fact that some problems might arise in forecasting base money demand and the possibility of a weakening relationship between base money and inflation as observed in some countries, the Bank started to also use implicit inflation targeting. This practice was announced to the public at the end of 2001. In this framework, short-term interest rates were actively determined solely based on inflationary outlook. Economic reasoning of these interest moves was announced by detailed press releases. This transparent policy helped to increase the credibility of the monetary policy.

Significant progress has been made to satisfy the preconditions for the implementation of explicit inflation targeting. The Central Bank Law has been amended. A new law on Public Debt was passed from the Parliament. Various

forecasting and policy analysis models were developed.

4. RESPONSE OF THE ECONOMY

Based on the 2001-03 program, economic fundamentals continuously improved. However, up to October 2001 the markets' reaction was not in line with fundamentals. The situation was reversed in the October-May 2002 period. The nominal exchange rate, inflation rate, interest rate, and Turkish Eurobonds spreads all followed a significant downward trend. With the surge in political uncertainty at the beginning of May 2002, which was perceived by market participants as policy uncertainty, this positive stance began to change. Finally, election results, which led to a one-party majority government was highly welcomed by the markets, and once again both the interest and exchange rates started to follow a downward trend (Table 1).

Table 1: Macroeconomic Indicators of the January 2001 - July 2002 period[a]

	Average exchange rate (USD/TL)	Secondary market Average interest rate (%)	Average Treasury borrowing rate (%)	Eurobond spread (end of period, basis points)	Annual Inflation rate (CPI, %)	Expected year-end Inflation rate (CPI, %)	Annual Industrial production growth rate (%)
2001.01	672.40	60.1	65.0	729	35.9	n.a.	7.5
02	739889	103.1	122.5	996	33.4	n.a.	-4.9
03	968299	154.8	159.8	990	37.5	n.a.	-7.6
04	1209965	127.0	130.5	864	48.3	n.a.	-9.6
05	1132510	86.1	82.0	833	52.4	n.a.	-9.4
06	1219505	83.2	88.4	848	56.1	n.a.	-10.1
07	1320605	95.2	91.9	1021	56.3	n.a.	-11.0
08	1400947	89.1	92.7	904	57.5	63.7	-10.8
09	1469888	87.9	87.6	929	61.8	64.8	-9.2
10	1600157	87.7	86.4	884	66.5	68.4	-13.6
11	1521208	77.6	79.3	755	67.3	72.0	-14.4
12	1462198	72.6	74.1	678	68.5	69.8	-8.1
2002.01	1359182	70.8	71.4	641	73.2	47.3	-2.1
02	1349975	69.6	70.0	640	73.1	47.5	-4.9
03	1398693	65.2	68.5	591	65.1	43.6	19.3
04	1317739	56.6	58.7	577	52.7	37.0	14.9
05	1389955	57.0	55.3	629	46.2	36.7	11.3
06	1523940	69.1	72.3	847	42.6	35.2	7.3
7	1653098	75.4	72.6	912	41.3	35.7	12.5
8	1639441	67.5	64.2	872	40.2	35.0	7.3
9	1648970	71.3	62.3	952	37.0	34.3	10.8
10	1650989	67.8	64.0	761	33.4	33.3	11.8
11	1607762	53.9	52.9	884	32.1	32.0	n.a.

a: Average figures are the monthly averages of daily data. Eurobond spread is the spread between the 30-year Turkish Treasury Eurobond yield and 30-year US bond yield. Annual figures denote annualized values for the monthly data, that is they are calculated as $[(X(t)/X(t-12))-1]$. Expected inflation data comes from the biweekly survey of the Central Bank.

The key to understanding these contrasting phenomena is the high ratio of domestic debt to GDP and the issue of its sustainability. The imposed fiscal and monetary discipline of the program and the accompanying structural reforms notwithstanding, reducing the debt to GDP ratio to manageable levels requires a considerable time period. In the interim period, such an economy is vulnerable to changes in the market sentiment, which increases concerns about the debt sustainability. Such a high level of debt raises the possibility of multiple equilibria. Given the macroeconomic fundamentals, the type of equilibrium in which the economy is in, or approaching, is mainly determined by expectations. Negative expectations can yield an economy to a "bad" equilibrium, at which the rates of inflation, interest, and exchange are all high. Positive expectations will yield to a "good" equilibrium. Based on this possibility, one should look at both fundamentals and expectations.

4.1. FUNDAMENTALS AND EXPECTATIONS: MAY 2001-OCTOBER 2001

Right after the twin crises, Turkey took key structural reform measures: Weak banks were taken over by the SDIF and excluded from the banking system. The overnight borrowing of these excluded banks was significantly reduced, and some of the banks were re-capitalized or merged, or both, while some were actually sold. There was a dramatic change in the governance structure of state-owned banks. Accumulated debts of the Treasury to these banks were paid and the state banks were re-capitalized. A politically independent board of directors was appointed. The board's mandate was specified as protecting the interests of depositors. A new management for these state banks was appointed, and the number of branches and employees were significantly reduced according to an operational plan. In May 2001 the Central Bank law

was changed and the bank gained "tool independence". The law explicitly stated that the main goal of the Bank is price stability. In additional to structural reforms, both the fiscal and monetary policies remained on track.

However, excluding a few weeks prior to the September 11 terrorist attack in the Unites States and up to mid-October, market expectations were not in line with the improvement in fundamentals. The interest rate stayed at a high level. The exchange rate followed an upward trend. The spread of the Turkish Treasury bond stayed at high levels (see table 1). That is, the Turkish economy was at a bad equilibrium. But why?

There were at least four reasons hampering gains in policy credibility: First, some political developments-that is, disputes among the coalition parties regarding some of the structural reforms- increased doubts about the continuation of the program and raised the tensions in the market. Second, the financial sector had a significant amount of open foreign exchange position before the crisis-that is, the sharp depreciation of Turkish lira did have an adverse impact on the balance sheets of the entire banking system. Third, there were external shocks, namely the potential of negative developments in Argentina was thought to have a contagion effect for Turkey. Fourth, the exchange rate regime was radically altered and economic agents were not familiar with a floating exchange rate regime environment.

These developments led to negative expectations by the markets, as the sustainability of public debt was continuously questioned. There was a vicious cycle: despite improving macroeconomic fundamentals, negative expectations were pushing the economy to a bad equilibrium. That bad equilibrium, in turn, was validating negative expectations. In early August the exchange rate volatility started to decline, and this was seen as a positive sign for gains in policy credibility. However, the tragic events of September 11

reversed market sentiment. In just a few days time, interest rates increased by some fifteen percentage points and the Turkish lira depreciated considerably. Once again, the sustainability of the program began to be questioned.

4.2. CHANGING MARKET SENTIMENT: OCTOBER 2001-MAY 2002

This worsening trend halted as it became evident that Turkey was going to further strengthen the ongoing program by additional structural fiscal measures and a banking sector re-capitalization program aiming for a quick recovery of sound banks. Also, there was the additional credit line from the IMF. The government announced its primary surplus target for 2002 as 6.5 percent of GDP. This announcement was found credible by market participants, since it became evident that the ambitious primary budget surplus target of 6.5 percent of GNP for 2001 was, in fact, going to be met. In addition developments in the Central Bank's balance sheet were in line with the constraints agreed to by the IMF. One should also add to these positive developments the fact that the political disputes among the coalition parties were finally out of the picture. There were other contributing factors as well. First, the fundamental differences between the Argentina and Turkish economies became more apparent. Second, banks started to roll over their foreign credits. Third, the economic agents began to get used to the mechanics of the floating exchange rate regime and, since the beginning of August, the Central Bank intervention to foreign exchange market had been almost nil. Fourth, the structural reforms in the banking sector were continued. Fifth, to finalize the restructuring of the financial sector, in February 2002 a re-capitalization law passed. Sixth, at the beginning of 2002, a debt management law, designed like a fiscal responsibility act, was enacted by Parliament.

Consequently, the nominal exchange rate almost followed a continuously declining trend from mid-October up to the beginning of May 2002. A similar phenomenon was also observed in interest rates. In March 2002, for the first time since the eruption of the crisis, the industrial production index showed positive growth. This growth stance continued in the following months. Inflation started to decline sharply. A similar phenomenon was also observed in the Turkish Eurobond spreads.

4.3. POLITICAL AND POLICY UNCERTAINTY

From the beginning of May, two negative developments occurred in the political sphere.

First, the Prime Minister was hospitalized and there were widespread rumors about his health. This was considered lethal to political stability, as it led to the possibility of a meltdown in his party-the party with the largest representation in a three-party coalition government.

Second, discussions about the necessary steps that should be taken to meet the Copenhagen criteria-which would start the negotiation process for possible European Union accession- started to undermine the unity of the coalition government. The resulting political uncertainty led to an environment of policy uncertainty. Although there was no change in the fiscal and monetary policy stance, as of the beginning of May 2002, interest rate, exchange rate, and Treasury spreads once again started to deteriorate, demonstrating the importance and the fragility of market expectations once again.*4.4. Political certainty*

At the beginning of August the Parliament decided to have an early election on November 3, 2002. This decision calmed down the markets and both the exchange and interest rates started to follow a horizontal path. Towards the end of October,

results of various polls demonstrated that the likelihood of a one-party majority government was very high. Indeed this was what happened after the general election. Markets reaction was very positive and rapid. A sharp decline in interest rate occurred. The Turkish lira once again appreciated in nominal terms.

ALBANIAN FINANCIAL SYSTEM IN TRANSITION PROGRESS OR FRAGILITY,

Shkëlqim Cani, Governor of the Bank of Albania, Sulo Hadëri Mamber of Supervisory Council of Bank of Albania

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ABSTRACT

This paper analyses the developments in the banking system, as the most important part of our financial system, which are considered in the context of and relationship with macroeconomic developments, highlighting two moments of crisis and turbulence of this system in 1997 and 2002. While the first financial crisis was a crisis ignited by pyramid schemes and not closely related to the banking system, the second moment represents a pure disturbance of the banking system, which marked the threshold of a banking crisis.

In this paper, we analyze the essential features of the banking system and various factors that stand in the foundation of the banking sector developments, reaching the conclusion that in spite of the significant progress, the banking system remains fragile and exposed to serious crises and disturbances that may be transformed into banking crises. The analysis of the financial crisis ignited by pyramid schemes and the consequences it brought about, especially in forming the public expectations, serves as basis for explaining even the recent shocking in the banking system.

The banking system development and the increase of public confidence in it relates not only to its development and invigorating through the privatization of state-owned banks, encouragement of competitiveness, perfection of payment systems and strengthening of supervision, but also to real economy development and political stability of the country.

1. INTRODUCTION

In the process of transforming a country with centralized economy into a country with free market based economy, besides major problems such as coping with the inflation and ensuring stable economic growth paces, which comprise the fundamentals of a successful transformation, a special place is occupied by the transformation and the reform of the financial system, especially in the banking sector. Given that in 2001 the financial market and other non-bank financial institutions occupy a rather insignificant weight of 5 per cent of the whole banking system (Ibrahimi, Salko, 2001), we will focus on the banking sector analysis.

During these 12 years in transition, a significant progress is marked not only in the direction of macroeconomic stability but also in the implementation of intensive structural reforms, including the banking sector reform as well. Notwithstanding the unfavorable conditions of starting the Albanian economy and the banking sector[1] (Haderi, Ibrahimi, 1996), the Albanian banking system is developed step by step by being extended with other private banks, through privatization and restructuring of state-owned banks, through the extension of the banking network, perfection of legislation and payments system, perfection of technology and the banking services, increase of crediting level, increase of fruitfulness and increase of other banking services.

Notwithstanding the progress of the Albanian economy[2] and the banking sector, the latter is still exposed to crises

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[1] The inheritance from the centralized system where money served merely as an account unit and played a limited role as an exchange tool constitutes one of the important causes of relative backwardness of the banking sector in transition.

[2] Albanian economy has testified that macroeconomic consolidation is still fragile, with external and fiscal imbalances, with the lowest income per capita in Europe, with relatively high poverty and relatively weak institutions. The macroeconomic consolidation may be ruined as soon as it is placed (1997), trade deficit is dis-balanced, budgetary deficit and debt in considerable levels, financial market continues to be in low development levels, etc. (Kule, Haderi 2001)

and is characterized by the wavering of public confidence in it, inappropriate level of payments systems, insufficient competition and domination of the system by only one bank[3], lack of a developed banking market, lack of a completely efficient legal framework, etc. The most clear evidence of the banking system fragility are the crisis of the financial year 1997, ignited by the pyramid scheme collapse, and the crisis of the banking deposits at the beginning of 2002. [4]

Our paper focuses precisely on the analysis of these highly negative moments, aiming at answering the questions highlighted by the banking system development during the years of transition. The Albanian transition testifies that the banking system, vis-à-vis a relatively stable economic development, measured in terms of inflation and economic growth, also reveals weaknesses and remains exposed to hits. Furthermore, the financial crises have appeared in such moments that are frequently called the "Albanian paradox" too. The financial crisis that associated the collapse of pyramids erupted when Albania displayed an impressive macroeconomic performance (IMF, World Bank) and was considered as successful in implementing the reforms, whereas the withdrawal of deposits occurred at the moment when the banking system was in better performance levels than ever before.

Under these conditions, the question raised is which are the factors that condition the banking system fragility? Does the instability spring from the nature of the system or from factors outside it? Which are the most long-term impacts of the pyramid crisis that was relatively slightly affected and that

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[3] In April 2002, the Savings Bank occupied 59.2 per cent of the banking system.

[4] In the last 20 years, many world countries have been hit by different financial crises where are evidenced crises in Nordic countries during the start of 90's and later, Asian crises (Korea and Thailand) at the end of '90s. In this period, special place is occupied by the crises that attacked economies in transition, such as Bulgaria in '96-97, which went through one of the most intensified crisis of the countries in transition, Lithuania earlier, in '94-95 and Mongolia in 1996 that experienced a crisis similar to that of other countries in transition.

influenced the banking sector to the same degree at the moment of its explosion and solution? Why the "Albanian paradox" was repeated with almost the liquidity crisis, which erupted at a time when the banking system had its best performance during the transition years? How were such crises managed and which was the role of the Bank of Albania in the liquidity crisis?

2.   BANKING SYSTEM DEVELOPMENTS IN '91 – '96

2.1   SOCIALIST BANKING SYSTEM INHERITANCE

The transition found Albania as the poorest country in Europe (Table 1[5]), as a communist country with features similar with other socialist countries and especially with those of Southeastern Europe but also with underlined features that distinguish it from other ex-communist[6] countries. Albania was the only European country of the communist block that did not undertake any important economic and political reform such as decision-taking decentralization, increase of market role and the democratization of the country, which applied the Marxist ideology and Stalinist practices rigorously for 45 years. Albania entered transition as a least prepared country from economic, political, social and cultural viewpoint for carrying out radical reforms towards market economy. (Kule, Haderi 2001)

During socialism the banking system was a completely centralized system and until 1976 it was composed of only

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[5] You will find the referred tables attached to the material.
[6] The Albanian model was characterized by the elimination of all private property forms through the complete nationalization of industry and agriculture collectivization; by the complete support on centralized planning and management, leaving no role at all for the allocation of resources by the market; by the extreme application of the principle of being based on one's own forces and on economic independence; by a somewhat total lack of democratic tradition and by the extreme application of the principle of struggle against classes, which maintains the consequences even in the transition years. For more details, see IMF (1992), Pashko (1994), Muço (1997), Haderi et al.(1999), Kule, Haderi, 2001.

one bank, the Albanian State Bank, which served at the same time as a monetary authority and as an authority of credit to economy. Meanwhile, its role as a financial intermediary was rather limited, since either the monetary policy or the credit distribution, were guided according to a centralized plan. The Bank served as an institution of recording the transactions among the producing enterprises. Except the Albanian State Bank, there also functioned the General Directorate of Savings Cash Offices and Insurance, which collected the savings of the population and dealt with the property insurance, mainly the insurance of co-operative[7] property. In 1977 the Agricultural Bank was established as a separate bank, through the separation of one section of the Albanian State Bank, which covered the supply of agricultural sector funds. In 1990, the Department of Foreign Relations of the Albanian State Bank served as a basis for founding the Albanian Commercial Bank that performed the function of financing and encouraging the exports and foreign payments. (Cani, 1995)

In a summarized way, the socialist banking system, on the threshold of transition, was characterized by serious deficiencies for a banking system of free market economy such as (i) its role as a financial intermediary was rather limited since the banks served merely as an institution of recording transactions among producing enterprises; (ii) under these conditions the credit evaluation was lacking and therefore even the risk management was lacking; (iii) the exchange rate was calculated but not its risk; (iv) the accounting system had the recording and monitoring of the fulfillment of the overall plan objectives as its main function, and in this sense, it changed radically from the international accounting practices, a change that was reflected especially in the banking sector; (v) the lack of banking experience in the activities of a market

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[7] The Directorate of Insurance and Savings Cash Offices did not represent a bank because it did not extend loans and the monetary assets deposited by the population were used by the budget.

economy constitutes another negative factor and the banks' directors lacked the international experience.

The period on the threshold of transition was accompanied with a significant decrease of GDP by 13 % in '90 and 27.7 % in '91, a decrease that had started to be felt since mid of '80s. The current account was worsened apparently due to drastic reduction of exports and significant increase of imports specifically for consumer's goods. The trade deficit reached the level of US$ 150 million in '90 and US$ 308 million in '91.

Upon the starting of transition, the budgetary deficit, which during the last years of communist regime was financed by deposits with the State Bank, showed an immediate increase due to the collapse of the collection system of obligatory state income and expenditure for salaries and subsidies of state – owned enterprises with losses. The budgetary deficit in '90-92 reached 15, 31 respectively and 44 % of GDP. The monetary expansion went out of control because the Bank issued money without restriction because of the governing pressure for crediting the enterprises with losses. This impacted significantly on the increase of bad loans in these banks, after the starting of reforms in '92. The credit interest rates were rather low, 3 %, and 5-8% in '90, '91 and until mid of '92, whereas the penalties for non-performing loans were not applied any more. As a consequence, the broad money increased with a rather high annual rate, 21 %, 152 % and 180 % in '90, '91 and mid of '92 respectively. (IMF Economic Review 5, 1995).

2.2 TRANSITION REFORMS AND STRUCTURAL CHANGES OF BANKING SYSTEM IN '91-97

The banking system reform, being a part of economic reform initiated in 1992, started as an institutional reform with the alteration of the legal basis. In April 1992, the People's

Assembly approved the law "On the Bank of Albania", and the Law "On the Banking System of the Republic of Albania". These laws marked the passing of the banking system from one-level to two- level banking system. On the basis of these laws, the way was open to licensing new private banks and regulating the banking system by the central bank.

The Bank of Albania was created as a first tier bank, the country's central bank, while the three other banks: the Savings Bank, the National Commercial Bank, and Agrarian Commercial Bank, constituted the second tier of the banking system. The Savings Bank was successor of Savings Institute with a new status as a universal bank. The National Commercial Bank was an amalgamation of the domestic commercial activity of the Albanian State Bank with the Albanian Commercial Bank.

Also, in 1992 two other banks with joint capital (foreign capital and Albanian Government capital) were licensed: The Italian Albanian Bank and Arabic-Albanian Islamic Bank. In 1993 the Government of Kosova established Dardania Bank and in 1996 two banks with Greek capital were licensed: Tirana Bank and Branch of National Bank of Greece.

During these years, the domination of state-owned banks characterizes the banking sector development, in spite of the slight increase noticed in the weight of G2 and G3 group from one year to the other. Table 3 shows the weight each group occupies in the banking system according to the capital ownership[8].

Notwithstanding the insufficient knowledge on banking inherited from the centralized economy, there can be noticed, though with slow paces, the tendency of banking system activity growth. (Table 4). In 1994 there operated 6 banks in the country with total assets of Leke 146.2 billion, which

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[8] The group of banks on the basis of capital ownership is the criterion that will be used until the end of the material. So, G1 includes the banks with state-owned capital, G2 includes joint ventures and G3 includes private banks.

comprised 79 % of GDP of that year, where the main weight was occupied by National Commercial Bank (77 % of the system assets).

In 1995 we have a reduction of the total assets of the system in Leke 80.8 billion (or 35 % of GDP). This reduction was influenced by the National Commercial Bank, whose main assets (Bank's other assets) were reduced to Leke 6 billion in 1995, from Leke 90.7 billion that resulted in 1994[9], while the other banks indicate their rising activity as compared to the previous year.

In 1996 the total banking system assets reached to Leke 128.8 billion or 46 % of GDP. The increase of the banking system assets by Leke 48 billion belongs mainly to National Commercial Bank (with Leke 41 billion), since the other banks reflect slight increase. This increase of National Commercial Bank assets is due to the increase of current accounts and demand deposits by the pyramid schemes[10].

During this period a number of efforts were made for the restructuring and preparation of the legal basis for banks' privatization, which generally did not result effective[11].

2.3 Problems and difficulties of the banking system in the first years of transition

Besides the positive but fragile developments, the banking sector was accompanied also by many deficiencies and negative developments, which though accepted not to be the main cause of the '97 crisis (Jarvis 2001, Cani and Vika, 2002), they helped in its appearance and deepness. First, the level of financial intermediary was limited. The state-owned banks

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[9] This reduction is due to clearing of some old accounts from the balance sheet of this bank.
[10] Rentier firms, as they were called at that time, opened current accounts and demand deposits with NCB in 1996, at about Leke 38 billion.
[11] For more details see: Cani "Restructuring of the Banks in Albania" in Restructuring Eastern Europe, The Microeconomics of the Transition Process, edited by Soumitra Sharma, Edward Elgar 1995.

that dominated the deposits market by about 90 % performed restricted functions of the financial intermediary, whereas the new private banks were limited in number, rather slow and non-interested in attracting deposits in Leke, being focused mainly on trade credit. The level of deposits did not depend much on the real interest rates because the central bank determined such interest rates that ensured positive real rates levels. The rather low level of credit to economy constitutes another deficiency of the banking system, which indicates the low intermediary scale.

Another underlined deficiency of the banking system in this period was the low level of the payments system. So, for example, at year-end 1996 the performance of payments for transactions through accounts in different branches of the same bank needed 5-6 days on average, whereas for transactions through different banks 15 days were needed. (Cani 1995, Jarvis 2001). Due to these reasons, the currency off banks, at the hands of the public was at very high levels (Table 1).

The absence of a regulatory and supervisory system as well as the absence of culture and tradition for loan repayment, influenced on increasing the level of bad loans. The first years of transition were accompanied with a reduction of economic activity due to the weaknesses of state-owned enterprises, especially in the industry branches with outdated technology and with downward requirements, branches that represented important consumers of state-owned banks. The continuation of credit to these enterprises with low production, in most cases even with the intervention of the government, impacted significantly on the increase of bad loans in these banks. As the fiscal situation got worse, the political impact on the lending decisions increased, due to the destruction of traditional sources of budget income and dept increase during the first years of transition. The overdue loans increased from

14 % of the stock of credit in '93 to about 60 % in '97. (Cani 1995, Ibrahimi and Salko, 2001).

In this period the role of banks as financial intermediaries between lenders and borrowers was limited even due to the absence of a proper mechanism of bankruptcy and liquidation. That is why the state-owned banks were less motivated to be prudent in interest rates offered to depositors as well as in following the substandard loans.(IMF 2002).

In the period of centralized economy, the accounting system had the recording and monitoring of the fulfillment of overall plan objectives as the main function and in this sense, it changed radically from international accounting practices, a change that was reflected appropriate accounting treatment of overdue loans, which did not reflect immediately and clearly the worsening situation of the bank.

The supervisory experience of the central bank was rather limited either due to the lacking of this experience in the conditions of a market economy or due to the restricted supervisory authority and the slowness in placing this authority. On the other hand, the directors of state-owned banks and private banks were not interested in the increase of supervision role, while even the employees of central bank supervision were unmotivated, above all materially, to fight with the directors of these banks. Furthermore, in cases when this supervisory system was at the proper level and stipulated the infringement of rules, these were not accompanied with the charging of penalties foreseen. On the basis of these phenomena stayed the political and economic power of the bank's directors, who, in many cases, were people with power that represented the interests of the party in power. In the first years of transition, when the law itself and its application were weak, the fear from the law was minimal for these individuals.

On the other hand, the lack of requirements to minimal

capital and the lack of appropriate rules of classifying loans from the losses as well as the provisioning rules themselves, deformed the real position of banks in the reporting system.

The inappropriate legal framework in the first years of transition constitutes another weakness of the banking system development. This is expressed either in the power of the central bank to determine prudential rules in licensing, in the absence of bankruptcy law, in its poor implementation by the law courts, in the absence of collateral law or in the non-enforcement of laws when they existed.

The lack of banking experience for the activities of a market economy constitutes another negative factor. Many of banks 'directors lacked the international experience and came from other state-owned sectors, even from sectors without financial experience. The difficulties in managing the bank and the replacement of the senior political officials was frequently accompanied with the replacement of the banks' directors, who in some cases rotated from one bank to another. This created the possibility that the new directors laid the responsibility on the previous director, not bearing responsibility for the problems they themselves had caused in the other banks.

On the other hand, even the foreign banks that started gradually to enter into the banking market were focused for a long time on activities without risk and on employing the most qualified staff. In this way they narrowed the profitable possibilities for the domestic banks to a certain extend, by maintaining a good performance even during unstable periods, such as that of 1992 – 1997. (IMF 2002)

3. PYRAMID SCHEMES AND '1997 FINANCIAL CRISIS

3.1 MACROECONOMIC FRAMEWORK AND FINANCIAL CRISIS

During the period of '92-'96 the developments in the real

sector were characterized by a significant economic growth of 9 % per year, a decline of inflation by 17.5 % on the average level and a significant improvement of the current account and budgetary deficit, which however, remain in high levels. The progress in the macroeconomic stabilization has its basis on the compilation and implementation of tightening monetary and fiscal policies and on the rapid-paced privatization in agriculture, wholesale and retail market, small- and mid-size enterprises, which enlivened the economic growth[12]. A significant step was marked in the central bank's independence with the new law of 1996, which reinforces the maintenance of price stability as the primary objective of the Bank of Albania. However, the monetary policy attended was based on the control of money growth through direct instruments such as loan ceilings and control of interest rates on deposits.

Vis-à-vis the fact of economic growth by 9.1 % in 1996, this year, with its negative political and economic developments such as the contested elections that were preceded by large budgetary expenses for electoral purposes, ungrounded increase of salaries, encouragement of VAT entry in the fiscal package, galloping extension of pyramid schemes, not only contributed in the deep economic crisis of 1997 but in many macroeconomic indicators, the crisis appeared apparently since year-end 1996 with the tripling of inflation in 17.4 % as compared to year-end '95 and the increase of budgetary deficit in 12.9 %. (Kule, Haderi, 2001). After the winning of elections by the party in power and their vast international contest, it was more difficult for the party in power to take appropriate important decisions because they were contrary to its fragile authority.

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[12] During this period, the privatization of agricultural land reached at 93 % at year-end 1993, the reform of taxation system made a headway with the entry of VAT (value added tax) in 1996, the treasury bill market and the massive privatization bonds market started to function, while most of small size enterprises were privatized.

The low banking system development level and especially the negative macroeconomic developments of 1996 contributed in the eruption of 1997 crisis, which was also impacted by the acting of other important factors that lead to the development and collapse of pyramid schemes, such as the informal credit market, the insufficient legal framework and the political factors.

3.2 INFORMAL LOAN MARKET AND PYRAMID SCHEMES. WHY?

The backwardness of the banking system development and its deficiencies nourished and were limited by the emergence and development of informal loan market since the beginning of transition. This market that appeared as a result of the tolerance of state authorities and the absence of the legal framework was composed either by the non-licensed exchange dealers of the foreign exchange market or by the companies that collected deposits and made loans with them, which were illegal because they were not licensed for collecting deposits. The banking system with its inefficiency as a financial intermediary made room for pyramids to absorb the growing savings, especially the savings of emigrants[13]. The interest rates supplied by these companies for the deposits were rather high and moved from 6 – 8 % per month, but however under the level of the loan rates, on which the data are lacking. The large interest rates increase in 1996 even because of the prevention of sanctions towards Yugoslavia got the interest rates offered by the banking system out of game and, as a consequence, the monetary policy effectiveness became non-existent.

The high interest rates lead to large deposit inflows at the

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[13] In this period these savings are evaluated to be at about $ 300 million per year. The system of informal credit was comprised mainly of private loans that the emigrants provided to family and friends, loans which generally reached US$ 30 thousand and were not accompanied with collateral, but with very high interest rates.

counters of these firms while their investment in production and securities was minimal as compared to the amount collected. On the other hand, the phenomenon of re-investing the principal along with interests from clients appeared. The impossibility of managing deposits by the firms lead to their depositing by the firms in current accounts with the commercial banks, creating to them excess reserves in large amounts, which went directly to the purchase of treasury bills, in response to high requests of the budget for liquidity.

Initially, this informal loan market was assessed as positive by the Albanian authorities, since under the conditions of deficiencies of the formal banking system, it was deemed that the companies that operated in this market carried out a financial intermediary by urging profitable investments and economic growth.

Along with informal credit firms that started to operate at the beginning of transition, other firms that received loans with high interest rates started to operate too, which "invested" within themselves, without making loans to others. As the time passed by, these were turned into pyramid firms. These firms, which offered 4-5 % interests per month until year-end 1995, used the money in an unclear way. In some cases they invested them in producing activities whereas in some cases it is believed that they financed criminal activities such as smuggling, illegal emigration, drug, prostitution and arms traffic[14].

In spite of distinctions among them, which were difficult to be highlighted, in both cases the domestic savings and the remittances that occupied considerable amounts served as sources for these firms. When the extension of informal market reached vast magnitude, the international bodies started to

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[14] Given their nature, it was difficult to determine their solvency with accuracy, that is the fact whether they earned more money from illegal activities than they paid at the depositors. Some of them might have been as such right from the moment of their creation, whereas some others became pyramid firms during 1996.

express their concern on their nature[15].

The absence of the proper legal framework comprises one of the main causes of the pyramid schemes development and the financial crisis of 1997. The associations that operated in the informal market were based on the civil code that allowed them the borrowing on the association basis, but without being obliged to be supervised by an authority which was indispensable for institutions that accept deposits and extend loans. Though in 1996 the new banking system law stipulated clearly that all the entities that accept various deposits had to be licensed and supervised by the Bank of Albania, yet these associations were not subjected to licensing and supervision. Some senior officials, who supported the viewpoint that the new law of the banking system is not valid for the loan-taking associations, also opposed the Bank of Albania requirement to license and supervise these firms, while the state bodies stayed indifferent or even worse, they supported the development of these associations.

The political factor that consists in the support the government gave to pyramid firms constitutes another cause of their development. This support had the source in the relations of important officials with these firms, in the financing they made for the party in power, such as the elections of 1996, and it was expressed in most diversified forms, by being engaged in promoting activities of these firms, making declarations in their favor and considering their activity as pure and useful. The support was reflected also in the fact that they were not required to pay fiscal obligations or they were never investigated for fiscal evasion.

The political factors that operated in 1996 encouraged also the boom of these associations, preparing the reduction and crisis at the same time. It was just these developments that

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[15] For example, at year-end 1995, the IMF mission on financial sector problems studied the possibilities of improving the financial formal system through integration of positive elements of informal market.

were related even with the contested elections, with the political decisions that worsened the macroeconomic indicators such as increases in salaries and budgetary expenses, in the function of winning the governance mandate, which, after the contest of elections of May 1996, were turned into a boomerang.

The need to verify the fairness of these elections did not allow the government to take actions against pyramid schemes, considering the local elections of October as a test that would certify the fairness of elections of May. In spite of the growing pressure, especially of international bodies, the government stood passive. Furthermore, in many times, it protected these pyramid schemes openly naming them as "the purest pyramid schemes in Europe", revealing that the problem was wider that the political support, since it *was governmental inability to manage the situation in time*[16]. The collapse of pyramid schemes at the beginning of 1997 lead to a general crisis, which started as a financial crisis. The country passed through a total anarchy. The government lost the control over the country, the revolts were turned into an armed uprising and the financial system was heavily hit. (Jarvis, 2001)

3.3 THE EXPECTATIONS OF THE PUBLIC AND THEIR ROLE DURING THE CRISIS

The analysis of the financial causes for the crisis of 1997, which appeared as a pyramid firms crisis has in its foundation the analysis of expectations and information on the financial market and the characteristics of the economic environment. Rightly a question is raised: Which are those factors that urge the non-realistic expectations regarding the very high return

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[16] The unreliable governance, which is expressed in the high corruption level and in the institutional and market vulnerabilities, as well as the backwardness of structural reforms, especially in the banking sector, constitute other very important factors that helped the crisis. According to EBRD (Table 5) the index of banking sector reform in 1996 was 2.0, while the index of competition policies and reform of non-bank financial institutions was 1.7.

rates that the investment in financial assets that are offered by pyramid schemes may bring about?

In order to realize why a great number of people invested in these firms that offered such high interests, analysis should be made with regards to how they evaluate the profit and the risk. The experience coming from the nature and history of the economic system serves as basis for forming the method of this assessment. According to this logic, most of previous experience or information suggests that such high return rates may only damage the others and sooner or later these firms that offer such rates go bankrupt, bringing about the complete investment loss. Surely, the formation of such way of behavior needs time and experience and it is normal for the economic agents having history in the market economy, but not for the socialist countries where other factors operate.

First, the lack of tradition and experience from the communist regime reduced the perception of risk by the population regarding the associations that offered very high interest on deposits. The lack of depositors' knowledge on risk influenced on their alluring through high interest rates, notwithstanding the entity risk. This was one of the factors that facilitated the creation of informal activities outside the banking system, which in Albania, unlike many other countries, lead to a general political and economic crisis with extremely heavy consequences.

Secondly, the absence of any period of bankruptcy in the first period of transition had formed the expectations of an implied government protection for the depositors. The socialist inheritance regarding the offering by the state not only of the income, but also of all other guarantees such as work, pension, education, health, maintains the confidence of individuals that the state is responsible and accountable even for decisions taken individually in a market economy. This confidence of individuals in the state and the support the state provided to

these associations formed the expectation that these high profits were real. On the other hand, even if Albanians doubted on the nature of pyramid schemes, the expectation based on this inheritance was that the state would compensate them in the event the schemes went bankrupt.(Elbit 1997)

Thirdly, in these countries, especially in the first years of transition, people believe that the market and capitalism offer such possibilities. This wrong confidence serves as the basis of the creation of pyramid schemes that in the economic literature are considered as based on "the wrong impression or on the prevention of an implied or defined confidence" as well as on the wrong viewpoint for the capitalist countries as countries where "the road is surfaced with gold and everyone is rich". There exist many indicators of these illusive factors expressed in stories, which explain the high profits of schemes during the time they flourish[17].

3.4 CRISIS AFTERMATH AND SOLUTION. LESSONS

The economic effects of pyramid schemes are large, even though with the statistical information available they are difficult to be measured accurately. The deep political and economic crisis, which erupted as a result of pyramid schemes collapse, and which in fact had started to appear since 1996 and had a larger basis, lead to production decrease at 7 %, inflation increase at 42 % and worsening of current account and fiscal deficit. In mid 1997 the domestic currency, Leke, was depreciated at about 100 per cent, while the monetary policy was placed directly in the service of ensuring liquidity for the state budget[18].

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[17] For example, the extremely high interest rates in pyramid firms in Albania were explained with such stories as high profits that derived from a hotel in California, from exploitation of mines that did not exist or from predictions based on fortune-telling.

[18] For more details see: Chris Jarvis "The Rise and Fall of Pyramid Schemes in Albania" IMF Staff Papers, Volume 47, Number 1, 2000.

Not going into details on other macroeconomic implications, what should be emphasized is that this crisis impacted obviously on the public confidence loss in the banking system, which lead to an inevitable money hemorrhage. The pyramid schemes had different impacts on the monetary indices and the banking system before and after the crisis. Before the collapse of schemes, especially in 1996, as presented in table …, an increase of broad money is noticed due to deposits increase, which during seven months of this year were increased by Leke 37.3 billion. All this increase in deposits came from pyramid schemes and therefore, the money-deposit ratio underwent a sharp reduction from 68 % in June, to 43 % in November of 1996. At the meantime, the other deposits changed very slightly. On the other hand, the large deposits increase was not associated with monetary expansion, since the bank's lending activity was also limited by the Central Bank. In this way, the banks resulted with excess reserves, which were used for purchasing treasury bills but not for increasing the private sector credit.

After the crisis, the impacts on monetary indices were reverse, but fortunately they had limited impacts on the real economy and the banking sector. Initially, in 1997, as it comes out in table…., a massive reduction of deposits in the private sector is observed. The sequestration and the gradual distribution of financial assets of pyramid schemes as well as their withdrawal by the operators lead to a roughly double increase of money-deposit ratio, which indicates that the people prefer to keep their money in *cash*.

After mid 1997 the new government, supported also by the international donators, applied a post crisis program and deepened further the structural reforms, especially in the field of privatizing the mid- and large-size enterprises, as well as the strategic ones. In order to reduce the fiscal deficit by increasing the budget income, which had dropped significantly

as a result of the deep crisis, the government increased the VAT significantly in 20 %, exerting pressure on prices increase, for the moment, which, however, was not much verified. An important part of the program was the closure, management, transparency and liquidation of pyramid schemes[19]. One of the most important factors that reduced the negative consequences of the crisis and impacted on rapid stabilization was the **courageous decision taken by all governments for not indemnifying the creditors from the state budget.**

The central bank, within the framework of measures taken to prevent the crisis effects on the banking system and to stabilize the macroeconomic indices, suspended the extension of loans for the banks which had the level of bad loans over 20 % and increased the minimal annual interest rates on deposits at about 30 %. These measures restrained the extension of risky loans and improved the banks' portfolio and made possible that the deposits level be increased again. This increase, which reflected a growth of confidence in banks, ensured the possibility for the banks to have sufficient liquidity, which was mainly used for the purchase of treasury bills and a small part for increasing the credit to the private sector.

One of the important measures for solving the crisis was the deepening of the structural reform in the banking system. The underlined deficiencies of this system, which were shown also in the increase of bad loans rate, which in special banks such as the Agrarian Commercial Bank reached to 90 %, was associated with measures that aimed at their strengthening. The Agrarian Commercial Bank was liquidated, the Trade Commercial Bank was privatized, while the Savings Bank was entered into the privatization preparation process, working with the assistance of foreign advisors in a management agreement. In order to deepen the banks' restructuring

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[19] For more details see: Chris Jarvis "The Rise and Fall of Pyramid Schemes in Albania" IMF Staff Papers, Volume 47, Number 1, 2000.

process, the license of Agrarian Commercial Bank was revoked and a part of this bank's assets was transferred to the Savings Bank, while the assets with problems were transferred to the National Commercial Bank and to the Agency of Treating the Loans (an agency that was established for treating the bad loans of state-owned banks). The measures taken for strengthening the banking system consisted in legal improvements, which aimed at enhancing the prudential role of the Central Bank, preventing the emergence of informal credit sector and improving the payments system and the banking infrastructure.

In conclusion, *the pyramid crisis was a crisis that was helped by the banking sector weaknesses, but did not stem from the banks and none of the banks was included in pyramid activities. Neither did they support them, as it happened with other segments of the government. On the contrary, the central bank was the only warning voice on their risk.*

Deficiencies in governance, inability to manage the situation created by the tolerance and the state support, lack of legal framework and the wrong expectations of the public, which had an inherited basis, but also relied on the wrong information limited for the capitalist society, all these constitute the breeding ground where the pyramid schemes were nourished and grown up, which brought about comprehensive consequences in the Albanian society.

4. BANKING SYSTEM DEVELOPMENTS, AND THE '97 - '02 CRISIS

4.1. MACROECONOMIC FRAMEWORK

During this period the macroeconomic stability was re-placed quickly and the structural reforms marked progress regarding the deepening and finalizing of small and mid enterprises privatization and the compilation of the strategy

of the privatization of large enterprises and the public services. The monetary and fiscal policies pursued and the deepening of reforms lead to an average annual increase of GGP of 7.4 % and to the inflation dropping at the level of 3.5 % in 2001. In spite of the downward tendency of the budgetary deficit and the current account they remained at relatively high negative levels, respectively 8.5 % and 7.4 % of GGP in 2001. Initially, the stabilizing policies pursued after '98 followed up the increase of interest rates and, after the rapid and proper reaction of the public, very soon lead to a significant inflation decline at the level of 8.7 %, at year-end '98.

Upon the sharp decline of inflation up to 3.2 %, reaching even negative levels in '99, we have a mitigation of the monetary policy, reducing the interest rates sharply. During this period, the monetary policy instruments evolved because the role of credit limit fell obviously until in '99 it was extinguished as an instrument, using only the interest rate of deposits with state-owned banks, which soon enough were replaced only with the market instruments, where the main instrument is the interest rate of repurchase agreements (Kule, Haderi, 2001).

4.2. Banking system developments and problems, '97-02

In this period, even the reforms of financial sector have marked an important progress, which relate with the privatization of state-owned banks and the entry of new private banks, which have impacted on the deepening of financial intermediary and increase of quality of the banking services. A greater attention and commitment in the deepening of the restructuring and the reform in the banking system characterize the years '97-02.

The first characteristic of these developments was the increase of the number of new private banks, which currently

reach the figure of 14. In 1997 another bank was licensed with totally foreign capital, the International Commercial Bank, while in 1998 there was licensed the American Bank of Albania and the Tirana Branch of Alpha Credit Bank. In 1999 three other banks started their activity, the First Investment Bank and the InterCommercial Bank[20] and Fefad Bank, while in 2002 the Albanian Credit Bank was licensed, a foreign private bank with Kuwait capital. The domination of foreign private banks, where currently only the Savings Bank remains with state – owned capital constitutes another feature of the Albanian banking system[21]. Currently Albania has 4.5 banks for one million inhabitants while Bulgaria has almost the same indicator, Rumania has 1.5 banks for one million inhabitants, Hungary has 3 banks and Croatia has 10 banks.

Another important characteristic in this period is the reduction of domination of banks with state-owned capital, either through the liquidation of Agrarian Commercial Bank and the privatization of National Commercial Bank or through the entry of new private banks. The table below indicates clearly this inclination regarding the assets weight of group of banks according to years: The first group, which includes the banks with state-owned capital, after the privatization of National Commercial Bank in '99, is constituted only by the Savings Bank and has been reduced gradually from 89.9 % of the banking sector total assets in '97 to 59.2 % in 2001. While the group 3, where the banks with totally private capital are included has undergone a continuous increase from 3.6 % in '97 to 35 % in 2001. The same tendency appears also in the weight the deposits occupy according to the classified groups. G 1 has been decreased while G 3 has been increased[22].

The banking activity has been extended along with the extension of banks in the market, increasing the banking

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[20] Upon changing its name, this bank is currently named the "Commercial Bank of Greece, Al".
[21] The Savings Bank is under privatization process and is offered to foreigners for purchase.
[22] The G1 weight has dropped from 93 % in '97 to 68 % in September 2002. (See Table 7).

deposits as an activity. The total assets of the system of '98 mark an increase of Leke 39 billion since 1997[23] reaching to Leke 206 billion or about 44.7 % of GDP. In '99 the banking sector assets increased in Leke 250 billion or at about 49.3 % of GDP. This increase comes either from the Savings Bank or from the entry of three other foreign capital banks[24] in the market. In the year 2000, though no new bank is added, special banks have experienced significant changes. The total assets of the system, in spite of the reductions taking place at the National Commercial Bank, evidence an increase of Leke 21 billion[25] since 1999, resulting to Leke 271 billion at year-end 2000, or 50.2 % of GDP. At year-end 2001 the total assets of the system results in Leke 318 billion or 54 % of GDP. In this increase of Leke 47 billion since '2000, the G1 and G3 group of banks have mainly influenced with approximately Leke 33 billion. On the other hand, the deposits level has marked a continuous increase from Leke 178.2 billion in '98 to 282 billion in 2001.

The level of financial intermediary is further deepened, reflecting the positive tendency of the banking sector developments. The ratio of total deposits to GGP, which is one of the main indicators of the level and depth of financial intervention, has been increasing during the whole transition period, especially following '1998, marking the level of 47.9 % in 2001. The same tendency is indicated by the ratio of time deposits to GGP, as the most significant indicator of

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[23] The data on 1998 comply with the new accounting system, upon its entry into force at year-end 1998. Hence, the comparison with 1997 could not be considered as completely accurate, but, as the total statements of balance sheet items between the two systems change slightly, the comparison is performed. The considerable change between the two systems exists in the loans classification method and for this reason the starting period in the moment of analyzing the loan portfolio quality will be 1998.

[24] As it is also mentioned previously, the Fefad Bank, the Commercial Bank of Greece and the First Investment Bank started their activity in 1999.

[25] The banking system deposits have been increased by Leke 20.4 billion since 1999, and the shareholder's capital (as a banking system) evidences an increase of Leke 9.1 billion as compared to year-end 1999.

intermediary, which is increased apparently from 12.8 % in 1994 to 29.3 % in 1998 and 38 % in 2001. This tendency is reinforced even by a larger indicator of intermediary, the ratio of broad money to GGP, which has been increasing and currently reaches the level of 66.7 % (Table 1).

Another characteristic of positive developments of the banking sector is the improvement of the credit market. Two are the most positive tendencies noticed in this market: the first is the continuous increase of the private sector credit and the second is the reduction of the bad loans to the total credit (NPL), which in June 2002 reached the level of 7.4 % and excluding the Savings Bank, which occupies the main weight in this ratio, the tendency becomes clearer. This ratio has moved from 10.8 % in 1998 to 6.9 % in 2000.

The continuous improvement of the banking supervision, either through the legal improvement or through the compilation and perfection of regulations in the field of licensing and supervision and regulation constitutes another positive phenomenon of this period. Currently, the Bank of Albania uses an updated evaluation system of second tier banks (CAMELS), a system which applies on the basis of relevant structures of human resources and legal basis.

Nevertheless, a series of deficiencies appear in the developments of this period, which constitute challenges to be sorted out. First, the domination of the banking market where only one bank occupies about 55 % of the banking sector, whereas the two main banks occupied about 70 % at year-end 2001. This situation limits significantly the competitiveness in the banking system, bringing about consequences either in the Bank of Albania monetary policy and in the internal dept management or in the development of the banking sector and enhancement of its effectiveness[26].

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[26] For more details, see Baleta et al., "Dominimi i Tregut Bankar Shqiptar", Banka e Shqiperise, Material Diskutimi, Nr. 3/(4)/00,2000.

The low competitiveness of the system is reflected also in the level of services, either by the parameters of the existing one, which is otherwise called "classic", or by the entry of new services more efficient than the banking investments, etc. The banking services are related, to a certain extend, even with the perfection of the payments system, which is under the process of big changes, especially with the entry of RTGS system.

In spite of the fact that banks are the soundest institutions in the country and the supervision regulation of the Bank of Albania has been constantly improved since '97, [27]with the establishment of Deposit Insurance Agency as one of the most recent developments, the banking system is assessed to have made a faster progress than the Bank's regulatory framework.[28] (Treichel, 2001).

Notwithstanding the increase of the level of credit to economy, it remains in relatively low levels and much lower than those of the advanced countries. So, the ratio of private sector credit to GGP, though increased, was only 4.6 % in 2001, whereas this credit to the total credit occupied only 14.1 % in 2001. This is obvious if we take into consideration the asset structure, where the treasury bills occupy an important weight in the banking system with over 51.7 % of its assets. Meanwhile, only the Savings Bank occupied 71 % in 2001. However, the private banks reflect the tendency to be more aggressive either in the credit to economy or in the treasury bills.

4.3. Banking system situation on the threshold of deposits crisis

The evaluation of the banking system at year-end 2002, measured in its performance indicators (Table 6) indicates that

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[27] Finally, on March 29, 2002 the Albanian Parliament passed the law "On Deposit Insurance".
[28] According to Treichel, 2001, the diversification of the banking activities requires the fostering of modern techniques of risk management by the commercial banks.

its "health" has been improving in all these indicators. This is obvious if we consider in more details the quality of the banking system assets and of the separate banks, the capital adequacy, the liquidity indicators and the banking system gains.

The quality of the banking system assets can be analyzed by being focused on the risk of investments in securities[29] and the credit risk. The investments in securities are found only in the portfolio of some banks, which are not obliged to report at the Bank of Albania regarding their rating. Meanwhile, it is the Bank of Albania, which examines on place the banks of the system, highlighting the quality of their activity, which at year-end 2001 results high because they present mainly government securities of Zone A[30]. The credit portfolio quality is the most important indicator that is measured with a series of indicators[31]. In calculating these indicators, except the system in general, calculations have to be made even for the system without the Savings Bank, as the only bank with state-owned capital and with some features that derive from the fact that a good part of the bad loans are accounts conveyed from ex Bank of Albanian State and Agrarian Commercial Bank and that after the placement of the rate of 20 % as a limit for making loans, the excess credit for this bank was reduced significantly by worsening the indicator statistically[32].

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[29] Excluding treasury bills.

[30] Meanwhile, if this portfolio of securities is classified "tradable and simultaneously meets the other condition, over 5 % of the balance sheet, then the banks are obliged to fulfill the Regulation "Market Risks", through which it comes out clearly how much are the banks exposed to these risks.

[31] The ratio of (gross) bad loans to credit balance serves as a measurer of the management effectiveness of this portfolio. Meanwhile, the ratio of net bad loans to net credit balance serves as a measurer of the banking system exposal to the credit risk. The analysis based on the net indicator (deprived of provisioning) evidences the net size of risk to which the banking system is exposed.

[32] In the bad loans balance of Leke 12.9 billion in '88, the Savings Bank occupies the amount of Leke 10.9 billion or 84.8 % of the bad loan balance of the system. So, the ratio of bad loans to (gross) credit balance results 35.4 % for the whole system, while in the Savings Bank this indicator is calculated 59.7%. If we exclude the Savings Bank, the above indicator results 10.8 %.

The performance of this indicator, where the bad loan occupied a high level against the excess credit until 2001, when the clearing of the bad loans was performed with provisioning due to the preparation of the Savings Bank for privatization, expresses a high risk scale that is filled with a high provisioning level, which really reduces this risk. (Table 5). Even though the level of this indicator compared with the standards, remains high, 6.9 % in 2001, the insolvency did not constitute concern for the system because of the low level of loans in the total assets (Table 1)[33].

The part of credit risk, to which the banking system is exposed, is the foreign currency credit weight to the total credit. The foreign currency credit exposes the banks to the credit risk, when this related to loan-takers that possess income in Leke, since a worsening of the exchange rate, that is a depreciation of Leke, would weaken the solvency of the loan-takers. This would impact on increase of loans with problems in the banks' portfolio.[34] The loans in foreign currency at year-end 2001 constitute 81.7% of the total excess credit, but meanwhile the foreign currency loans with problems to the total foreign currency loans occupy 7.9 %.

At year-end 2001, the ratio of loans with problems to the (net) excess credit is 4 % (which is still considered in low levels). In conclusion of analysis of the quality of the banking system assets, it can be stated that the banks, though limited in foreign investments in international markets, they are extending their lending activity in the domestic market from

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[33] Furthermore, if we observe the two banks that underwent withdrawal of deposits during the panic, the Savings Bank and the National Commercial Bank, their loans occupied less than 0.5 of the total assets.

[34] For making a more accurate assessment of the ratio of bad loans correlated with the exchange rate performance, the work for creating a regression equation is in initial phases, where the ratio of bad loans is considered as a dependent variable and the exchange rate as an independent variable. It is spoken about a work in initial stages, since its time series is needed with more than 30 data, which are currently lacking because the loan classification by the banks takes place once in three months and the ne
w accounting system entered into force at year-end 1998.

one period to another, maintaining a satisfactory level of the quality of their portfolio quality.

The shareholders' capital constitutes the bank's own funds, whose sound level ensure public confidence in the stability of banks and banking system in general, support the banks' activity, ensure steady support for the inherited losses and unforeseen losses and provide possibility to the banks to constantly fulfill the requests for loans.[35] The banking capital influences as a depreciator about the banks' concern regarding the solvency, preventing their bankruptcy. Let us analyze the two main indicators of the banking capital level: the financial leverage and the capital adequacy ratio.

The financial leverage that indicates the structure of funds of an institution is given as a ratio of shareholders' capital of the bank to the total assets. This indicator results in 6.3 % for the banking system at the end of 2001, while in the banking sector the interval of 5-9 % is considered as a standard level. (BoA)

The ratio of capital adequacy determines the bank's ability to face possible losses. The calculation of this indicator is based on the methodology set forth pursuant to Basle Committee Agreement on the Banking Supervision in 1998,[36] according to which this ratio, in our country, is stipulated by the supervisory authority to be 12 %.

The ratio of capital adequacy, calculated aggregately for the whole banking system results 35.3 % [37]at year-end 2001, which is rather higher than the minimum rate. The performance of this indicator for the system shows clearly its downward

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[35] According to Cani and Vika 2002, the reduction of capital adequacy constitutes one of the characteristics that associate the financial crisis in many cases studied.

[36] Hence, according to this risk assessment framework, the banks should define their assets in one of the 4 categories (from 0% to 100 % risk) on the basis of the credit risk of the borrower and the regulatory capital of the bank should not fall under 12 % of the total of these risk weighted assets.

[37] Meanwhile, each bank of the system individually evidences high ratio for this indicator. The banks with lower values (it is understandable, over the rate) are the most active ones and which speak about increase of competitiveness.

tendency, which, however, surpasses significantly the minimum rate and does not presume less abilities of banks to face the possible losses, but speaks about ever larger extension of the banking system in riskier activities such as lending. In conclusion, it may be stated that the banks of the system, being in their growing stage and undertaking few risky activities on their side, are characterized by a high rate of capital adequacy, which does not serve the emergence of a financial crisis at all, what is more they leave space for further developments.

The profitability measured with its indicators ROA and ROE, represents another important indicator that serves the assessment of the bank's historic performance and on this basis, the assessment of its ability to pay future liabilities to its depositors. After a period of losses until '99, during the recent years the banking system results with profit,[38]respectively Leke 5.4 billion and Leke 4.3 billion in '00 and '01.

ROA (return on assets), which is an indicator of managerial efficiency and indicates how competent banks have been in converting their assets into net income results 1.15% on annual basis, while ROE (return on equity) results 18.6 %.

The liquidity constitutes another important indicator for analyzing the banking system soundness because it relates directly to the solvency of the bank and the bankruptcy risk. The analysis of liquidity[39] indicators at end 2001 indicates that on the threshold of the crisis the banking system liquidity position was relatively sound, which is expressed in the level of these indicators, where the liquid assets occupied about 90 % of the total assets and more than half of them were

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[38] Excluding the Italian Albanian Bank and the National Bank of Greece, which result with losses, the other banks of the system evidence positive financial results at the end of this period.

[39] The liquidity indicators are various, such as the ratio of liquid assets to the total assets, liquid assets to short-term liabilities, net credit balance to average deposits, maturity gap until one month.

treasury bills, while the ratio of liquid assets to total short-term liabilities was over 98 %. This indicator is presented as more improved at the bank where the banking panic started and had the highest intensity, precisely at the Savings Bank, where all its assets were liquid.

In conclusion, it can be stated that the threshold of the crisis could not be assessed as such at all by the economists and supervisory authorities if base on the practices studied and the indicators signaling the crisis.

4.4. LOSS OF PUBLIC CONFIDENCE, DEPOSITS CRISIS AND THE BANK OF ALBANIA

The banking system was faced with the panic of deposits in March 2002, which comprises the heaviest event for the Albanian financial sector after '97 and what is more important, it is a pure banking sector event. The analysis of the causes that lead the banking system to a banking panic and to the threshold of a financial crisis indicates not only the banking system fragility that springs from its internal nature as a system which is based on the public confidence but also the Albanian banking system fragility of the transition that is based on the fragile public confidence.

The history of figures that reflects the starting and intensity of the panic is given in the summarized table (Table 8), which presents the outflow of deposits for the system and banks affected by it. The panic started and was extended mainly in the Savings Bank, which was on the eve of privatization and occupied the largest part of the banking system and less in the National Commercial Bank as the second bank in the country as far as the size is concerned.[40]

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[40] This bank, which was privatized in 1999 is likely to be regarded still as state-owned by a part of the public that is not informed, especially in rural zones, where the panic started and had its highest intensity.

The deposit outflow from these two banks reached to Leke 12 billion in March and Leke 9.4 billion in April, while the Savings Bank occupied 96.3 % of them, which brought about even the reduced weight of this bank in the banking system from 59.2 % at year-end '01 to 56.6 % in April '02.(BoA)

Beyond the history of figures and the positive environment of the banking system, the panic became a fact and as such, it has its own causes, which should be required in other circumstances of this period and in the factors that form the public expectations and its confidence on the banking system. The lack of information and its asymmetry has a significant impact on forming non-accurate public expectations. It is not accidental that the deposits withdrawal started and got extended initially in the rural areas, where the knowledge on the banking system and its evaluation and the information on it are rather limited.

The Albanian public won an experience in 1997, which cost a lot and made the public more sensitive to the risk of loosing the deposits. However, after the crisis of 1997, the public addressed the banks, especially the banks with state-owned capital to deposit their savings. (Table 6, 7). This phenomenon is based on the fact mentioned above that the banks were not included directly in the pyramid schemes and the impact of the latter on them was very slight, which contributed in the increase of public confidence in the banks and led to the fact that deposits with the state-owned banks implied their implicit security by the state as the proprietor.[41]

In this context the interweaving of two events, that is the offering of the Savings Bank for privatization and the approval of the law on deposit insurance at this time, interwoven even

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[41] After the bankruptcy of pyramid schemes, the wavering of the inherited confidence in the state because of the support the state provided to them, was not extended in state-owned banks, perhaps due to the fact that the state declared sharply and maintained the attitude of not compensation the depositors for their losses from the pyramid schemes, considering the investment in them as issues of the individuals with the private firms.

with political factors, shocked the public confidence in banks, leading to a massive deposit withdrawal. The Savings Bank privatization, at a moment when the government was characterized by serious problems and lack of stability, and on the other hand, the argument of the opposition that the privatization and its offering to foreign banks would infringe the deposit insurance, as a tool of political struggle, associated even with the decrease of confidence in the implicit security due to discussions on the amount of the level of deposits to be insured by law, encouraged the formation of inaccurate expectations on these banks, leading to panic.

In conclusion, because of the inheritance from the socialist system, the negative developments of the transition period, the insufficient public education on the banking system, the asymmetric information and the lack of information, the floating political developments, the fragility of the whole Albanian economy development including even the real economy, the public expectations and on this basis the confidence level on the banking system remain fragile. Under these conditions, the banking sector performance, vis-à-vis its positive developments and positive upward indicators is exposed to risks and possible crises and as such, even it remains fragile.

On the other hand, the deposits crisis had consequences even on the real economy, since the deposits decrease was associated with the increase of currency off banks, increasing inflationary pressures and creating liquidity problems for second tier banks. Under these conditions, the Bank of Albania, having the responsibility of the monetary and supervisory authority, through the available instruments intervened by affecting on extinguishing the crisis and preventing its consequences. The Bank of Albania intervention, accompanied even with the operation of other factors especially international ones, resulted very effective because

currently the panic is considered as overcome and the deposit level at end of September was Leke 4.8 billion more than the level foreseen in the monetary program. (BoA)

The Bank of Albania, being in the role of the compiler and executor of the monetary policy and the supervisor and banking system regulator took the important role of temporarily giving up the primary objective by being focused on the maintenance of the banking system liquidity level, in its function as a lender of the last resort. That is why repo and fortnight deposits, which served for withdrawing liquidity from the banking system, were given up, using largely the reverse repo instrument and other facilities such as the lombard loan and the overnight loans through which the liquidity was injected in the market. In order to cover the government liquidity needs, the direct loan was used for a short time, without affecting the limits stipulated by law.

Another measure in the function of encouraging the public for restraining the liquidity withdrawal was the increase of repo interest rates up to 1.5 %, which urged the banks to increase the deposit interest rates and other interest rates. Meanwhile, the Bank of Albania was willing to intervene in the foreign currency market in order to affect on the stability of foreign currency rate, which was under the pressure of depreciation from increase of foreign currency request.

The Bank of Albania established an everyday cooperation with the banks for following up the situation and undertook an educational campaign in cooperation with the academic world, distinguished field personalities, non-governmental organizations, politicians, etc., which had their own impact in restraining the public. The support of international factor had a considerable influence in this direction.

As a result of this Bank of Albania intervention and the operation of other factors, the panic was overcome. The deposit level is re-placed. The inflation, notwithstanding its

increase as compared to the target of a year ago, is showing dropping signs and it is hoped that the target will be reached at the year-end. The rate had slight fluctuations, reflecting even the confidence of the market in the Bank of Albania.

5. CONCLUSIONS

The financial system during the transition decade, in spite of the apparent progress, remained in a fragile position. The answer to the question raised in the title, progress or fragility, would be fragile progress. This fragile progress has its basis not only on the domestic banking system developments, bad inheritance, reform slowness, pyramid schemes, emphasis on macroeconomic developments, but also on the Albanian economy fragility itself, in micro and macroeconomic level.

The fragility of the banking system development appears in two most difficult moments for it, such as the financial crisis ignited by the collapse of pyramid schemes and the deposit crisis. The pyramid crisis was a crisis helped by the banking system weaknesses, but it did not stem from banks and non of the banks was included in pyramid activities or supported them, as it happened with other segments of the governance. On the contrary, the Bank of Albania was the only warning voice on their risk. The deficiencies in governance, the inability to manage the situation created by the tolerance and state support, the lack of legal framework and the wrong expectations of the public which had an inherited basis and the wrong and restricted information on the capitalist society, constitute the breeding ground, where the pyramid schemes were nourished and grown and which brought about comprehensive consequences for Albanian society.

Meanwhile, the deposits panic had in its foundation the expectations formed from the pyramid crisis, but it occurred in a situation that is more developed and sound for the banking

system reflecting either the well-known fact that the banking system is very sensitive vis-à-vis the public confidence, also the factors that operated in that period, such as the offering of the Savings Bank for privatization, the approval of the law on deposit insurance and the political factors, which shocked the public confidence in the banks, leading to a massive withdrawal of deposits.

In conclusion, due to the inheritance from the socialist system, the negative developments of the transition period, the insufficient public education on the banking system, the asymmetric information and lack of information, the oscillating political developments, the fragility of the whole Albanian economy development, including even the real economy, the public expectations and on this basis the confidence level in the banking system remain fragile.

The lessons revealed from this analysis are that the developments of real economy, the deepening of reform in the banking system stand in the foundation of the establishment of a sound, competitive financial system, capable of responding to the economy needs in general and the private sector development in particular. In this framework, the financial market restructuring and strengthening and the encouragement of banking service enhancement constitute two basic directions of the strengthening the banking system, which require fastest privatization of the Savings Bank as the largest bank in the country and with a dominating position in the banking market, reinforcement of supervision system and the banking system regulation in compliance with international standards, promotion of competition among the banks, fostering of payments system through the installation of Real Time Gross Settlement (RTGS), establishment of Credit Information Office and the promotion of the extension of savings-credit schemes and the banking system network in the territory of the country.

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Table 1. Selected economic indicators

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	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	sept'02
Nominal GDP											
Real GDP											
GDP per capita in USD											
Nominal GDP increase (in %)											
Real GDP increase (in %)											
CPI annual change in % (inflation)											

Total foreign currency assets (not net)
Source: BoA

Table 2: Albania main transition indicators.

	1991	1992	1993	1994	1995	1996	1997	1998	1999
EBRD Index of price liberalization	1.0	2.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
EBRD Index of forex and trade liberalization	1.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
EBRD Index of small scale privatization	2.0	2.0	3.0	3.0	4.0	4.0	4.0	4.0	4.0
EBRD Index of large scale privatization	1.0	1.0	1.0	1.0	2.0	2.0	2.0	2.0	2.0
EBRD Index of large enterprise reform	1.0	1.0	1.0	2.0	2.0	2.0	2.0	2.0	2.0
EBRD Index of competition policy	1.0	1.0	1.0	1.0	1.0	1.7	1.7	1.7	1.7
EBRD Index of banking sector reform	1.0	1.0	.3	2.0	2.0	2.0	2.0	2.0	2.0
General government expenditure	66	46.7	40.4	36.4	33.4	30.3	29.4	30.7	32.6
General government balance	-31	-23.1	-15.5	-12.6	-10.1	-12.1	-12.6	-10.4	-11.3
Privatization revenues	Na	1.1	1.8	3.0	3.1	3.3	3.6	3.6	3.9
Private sector share in GDP	5.0	10.0	40.0	50.0	50.0	75.0	75.0	75.0	75.0

Source: EBRD Transition Report, 2000

Table 3. Banks' share according to banking market classification, '94-'02

Share in % to the banking system according to years	G1	G2	G3
1994	97.8	1.9	0.3
1995	95.1	4.2	0.8
1996	93.7	4.7	1.5
1997	89.9	6.5	3.6
1998	85.6	5.1	9.3
1999	81.4	5.8	12.8
2000	64.8[42]	6.2	29
2001	59.2	5.8	35
April 2002	56.6	5.9	37.5

Source: Bank of Albania

Table 4. Banking system assets structure

Assets structure	Total	Total
Index (in percentage to the total assets)	December' 00	December '01
1. Treasury and interbank transactions	88.4	85.7
2. Operations with customers (net)	6.1	8.6
3. Securities transactions (net)	2.9	3.3
4. Other assets	0.6	0.4
5. Fixed assets	1.9	1.8
6. Accrued interests (net)	0.1	0.3
Total assets	100.0	100.0

Source : Bank of Albania

Table 5. Banking system performance indicators

	Dec. '98	Dec. '99	Dec. '00	Dec. '01	Jun '02
Capital adequacy ratio (%, system)	0.0	8.2	42.0	35.6	32.2
Risk weighted asset (mln leke, system)	24.9	48.6	39.6	46.4	51.8
Assets growth rate (%, system)	-	21.1	8.6	17.6	-1.2
Growth rate of credit balance (%, system)	-	17.7	55.6	0.22	17.9
Growth rate of system deposits (%, system)	-	19.5	10.6	19.2	-4.6
NPL rate (%, system)	35.5	32.1	43.1	6.93	7.4
Reserve rate for loss loans to NPL(%, system)	96.3	109.5	95.0	44.1	53.8
After-tax rate of return on assets (%, system)	-1.8	0.5	2.1	1.5	0.9
NPL Rate of the system without SB (%, system)	10.8	9.7	9.4	6.9	7.3
Reserve rate on loss loans to NPL (% without SB)	82.2	133.7	52.7	42.2	52.3
After-tax rate of return on assets (% without SB)	-12.8	1.4	3.3	8.7	6.1

Table 6. Banking system deposit performance

Deposits balance (in mln Leke)	1997	1998	1999	2000	2001	SHTATOR 02
SB	83,404.00	141,395.60	159,998.40	181,506.20	176,980.00	162,301.08
ACB	4,232.20					
NCB	25,820.00	22,032.70	22,460.50	22,555.30	28,600.04	28,098.61
AIB	4,987.30	5,635.00	8,845.75	9,894.72	12,484.90	12,813.39
AAIB	492.10	340.90	673.24	635.32	802.14	1,198.34
DB	447.50	880.60	1,029.70	1,467.03	218.40	153.30
TB	1,561.60	2,726.10	5,768.02	9,580.16	15,013.32	19,730.53
NBG	1,894.40	3,275.10	4,420.08	9,733.22	6,870.00	7,382.78
ICB	52.30	331.00	648.17	504.91	1,007.56	1,112.12
AB		1,081.00	3,054.92	5,637.88	9,287.31	12,143.91
ABA		572.10	5,581.07	10,870.60	17,938.50	23,716.58
FEFAD			1,821.56	3,590.51	6,802.04	8,398.21
FIB			35.32	91.47	169.61	790.68
CBG			40.45	789.56	1,744.48	1,828.22
System	122,891.50	178,269.50	214,383.24	233,086.62	277,817.90	279,625.71

Source: BoA

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[42] Savings Bank evidences reduction from its share in the system from 67.9% at year end 1999.

Table 7 Banks' share according to banking market classification on deposits, '97-'02

G1 deposits weight to total system	92.32	91.67	85.11	76.97	73.96	66.06
G2 deposits weight to total system	4.46	3.35	4.44	4.52	4.78	5.01
G3 deposits weight to total system	3.22	4.97	10.45	16.52	21.26	26.91
	100.00	100.00	100.00	100.00	100.0	100.00

Source: BoA

Table 8 Deposits performance during the panic

Table 8 Deposits performance during the panic

Deposits balance mln Lek	Dec 2001	Jan 2002	Feb 2002	Mar 2002	Apr 2002	May 2002	June 2002	Jul 2002	Aug 2002	Sep 2002
Savings Bank	170,960	160,510	160,407	167,425	157,925	150,700	157,525	156,061	150,860	162,301.1
Alpha Bank	9,267.31	9,558.95	9,784.32	9,048.58	9,586.27	10,088	10,188	10,275	11,700	12,148
American Bank of Albania	17,508.1	19,389.5	19,418.4	20,069.4	21,065.0	21,071.1	21,678.9	22,285.3	23,411.2	23,717.0
Arab Albanian Islamic Bank	862.1	855.5	843.8	866.9	844.7	951.0	1,070.32	1,402.05	1,210.33	1,196.34
Dardania Bank	218.4	168.9	163.5	269.9	167.8	185.8	321.4	154.5	334.3	153.3
RZ-AO Bank	6,802.0	7,018.2	7,204.9	7,284.9	7,587.0	7,591.0	7,580.5	7,614.4	7,900.0	8,388.2
First Investment Bank	168.6	952.2	908.7	658.7	211.8	209.0	222.9	210.2	652.8	790.7
Albanian-Italian Bank	12,464.9	12,597.2	12,437.7	12,449.5	12,160.9	12,910.0	12,439.3	12,510.0	12,661.5	12,813.4
National Bank of Greece	6,670.0	6,046.7	6,043.9	6,604.0	6,015.0	6,962.0	6,070.0	6,965.8	7,077.9	7,362.8
National Commercial Bank	29,500.0	28,138.0	28,517.0	28,124.5	25,985.1	25,856.3	26,077.5	26,561.4	27,320.7	28,058.6
International Commercial Bank	1,007.6	1,045.2	951.9	1,055.5	1,001.0	945.5	969.1	1,057.0	1,088.1	1,1121
Commercial Bank of Greece	1,744.5	1,594.7	1,818.9	1,741.9	1,705.9	1,658.1	1,806.9	1,749.0	1,731.1	1,828.2
Tirana Bank	15,013.3	15,735.5	16,134.1	16,152.1	16,707.6	17,001.4	17,166.9	19,428.0	20,525.0	19,730.5
Banking system	277,617.93	296,562	285,585	276,700	261,873	263,311	265,682	268,369	275,361	279,626
Banking system without SB and NCB	72,337.86	75801.442	76520.0982	77151.1549	77802.4099	80076.5552	81479.8067	83650.721	85115.092	89286.0577

Deposits balance mln Lek	Dec 2001	Jan 2002	Feb 2002	Mar 2002	Apr 2002	May 2002	Jun 2002	Jul 2002	Aug 2002	Sep 2002
Savings Bank	170,960.0	160,510.0	160,407.5	167,424.6	157,924.5	150,700.1	157,524.0	156,097.1	150,860.1	162,301.1
National Commercial Bank	29,500.0	28,138.0	28,517.0	28,124.5	25,985.1	25,856.3	26,077.5	26,561.4	27,320.7	28,058.6
Banking system	277,617.9	296,562.0	285,544.6	276,700.5	261,873.1	263,310.9	265,682.0	268,369.2	275,360.5	279,625.7
Banking system without SB and NCB	72,337.9	75,835.5	76,520.1	77,151.2	77,963.5	80,754.5	81,479.7	83,650.7	86,153.7	89,266.0

Source: BoA

CENTRAL BANK INDIPENDENCE AND INFLATION IN TRANSITION COUNTRIES,

Alex Cuckierman, Professor of Economics at Tel- Aviv University

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I have been asked by the organizers to talk about two things. One is central bank reform, inflation, and liberalization in the transition economies, the other one to make some remarks about the issues of accountability, credibility and transparency more generally. Now, in the time allotted I don't think I can address both these topics so I will assume that the group time is around an hour, I will try to divide my lecture basically into two parts, one is going to be the main one, I am going to give you the first topic and I will allocate to that between half an hour to a quarter of an hour and then make some remarks on the second topic, the topic of accountability, credibility and transparency.

So, let me start with the first topic. The first topic, the lecture is going to be based on this paper that was published in March of this year in the journal of "Monetary Economics" titled, "Central bank reform, liberalization and inflation in transition economies-an international perspective." This is really a continuation of work that I have been doing over the last 10-15 years with various combinations of coworkers that are based at the World Bank and in Turkey also, and several other places. This effort has come in end in 1992, I mean the earlier version, has to lead to a set of indices of legal indices of central bank independence that were published both in an article and in a book in 1992, and the idea in those indices was basically to have a unified index of legal independence for a large central apparatus in the world. Indices that have been developed until 1992 basically included indices of central

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bank independence starting, legal indices of central bank independence. You will see in a minute why I stress the word legal.

Those indices then were developed for a sample of about 60 countries, including all developed economies and a sample of about 40 developing countries for the years starting in 1950 and ending in 1989, just the last year before the going down of communism. One sees that (as we are looking at those numbers) there has been a remarkable stability in the level of legal central bank independence during the forty years ending in 1989. There was hardly any meaningful reform in the level of legal central bank independence over those years. On the other hand when you look at what happened since 1989-1990 during the last 12 or so years, there has been really a revolution in the level of legal central bank independence.

This is really a revolution in the sense that I would not exaggerate if I say that over 70 or 80 countries basically completely overhauled the central bank laws during the last decade and this obviously includes the transition economies. You know they did not have to overhaul; they just created new central bank laws because you know there were no central banks in most of the transition economies. That is not quite true for the central eastern European countries like Poland, Romania and some of those. They did have central bank laws but for those countries there also has been quite of a jump in the level of central bank independence.

Now, this is just an introduction. Let me just also add two additional sentences by way of introduction and then you know many people that work on central bank independence and on the effects of central bank independence on the economy including some of the earlier people that started this line of investigation. The first indices were developed by Bate and Parky and latter on by Alesina and Iprich at the beginning of the nineties. The indices that I am using are basically the ones

that exist in the sense that they basically, the indices of previous authors can be obtained from the indices that I am working with as in particular cases there are also latter indices, for example: by Itegen and Scaning, that have been developed in the mid nineties. They are narrow indices and this kind of index also can be obtained, using the data that underlines this research effort, as particular cases like I am using part of the features that enter into the index of central bank independence. In any case, what I want to stress at the outset is that legal independence is not always the same thing as actual independence. There are deviations between the letters of the law and between what is actually being done in practice. Those deviation vary; the seriousness and magnitude of those deviations varies across different countries and also across different groups of countries and depends very much on the degree of the abiding on whether the deviation is more or less serious on the degree of abiding to the law in a particular country. Now, that suggests that it would be a good idea to have behavioral indices of central bank independence, indices that are not only based in the charter of the central bank but are based on actual behavior.

Now, two such indices have been developed over the nineties. One is the actual as opposed to the legally mandated turnover for central bank governors, and what is written in the hope that the office of central bank governors is not appointed for let's say six years. But one can look also at the actual ten year central bank governors. So then I refer to that as the turnover rate of central bank governors and there is another one that I developed together with Steven Wealth from the World Bank and that appeared in the mid-nineties in the World Bank Economic Review and which I believe is the best existing behavioral index of central bank independence. We call it the index of political vulnerability of the central bank and it is basically defined as the fraction of cases in which the

central bank governor office is terminated following a political transition. So that, within a short period of time following a change in government, the central bank governor is replaced. For the forty year period ending in 1989, this number is on average, for all the countries that entered in the sample, (this is a sample of about 50 countries, 50-60 countries or something like that) somewhere in the range of 0.2, or something like that. So in other words, in 20% of the cases a change in government or some sort, more generally a political transition is followed within 6 months by the replacement or by resignation of the central bank governor.

Now, this covers up very different kinds of behavior between the developing countries and the developed economies. In the developed countries the number is 1 so only 10 % of political transitions are followed within 6 months by a replacement of a central bank governor. In the developing countries the same number is 30 %. So 30% of political transitions are followed within 6 months by a replacement or by resignation of central bank governor. And, as a whole one can look also at the number of individual countries, and the country by the way which in the 40 year period ending in 1989 was at the top of this list. Maybe somebody can guess which country you think in terms of this index of vulnerability was likely to be at the top.

The country is Argentina with a ratio of vulnerability of around one, sometimes even a little bit above one. So that, sometimes a political transition in Argentina was followed by the replacement of more than one central bank governor within 6 months, two turnovers. In any case this is not the main topic of my lecture.

This is an economic paper I worked with Geoffrey Miller and Bilin Neyapti and when we started this project– I think its important I tell you what was our expectation – our expectation was that there would be no relationship whatsoever between

legal independence in transition economies and between the rate of inflation. Ok, why do I say that? Conventional wisdom, with respect to the developed economies, is that there is a negative relationship between central bank independence and the average level of inflation. This is based both on theoretical considerations, that we are not going through right now, and also on empirical evidence, which is quite pervasive that there is such a relationship in the developed economies. However, for the transition economies, my *apriori* expectations when I got involved in this project, was that there would be no relationship. And, there are several reasons for this. One reason is that during the nineties, which is the bulk of the period of the sample, most if not all of those economies underwent very extensive process of structural change; there was substantial liberalization of the economy and part of this liberalization took the form of freeing of prices that were previously controlled by the government.

So there was a very substantial process of decontrol of domestic prices. My *apriori* expectation is that when you have such a process of decontrol of domestic prices no level of legal central bank independence, however large, can stop the very powerful inflationary bursts that are going to be common. You know, if lets say decontrol of prices causes the dumping of most of the controlled prices; you cannot stop that by monetary means nor should you do that. But this is another mater now; you know from a positive point of view. So this is one reason. The second reason is that one can expect in most transition economies the fact that the tradition of obedience to the law is relatively poor, so that the discrepancy between what is written in the law of the central bank and what is going on in practice is going to be large. In view of that, this is another reason, why one should expect that there would not be a very tight connection between legal independence that would decrease reform and between the rate of inflation and

the immediate rate of inflation in those countries. Maybe in the long run there will be something but not in the short run. Ok, so let move to what the particular cases that I want to discuss are actually doing and to what extent this *apriori* expectation has been fulfilled or has not been fulfilled.

Whether the granting of the independence had any impact on inflation, we will control for other variables. So first of all, I think that from the point of view of the sociology of institutional reform it is very interesting to look at the magnitude of reform. The main finding is the magnitude in the transition economies and it has been very substantial. It was very vicious reform in terms of how much legal independence was granted by parliament and government by the political authority to the Central Banks. Basically, there are two indices of aggregate legal central bank independence. One is called NVAW. This is an index that weighs 16 legal characteristics.

Let me digress for a minute and say a few words about how this index is constructed. I am not going through the description of all the 16 legal characteristics. This can be done quickly through the appendix in my paper and in more details through my 1992 book. However, let my just mention what are the main features that go into the construction of this index.

There are basically four groups of variables. The first variable has to do with the appointment and for the dismissal of the chief executive officer of the central bank basically the central bank govern and also who appoints the central bank governor. The central bank in which the appointment of the central bank governor is further removed from the political authorities.

Are they allowed to be in the monetary policy committee of the central bank, the one that make the decisions and things like that? Also what happens in case of conflict between the central bank and the between lets say the treasury political

authorities in more general. And obviously, if the law says that the final authority rests with the political authority, then the central bank is less independent if it rests with the central bank; central bank is more independent.

Other procedures for resolution of conflict. What are the procedures for the resolution of conflict? Who has the final authority in case there is a conflict? Those are the issues that are dealt within the second group to which I refer to as who has the authority to conduct monetary policy, according to the law. The third feature has to do with, what is the effective degree of legal conservativeness of the central bank and that is a proxy by how important is the objective of price stability in comparison to other objectives.

There are some central bank laws in which price stability is the only objective. So that would be on this dimension the highest level of independence or conservativeness. There are other central bank laws in which there is a multitude of other objectives that appear together with price stability and even if you go back sufficiently in time and look at the central bank laws prior to 89, you find many countries in which there is a whole bunch of objectives in the central bank law but price stability is not one of them. You have high employment, high growth, lending to the government, financial stability but you don't find price stability as one of the objectives. Basically, the central bank law is going to be ranked relatively low. Finally the final group, you know I mentioned 3 groups, then there is a 4th groups of features. Features that have to do with limitations on lending to the government. There are various ways to measure that.

There are 8 variables basically that look at the various features of those limitations but the general idea is that the more serious are the limitations on lending to the government, on the part of the central bank directly or indirectly the higher the level of legal independence, as I mentioned. So, those are

basically the features that are aggregated into tow indices; one is the index LVAW, that basically aggregates all those 16 legal features in some way. LVAW stands for legal variable aggregated weighted.

There is also the second one LVES, which actually weights only subsets of those pieces. ES stands for scanning who suggested that the most important features for developing economies are basically the things that have to do with what is the relative purpose of price stability and who is the final authority to conduct monetary policy. So LVES is a narrow index, which focuses only on those two. Then what you have here in this table, in the panel name is the ranking of the new laws of the transition economies by the aggregate legal of central bank independence of both the transition economies in the nineties together with the legal independence of the developed economies during the 80s.

The reason that is was not done is that it would have been more desirable to include the legal independence of the developed economies in the 90-s, but nobody has actually done those studies. So the best that we could do in order to compare the extent of reform of the central bank reform within the transition economies, was to compare it to the nearest available data which basically is the level of legal independence of the developed countries during the 80-s. So, the first panel, panel A ranks, gives a combined ranking of the transition economies together with the developed economies with this ten-year. Number one, panel A does it for LVAW, panel B for the narrow index LVES. Before, telling you what the result are let me just explain how this index is arranged.

The highest possible level of independence, the scale is such that the highest level of independence is one and the lowest is 0. So, lets suppose a level of independence of 3 would be below the middle and so on.

Let me read you for example for the index LVAW, the first

country in this ranking and this ranking that includes the developing countries during the 80-s, within this ranking the first countries, I am reading from the bottom, Poland with 89 Armenia with 85, Estonia 78, Lit 78, Georgy 73, Moldavia 73, Belarus 73 Czech rep 73, and only then comes the conservative, famous for its conservativeness, Bundesbank Germany 69, Hungary 67, Switzerland, which also believed to be very conservative with .64, Slovenia 63, Slovak Rep. 62 Austria 61 Uzbekistan 56 etc. Let us see the index that we get for Albania. By the way, This is the index only for the first law, the 92 law, and I just became aware of the fact that there were two additional laws which are not included here so those laws, 96 and 97, would probably reflect a higher level of legal independence. And again if you do the same experiment, the same ranking with the LVES index you find that a similar kind of picture the first coming countries in the first places are Armenia, Estonia, Latvia, Lit, Moldavia, Czech rep, Poland, Kazakhistan, Mongolia, Slovak Republic, and only then Germany. Let me mention another thing, and that is, that out of a sample of 26 countries that we have here, 9 of the countries have had basically two central bank reforms.

There was the first law and then several years latter there was a second law. For those of you who have the paper, you can see that in table no 1. Table one lists the countries in alphabetic order and lists the year of the enactment of the law. It gives basically three aggregate indices. One is LVAW, LVES, and there is the third index that is called LVESX, which is an index in between the two. And we can see for example that Armenia had two central bank laws 91-93 and one in 96. Russia had also two central bank laws one in 93 and another one in 95. Basically there are nine countries and now actually that I became aware that Albania also has basically, there are ten, together with Albania, that have two central bank laws.

This is interesting for the sociology of reform. Those of you

who have the paper you can actually see that at the bottom of the table. We take those 9 countries and look at what was the level of legal independence of the first central bank law and then you take the same 9 countries and you look at the average level of the second central bank law. The average level of independence of the second central bank law is substantially higher than the average level of independence of the first central bank law. So the picture that you get basically is that those that were early reformers, had a first central bank law, they went only part of the way and then after several years they had second thoughts for some reason and then they moved. They gained in the direction of further extending high legal independence.

Let me go to the second issue. The second issue has to do with whether this very extensive, legal central bank reform has had any impact on the inflation rate of a country. As I said on the outset, we cannot expect to have any immediate and maybe not even any impact. And certainly it is unlikely that it will have any impact in the period that there was a strong process of decontrol of controlled prices. Also there are other issues. There is a paper that precedes this one by two people from the World Bank. Experts in transition economy actually looked at the degree of liberalization effect on inflation.

What they found is that there is a negative relationship between the cumulative degree of liberalization and inflation on average across those countries. By cumulative liberalization is meant that you take into consideration not only what is the current level liberalization but all sort of different degree of liberalization because those things tend to operate with the label. This is a variable that when one goes into the project of trying to find out whether legal independence has any or no effect on inflation, one would like to control for that in order not to mix the two things. Another thing one would like to control for is, like I said before, the very powerful price shocks

which would be spread over a year or two due to decontrolled prices.

Finally, there are at least 6 or 7 countries that were involved in wars during some of the period, and as we know during wars governments tend to resolve to inflationary finance. So one would like to control for that as well in order to see whether after you control for all those things legal independence has or has no impact on inflation. Before talking about the results, let me explain also another methodological issue. Suppose there is a reform today, one cannot expect that the rate of inflation, even if the legal independence of central bank has an impact, that it would immediately affect the rate of inflation. It takes time for the institutions to actually implement, for the people that are in office to take the necessary policy steps and then there is also the gap between the taking of policy steps and the time of the impact on the economy. What we did, was to break down the sample into at most three periods. A period prior to the first central bank reform in the case when there were two central bank reforms and a period after the second central bank reform.

Now for the countries that had only one central bank reform there were only two periods, the first period was after including the first central bank reform and then the second period was the period after the central bank reform. So we obtain that for all the 26 country and put cross section time series, broad time series. It is not a chronological time series; it is a functional time series. Lets say for countries that had only one central bank reform the post central bank reform may start for one country in 97 and for another country may start in 93. From now on, I will talk about those periods. What I mean is that those periods are basically, prior any central bank reform either first or second and the period after a central bank reform. And in line with what I said earlier, we would expect that if there is any effect legal independence on inflation then it will

show in the post central bank reform whether first or second.

For those of you who have the paper why don't you turn to page 249 and look at table 3. Look at the first three columns. Basically, let me describe what the results are. The controls are the following, CI is the cumulative index of liberalization, I is the index of decontrol of prices, WT world dummy, and then are the three indices of legal independence LVAW, LVES, and LVESX and then there is also a dummy called DCENTRAL BANK, that was added latter on in order to test whether after you control for all those variables including legal central bank independence whether pegging the exchange rate like they did in Lithuania or Estonia having basically currency board, whether that contributes any additional dummy effect to inflation.

The first conclusion is the following: the legal independence of cumulative liberalization has a very significant negative impact on inflation. The index that is called I in the paper for us, has a positive effect on inflation; the world dummy also has a very positive effect on inflation, and the three indices of legal independence are basically insignificant it conforms to our *apriori* expectations. And the dummy for the currency board in those two countries Lit and Estonia is also insignificant.

However, this is not the end of the story. Then we divided the sample according to the degree to the level of cumulative liberalization into countries that have progressed a lot into liberalization and countries that have progressed slowly. The range of the values of the index of cumulative liberalization in the sample is from 0, which is not liberalization at all. This index by the way is measured between 0 and 1. However, the cumulative index is the sum of those things. So you have to sum over years, which may be much larger. For the sample we have over here, which is from 89-98 this index basically ranges from 0-10 at most or 9 or something like that. Now in the

sample the countries that are above 3-4 they already had undergone the process of cumulative liberalization that is substantial. Now we divided the groups of countries into basically two group: those that have an index of cumulative liberalization below three, meaning those that are lagging in the process of liberalization and those that have done a lot in the direction of liberalization.

Then we allowed the effect of legal cumulative independence, on controlling for most other variables between those two groups of countries to differ. It turns out that there is strong and significant effect in the group of countries, which have undergone the process of cumulative liberalization. In other words, for those countries in which the process of cumulative liberalization is lagging there is no effect of legal cumulative independence on inflation.

However, for those countries that have undergone a substantial and sufficiently sustained level of liberalization, the tradition of negative relationship between legal independence and inflation that has been detected through the 80-s by various authors including myself for the developed economies, does emerge also in the economies. So, that is basically at the behavioral level the main conclusion of this paper.

Now let me just take 3 or 4 additional minutes to mention some additional things that have been done and could be done, because I don't think this exhausts everything that can be done with this kind of data. I think the data should be used to do additional things that we did not do. This is a lot of work to develop this data and we always make mistake and we always discover we forgot this and forgot that. I discovered yesterday that we missed Albania from 96 and 97. In any case, an additional question that arises here, which is interesting, is a question that has to do with the sociology of worldwide reform. What are the factors, that induces some?

Before we take the reform as something that is given from outside, given exaggeratedly and asking what is the impact of reform on economic performance in this case in the area of inflation. Then, one can ask another question and that is: What are the long run forces that are more likely to induce policy makers? Who are the politicians to grant independence, more independence to the central bank?

There are several possibilities here. One is the country that is near to Germany. Because of the influence of Germany and the good record of Germany on price stability may have been more likely to grant independence to central banks. So, if we basically ran a regression that is not reproduced here but which is described in one of the sections in which the dependent variable is the level of legal independence, that was finally granted to the central bank. It looks like there are a bunch of institutional, explanatory variables. So one of them to capture the influence of Germany was the distance of the capital of the particular country from Berlin, not from Bonn but from Berlin.

This variable, by the way, turned out to be insignificant. Now, it is also possible that countries that are on the first and the second fast tracks to join the EU; the first fast track include, Hungary, and the Czech Rep. Poland and all that, had a stronger incentive to institute higher levels of legal independence in order to facilitate their prospective admission to EMU.

What the regression tells us is that; we captured it with the dummy variable. The dummy for those countries that are on the first fast track is positive and significant. In other words, controlling for other things, the positive influence of being on the first fast track on the level of the legal independence that is granted to the central bank in those countries that is in the first fast track. But the other variable, the dummy for the countries that are in the second fast track, although positive,

is insignificant. And, there are several other variables of this type that we worked with; practically all of them were insignificant.

There was just one, one additional one, that was significant, and that is the day of the reform – the latter was the reform, the higher was the level of central bank independence granted to the central bank of that particular country. Now, during the refereeing process, one of the referees, who evidently are an American, raised the possibility that countries that had had very high rates of inflation would be inclined to grant more legal independence to central bank to offset the inflation, and there is no evidence in the data to support that. As a matter of fact, if there is evidence, it is in the opposite direction.

So let me conclude this discussion by basically with a sort of general remark that I will read from the last paragraph of the paper - "The fact that the average level of legal independence during the 80-s rather than during the 90-s the level of central bank independence, that is legal independence embodied in the new laws, would have been significantly lower.

This is one concrete illustration of the broader principle that exists in professional consensus at the time the reform affects the pattern of reform. I think this is a very nice illustration of the power of ideas. In the 30-s we had the Keynesian revolution, which had a tremendous impact on subsequent policy in the developed economies and also latter on in developing countries which is still shaping the thoughts of economists to this day. And I think there is something similar in this area of central banking that has gone on during the 90-s, you know this paper has focused only on the transition countries however a similar kind of phenomenon was happening in parallel in South America. Basically, practically all the countries in South America have very substantially increased the level of legal independence of their countries and also practically almost all European countries as well as

Japan have increased the level of central banking. This will terminate this topic.

I see I have 7 min left so I will use those 7 minutes to make a few marks about the issue of accountability credibility and transparency in monetary reforms. The issue of accountability credibility and transparency has arisen recently in the context of the discussion that preceded the formation of EMU. Basically, it raged during 98-99 and it basically reflected two different points of view one, which I like to call the new Bank of England approach, the one that was exemplified by Vickers Merlin Kind and the approach of the Bundesbank.

The EUROPEAN CENTRAL BANK is basically the son of the Bundesbank. It has been created in pattern after the image of the Bundesbank. Its glorious years of conservative are fargone by now. In any case, the Bank of England approach insists a lot on the accountability of individuals and therefore on transparency of I should mention both in the bank of England as well as the EUROPEAN CENTRAL BANK the decision about monetary policy is done by the monetary policy committee in the Bank of England and by the governing council of the EUROPEAN CENTRAL BANK.

The Bundesbank approach, which is reflected in the EUROPEAN CENTRAL BANK basically, stresses collective responsibilities. It doesn't think it is a good idea to publish the explicit voice of individual council members. This is a very touchy issue for the European Monetary Union due to the fact that this is the CENTRAL BANK of many different countries with different fiscal authorities, which certainly have diverging interests.

The precise voting of a particular council member the council member from Germany, France or from Italy, that has a lot of political implications, even if it doesn't have political implications, can be misinterpreted from the general public as arising from political implications. This is a situation that is

somewhat different than the situation of the Bank of England, which is a bank that faces only one fiscal authority.

So, although I believe that transparency is a good thing in the sense that transparency has many advantages in countries that are joining the club of countries with high level of legal independence, transparency should be an important feature particularly in order to prevent gross political influence on the central bank. For example, the law of the Bank of New Zealand from 1989 basically gives the governor instrument independence; the governor can decide what the interest rate is, but the minister of treasury and the government more generally has an overwrite privilege, in other words it can tell the bank. By the way a similar kind of thing also exists in the new law of Bank of England as well as the bank of Canada already from many years ago. However, there is speculation that the government overwrites the central bank and takes over the conduct of monetary policy.

To limit irresponsible behavior on part of the central bank, I think it is mostly to limit irresponsible behavior on the part of government in most cases. In other words, the government, when it utilizes the privilege it has from the law to influence the monetary policy, it should be clear from now on that this is the responsibility of the government, and that the government it is going be responsible politically, good or bad. This is one point. There is another issue that has to do, I will not have time to discuss in full, but I just would like to put on the table for the discussion session.

There is the issue, again which arose within the context of central bank issues, between William Bolker, who at the time was on the monetary policy committee of the Bank of England and between Roth Marisin, who is still in the governing council of the EUROPEAN CENTRAL BANK. In 1998, just before the creation of EMU William Bolker wrote a paper entitled euphemistically, "Ellis in Wonderland".

It criticized very strongly the EUROPEAN CENTRAL BANK for not being sufficiently open about various issues but also about the forecast that the EUROPEAN CENTRAL BANK might have or should have about where the inflation rate will be in the Euro area in the absence of activist monetary policy. There was a response on the part of Roth Marisin with respect to that, I must say that I believe, personally for reasons that I will not go into, but again this may be left to the discussion session, that one should not exaggerate to the other extreme of going overly open transparency with respect to all the information that the central banks has.

At least two reason for that. Number one: the central bank operates in a world of uncertainty. So, it may have some ideas about where the economy is going but it is not certain about that. Now, if it says we think this and that, there is a likely possibility that this is going to be misinterpreted by at least by part of the public and may create more confusion than clarity. There is a very distant paper that was written in this context by somebody by the name of Vinclair from the research department of the EUROPEAN CENTRAL BANK, "Full transparency does not always mean full clarity."

You can submerge the public with tons of information but the signal there is very low. And the second reason is that imperial to central bank has early signals that there is financial fragility. There is a bank or a group of banks that are in bad shape; maybe there will be a banking crisis and maybe a currency crises or something like that. We all understand that it is a very bad idea to publish such information.

The central bank in a situation like that in my view should take the actions that are necessary, maybe to close the bank, inject some money temporarily. However, it certainly should not publicize this information ahead of time because of the risk that is actually to precipitate the financial crises that otherwise could have been averted.

FINANCIAL CRISES IN SOUTH EAST EUROPE

Marko Skreb, Even Kraft

FINANCIAL CRISES IN SOUTH EAST EUROPE; CAUSES, FEATURES AND LESSONS LEARNED

Marko Skreb, Even Kraft

ABSTRACT:

This paper analyzes systemic financial crises in three Southeast European countries, Albania, Bosnia and Herzegovina and Croatia (ABC). Albania's crisis involved the informal financial sector (pyramid schemes). Bosnia's crisis did not have a defining set of events, but instead involved "permanent stress" and an eternally unfinished reform agenda. Croatia's crises included a first crisis resulting from transition and war, and a smaller second crisis resulting from liberalization without an adequate institutional and legal framework.

We argue that there were common features of these disparate episodes. The crises were very costly, politics was involved in each case, the legal system was partly inadequate and there was a lack of coordination between the supervisory authorities and other institutions. The positive common feature is that none of the ABC countries inflated its way out of the crisis.

We argue that several lessons may be learned: political consensus is essential for speedy resolution, early design of a crisis resolution plan and strong crisis management are crucial, there is no "one size fits all" policy for crises and strong fiscal position is a plus. Finally we should be glad to have financial crisis, as it is only after a crisis that additional effort is made to improve the stability of the financial system.

1. INTRODUCTION[1]

The main aim of this paper is to analyze systemic financial crises in three Southeast European countries and attempt to draw some conclusions and general lessons based on those cases. The paper examines Albania, Bosnia and Herzegovina (BiH) and Croatia (or the "ABC countries").

The recent experience in financial problems of these three countries has not been widely studied. Their experiences are quite disparate: Albania experienced a financial crisis due to the advent and collapse of pyramid schemes. This crisis had little to do with the banking system, except perhaps that the growth of the informal financial sector was a result of the lack of development and flexibility of the formal banking sector. In addition, crisis prevention and resolution were not primarily in the hands of the central bank, for that institution did not have clear authority over the informal financial sector.

Bosnia and Herzegovina experienced sustained distress of the formal financial system without a single event or set of events that could be characterized as a crisis. Banking supervision functioned separately in each of the two entities established by the Dayton Accords, creating significant differences in the pace of change and the extent of banking problems. Nonetheless, the problems in the two entities and the overall legal and macroeconomic framework were similar enough to merit the term "Bosnian."

Croatia, substantially the most economically developed of the three countries, experienced two banking crises. The first was the result of the transition from communism, and

essentially was the result of stocks of bad loans inherited from the old system. The first crisis was drawn out and amplified by the 1991-95 war. Shortly after the first crisis was resolved in 1996, a new crisis broke out, this time a classic crisis of liberalization and excessive risk taking.

Despite these rather disparate histories, we argue that there are important similarities between the three cases, in particular the difficulties caused by weak legal systems, political interference in financial sector supervision, and inadequate coordination among supervisory institutions and governments.

The paper has three main parts. Following this introduction in the first part we give a comparative analysis of the main economic, financial and banking indicators for the ABC countries. In the second part, we analyze banking sector (financial sector) problems in each of them separately, with an assessment of crisis management in each country. In the last part, we try to draw some conclusions and lessons learned from these experiences.

2. MAIN INDICATORS FOR ABC COUNTRIES.

Albania, Bosnia-Herzegovina and Croatia are not well known. The latter two only emerged as independent states a decade ago. Until the transition started, Albania was arguably among the closest countries in the world. So, it seems useful to provide some background information before moving on to their financial problems.

The three countries are all geographically part of Southeast Europe. As can be seen from Table 2.1. all have relatively low GDP per capita. Albania's and Bosnia Herzegovina's GDP per capita are estimated to be barely higher than 1000 USD (or less than 3 USD per day). Croatia's is substantially higher. Measured by total GDP, their economies are very small. But all of them grew relatively rapidly in the 90's. All showed a very high degree of monetary discipline, as manifested by

low inflation. Bosnia and Herzegovina achieved this with a "rules based" monetary policy i.e. a currency board (since 1997), while Albania and Croatia employed managed floating exchange rate regimes and independent monetary policies.

Table 2.1. Economic indicators for 2001

	Total GDP in bill. US $	GDP/p.o. in US $	GDP/p.o. in PPP US $	GDP growth in %	Inflation in % (eop)
Albania	4.1	1 108	3 488	6.5	3.5
Bosnia-Herzegovina	4.6	1 068	N/A	5.6	0.9*
Croatia	20.3	4 625	7 892	4.1	2.8

Source: IMF Article IV reports for Albania, Bosnia and Herzegovina and Croatia (www.imf.org) and Borish (2002)
Note: * Estimate (weighted average of two entities). There is no data for inflation for BIH.

As Table 2.2 demonstrates, their current account deficits are relatively high (Croatia's was double digit in 1997) and all have fiscal deficits. Albania's deficit is very high indeed (four years ago it was in the double digit zone). None has a particularly deep financial market (as measured by the share of broad money in GDP), but all have experienced high rates of money growth[2]. Albania and Bosnia and Herzegovina have very high shares of currency in circulation in GDP. If, on top of easily measurable domestic currency outside banks, foreign currency banknotes (which circulate widely in all three countries) were to be added, they could easily be labeled "cash societies".[3]

Table 2.2. Financial indicators for 2001.

	Current account as % of GDP	Fiscal balance as % of GDP	Broad Money as % GDP	Broad Money Growth %	COB** as % of GDP
Albania	-6.3	-8.5	66.7	19.9	20.2
Bosnia-Herzegovina	-18.0	-0.9*	43.6	79	16.3
Croatia	-3.1	-5.3	62.8	45.2	5.0

Source: IMF Article IV reports for Albania, Bosnia and Herzegovina and Croatia (www.imf.org)
Note:
* Consolidated central government on commitment basis.
** Currency outside banks

[2] It has to be noted that due to changeover to Euro from DM end 2001 is an outlier for countries with strong currency substitution and high official and unofficial dollarization. Nevertheless, rapid growth of broad money is characteristic.
[3] For estimates of unofficial dollarization in Croatia see: Feige et al (2002) and CNB (2002a). In Croatia, more than 2.1 billion euros of foreign exchange cash were exchanged in the last months of 2001, indicating that the foreign currency in circulation was roughly twice the local currency in circulation.

In short, if rapid GDP growth continues in the future, there is ample scope for further deepening of financial markets. At the same time, financial deepening, if combined with inadequate financial institutions (weak regulatory frameworks and especially weak enforcement) and rapid deregulation may be a recipe for financial problems in the future[4].

After taking a macroeconomic view of the countries we now turn their banking industries in particular.

Table 2.3. Banking indicators for 2000.

	No. of banks	o/w foreign	Banks per 100 000	Assets/bank (mil US $)	Assets/ GDP	EBRD Indicator^
Albania	13	12	0.38	155	52%	2 +
Bosnia- Herzegovina	55	14	1.30	52	65%	2 +
Croatia	44	20	0.96	312	70%	3 +

Source: EBRD Transition report (2002) and own calculations
Note: ^ The EBRD Banking reform indicator has a range from 1 to 4+ (the latter being the highest score). A score of 2 means that there is significant liberalization of interest rates and credit allocation. A score of 3 means that there is substantial progress in establishment of bank solvency and of a framework for prudential supervision and regulation. For more details see: EBRD Transition report (2001) p. 16.

It is worth noting that both in BIH and Croatia the number of banks has significantly decreased since 1997 (in Albania it has actually increased). It is expected that in the future consolidation will continue and especially that the market share of foreign banks will continue to increase rapidly. But, as Table 2.3. reveals, average bank size in these countries is still very small. This is a typical feature of a relatively lax entry policies and licensing at the early stages of transition. Besides it shows that those countries are not immune from global trends that affect not only developed economies, but emerging markets banking industry as well.[5]

Deregulation, opening up to foreign competition and privatization will continue in the future, as they are world-

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[4] For example Eichengreen and Arteta (2002) identify rapid growth of banking credits linked with financial liberalization as major causes of banking crises in emerging market economies. See also Caprio and Klingebiel (1996) and Gavin and Hausmann (1996).

[5] For more detail on trends in emerging markets banking see the excellent work by Hawkings and Mihaljek (2001)

wide trends that will affect the ABC countries (see Hawkings and Mihaljek, 2001). In short, there is no doubt that all countries (including the ABC ones) are more and more involved in globalization and would be well advised to study them well and prepare for them..

Table 2.4. International obligations (end of Q1 2002)

	WTO	EU-SAA	IMF/WB/EBRD	Sovereign rating	External debt
Albania	Yes	No	Yes	None	Not fully
Bosnia-Herzegovina	No*	No	Yes	None	Not fully
Croatia	Yes	Yes	Yes	BBB-	Fully

Source: own information
Note: WTO World Trade Organization membership EU-SAA, European Union Stabilization and Association Agreement signed or not.
IMF/WB/EBRD. Does a country lend (i.e. it active) from multilateral financial institutions. Both Albania and Bosnia and Herzegovina lend under concessional terms.
Sovereign rating by any of major agencies (S&P, Moody's and Fitch IBCA).
External Debt: Whether external debt is fully regularized or not.
* BiH is presently negotiating its accession to WTO. It is expected that BiH could become a member in 2004.

Croatia is by far the most advanced of the three countries as far as international obligations are concerned. Since all three are part of the "periphery" of the huge EU market (which will come even closer when the 10 new applicant countries becoming full fledged members, perhaps as soon as two years from now), it is no surprise that the EU is their main trading partner. So, institutional relations with the EU (presently in the form of Stabilization and Association Agreements) as well as trade developments are key to their further integration into the world market.

One could argue that proximity to the EU determines (broadly speaking) the legal framework for banking industry. Our three countries embrace universal banks and have independent central banks with modern laws that grant independence (*de iure* if not d*e facto*). What is not easily measurable is the question of enforcement of laws (especially in the area of banking). One could argue that the ABC countries are not enforcing their laws vigorously enough. Indeed, this is the assessment of the EBRD, as shown in table 2.5.

Table 2.5. Legal framework for banking operations

	L, R and S in central bank*	Banking law	Bank closure	Deposit insurance	EBRD legal indicator**
Albania	Yes	July 1988 (amended)	***	April 2002	2 -
Bosnia- Herzegovina	No (two entities)	Oct 1998 April 1999	Relatively Easy	Feb 2001 (only FBIH)	1 +
Croatia	Yes	Dec 1998 (new draft)	Easy	June 1997	3

Source: EBRD Transition report and own assessment
Note: * Licensing, regulation and supervision
** EBRD legal transition indicator is a classification system for financial regulation. The highest grade is 4+. An indicator of 1 indicate that legal rules on banking are very limited in scope, 2 means that they are limited and 3 means that they are comprehensive, but further refinement is possible. For more details see: EBRD Transition report (2001) p. 38-39.
*** Through mid-2002, no banks had been closed, so it is not possible to assess the ease of bank closure.

After this brief comparative analysis, we will now examine systemic financial crisis in each of countries more closely.

3. FINANCIAL CRISES: ABC COUNTRIES

3.1. ALBANIA

3.1.1. Crisis background, the crisis and crisis management

It has to be mentioned that so far Albania has not been confronted with a typical banking crisis. But, it had very serious financial sector problems. Its financial problems were much more related to the growth and spectacular collapse of pyramid schemes and especially to the negative social and political consequences this collapse had on Albanian society as a whole. So, the fact that the non-regulated part of the financial system grew and caused such havoc is what makes the Albania case interesting.

There is no doubt that, at the beginning of transition, Albania faced the worst initial conditions. Indeed Albania's initial conditions were not only the worst of the three countries we are comparing, but of all European postsocialist countries.

Before 1991 it was among the least known and poorest countries in Europe[6].

At the beginning of transition its financial system was similar to that of other former socialist countries. Its banking system was composed of the State Bank of Albania (which, typically, performed some central banking and commercial banking functions), the State Agricultural Bank and the Albanian Commercial Bank. The State Agricultural Bank's main function was to lend to cooperatives and state farms. The Albanian Commercial Bank, which was developed from a foreign relations department of the State Bank of Albania, was in charge of foreign exchange reserves, foreign exchange operations etc. The State Bank of Albania collected deposits as well. At the same time, there were about 40 thousand local offices of the state bank scattered throughout the country. These representatives collected deposits that were redeposited at the State Bank of Albania.

The payment system was very rudimentary, consisting only of cash and clearing of banking invoices.

But major reforms in the financial system started relatively early in the transition. In April 1992 the new central bank and banking law created a two tier banking system. The Agricultural bank was later closed, leaving the National Commercial Bank (the new name for the Albanian Commercial Bank) and the Savings Bank as the main second tier banks in Albania. The central bank was separated from commercial banking activities. In July 1993, the first foreign bank started to operate in Albania. Soon, some other private banks started. But, they were all dwarfed by the National Commercial Bank and especially by the Savings Bank with its dominant position on the domestic market.

Regardless of all the institutional changes and the emergence of *de novo* banks in that period, financial

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[6] For a very good view on Albanian economy before 1992 see Blejer at al. (1992).

intermediation remained in very poor condition. In other words, financial sector did not play the role it was supposed to play. And this inadequacy of formal intermediation, combined with lack of adequate regulation and lack of knowledge about finances, was fertile ground for the development of pyramid schemes[7].

Due to deeply rooted mistrust of the financial institutions and the inefficiency of the payment system, households kept large portions of their financial assets in cash (see chart 1). With inflation in double digits (30% in 1993 and 16% in 1994) the opportunity cost of holding cash was high.

At the same time, the lending market was very small and underdeveloped. Three state banks and the new emerging private banks were unwilling to lend to households and small private businesses. So, an informal market both for deposit taking and making loans was developing rapidly.

At the beginning of the development of the informal financial market, neither the regulators nor international financial institutions viewed those activities as illegal. On the contrary, they were viewed as a welcome complement to (inefficient) official financial intermediation. So, both the lending and deposit taking markets were developing in the shadow of the inefficient formal financial intermediation. During 1995 interest rates on deposits were 4-5% monthly[8].

Since the companies claimed to operate under the Civil Code, it was difficult to regulate and control them. But, according to Jarvis (1999) "…the problem was not just a legal one, and (that) members of the government themselves benefited from and supported the pyramid schemes companies." (p. 10). This is an important element as obviously this capture of the state by interested parties contributed to

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[7] Our description of the rise and fall of pyramid schemes in Albania is based on Jarvis (1999) and Korovalis (1999).

[8] A 4% monthly rate is about 60% per year. Compared with 6-7% annual interest rates in banks, the differential was huge.

the growth (and later the collapse) of the schemes in Albania.

Unfortunately, the central bank did not attempt to close the pyramid schemes under its authority to close unlicensed banks. But the Chief Prosecutor ruled that the pyramid schemes did not fall under the banking law. Given this and the refusal of the Ministry of Justice to handle the issue at all, it seems likely that the central bank would not have had any allies if it had moved against the schemes by itself. In addition, the IFI's also warned the authorities about the schemes, but at a relatively late stage (mainly during 1996) and again without much effect until rather late in the game.

It should also be mentioned that it was not always easy for the public to understand that the pyramid schemes were not legitimate enterprises. Many did make a show of investing in real assets that probably brought some profits. Also, some undoubtedly "invested" in high-yield criminal activities.

Two main events contributed to the collapse of pyramid schemes in late 1996 and early 1997. The first was the lifting of sanctions on FR Yugoslavia at the end of 1995. This meant that profitable smuggling activities financed by money from the pyramid schemes began to dry up. Second, the upcoming parliamentary elections created uncertainty whether the ruling Democratic Party (which actively supported the schemes) would win. On top of this came the "normal" dynamics of pyramid schemes: they always collapse sooner or later. Further, increased competition (new entry) led to the increase of monthly interest rates to 6-10% per month in the first half of 1996. Finally by November of that year, some schemes were offering more than 40% monthly deposit rates. In autumn 1996 international warnings (IMF/WB annual meetings in October) became much stronger, and the pyramid schemes started to collapse in a couple of months.

At the time of the collapse of the schemes, they had more than 2 million depositors (out of a total population of 3,5

million). Accrued fund liabilities were more than 50% of GDP. So, it came as no surprise that when the schemes stopped paying back their depositors, civil disturbances started.

Slowly, Albania descended into anarchy. The government took some measures to seize the remaining assets of the schemes, but it was obviously too little and too late. By March 1997, Albania was in chaos. The police and army deserted, foreigners were evacuated. As a consequence of widespread rioting some 2000 people were killed and more than a million weapons looted from military barracks and police stations.

By mid-1997 things started to calm down. With the help of international forces, the interim government managed to organize new elections in July of 1997 and gradually peace returned to the country.

But, the problem of the pyramid schemes was still there. A new law was needed to provide a basis for seizing and winding up the pyramid schemes. To make things worse, then president Berisha refused to sign the decree on the law of pyramid schemes. It was only in July 1997, when a new president took office, that the new law was signed.

The new law stated that all pyramid schemes were subject to control by administrators. The administrators were given wide powers. The administrators were foreigners and faced formidable difficulties (from physical threats to legal challenges). So, it took several more months, roughly to March 1998, to gain complete control of the schemes.

3.1.2. Crisis management: assessment

The Albanian pyramid scheme experience reveals some interesting lessons:
- Problems in the financial sector need not be linked with banks or the regulated financial system. Informal financial markets can easily get out of control. Albania

is not the first country to be faced with pyramid schemes (MMM in Russia, cases in Romania, Croatia etc.) but the size and especially consequences of the Albanian schemes make them unique.

Financial sector problems can have devastating consequences on civil society and can provoke major social unrest. Argentina in 2002 is another example of how huge problems in the financial sector (and losses of the household sector) can spill into social and political trouble.[9]

• The late reaction of the authorities was not only caused by an inadequate legal framework but broadly speaking was a problem of governance i.e. of crisis management. The authorities reacted slowly and weakly. Linkages with highest levels of the government and corruption postponed adequate reaction for some time. This delay not only allowed the schemes to grow but also delayed the seizure of remaining assets, which facilitated asset stripping.

• It is interesting to note that in spite of the devastating political and social consequences the economic impact was relatively modest. The formal sector (i.e. banks) did not suffer. Looking at yearly data, one can hardly see any impact on deposits in banks, as can be seen from the following chart.

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[9] To be completely clear, the problems in the financial sector were not the cause of Argentina's macroeconomic problems in late 2001. Instead, it would be fairer to say that banks became the victims of the breakdown of the currency board, and of popular anger.

Chart 3.1. Total deposits and currency outside banks in Albania
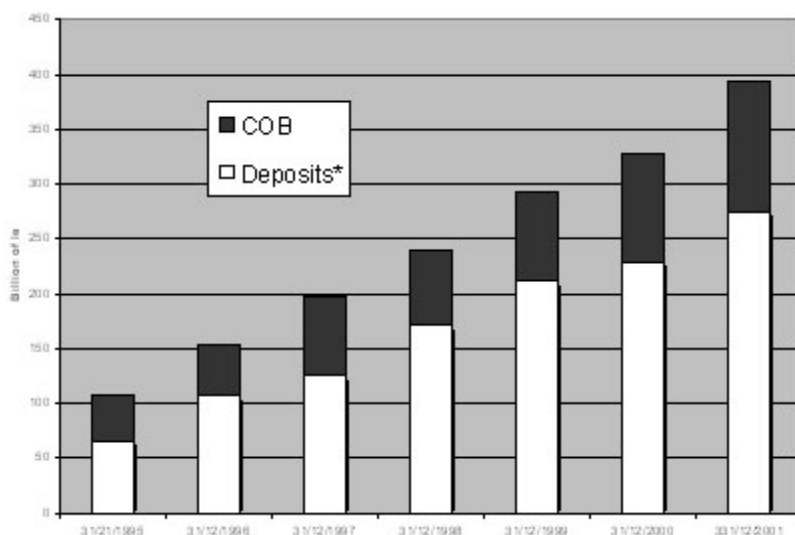
Broad Money (deposits plus currency) grew at a steady, rapid pace in the period from 1995 to end 2001, without interruption even during the crisis period. The currency to deposit ratio increased from 0.44 at end 1996 to 0.58 at end-1997, but quickly fell back to 0.40 by end 1998 and stayed at that level through the end of 2001.

This does not meant that the collapse of the schemes did not have any economic consequences. Inflation went up and GDP growth fell from 9.1% in 1996 to -7.0% in 1997 (although it has to be noted that data on Albanian GDP are very unreliable). But it seems that most of the GDP decrease has to be ascribed to the social unrest, which brought normal life to a standstill in much of the country for several months. In short, the economic consequences of the collapse of the pyramid schemes per se were less than expected (as

documented in Jarvis, 1999).

As a consequence of the collapse of the pyramid schemes, the public remained extremely sensitive to financial sector problems. An episode in March 2002 with the largest bank in Albania clearly demonstrates this. The bank had a clean balance sheet. All bad loans had been carved out and the bank had been recapitalized with government money. The bank was forbidden to make loans, so that all its assets were either in government bills, foreign assets or claims on the central bank. The bank was awaiting privatization (relatively soon, one hopes). In spite of its clean balance sheet and high quality of assets, in March 2002 rumors started that the bank was insolvent and that people should withdraw their deposits, referring to the collapse of the pyramid schemes. The cause for those rumors is not clear, but as a consequence the bank lost 12% of its deposits in a single month. After that, the situation returned to normal (withdrawals ceased), but the deposits did not return to the bank. At the peak, the net outflow was 1% of total deposits per day. This is a textbook case of how a run on bank can be produced out of nothing more than rumors based on a recent history of financial distress. Confidence is easily lost, but takes a long time to regain.

Finally, in the meantime the Albanian banking system has continued to develop in the right direction. There are presently 13 banks, out of which only one is state owned (but with a dominant position of roughly 2/3 of the deposit market). There are no major risks in the system at the moment, but caution is warranted for the future. On top of privatization of the largest bank, further strengthening of supervision is needed[10].

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[10] We will not pursue the analysis of the Albanian banking system any further. For more details see: Siegelbaum et al. 2002, Cani et al (2000), Banking Supervision Annual Report (2000) or Muco et al. (2001).

3.2. BOSNIA AND HERZEGOVINA.

3.2.1. Banking development background and banking crisis[11].

Describing the history of BIH banking is equivalent to describing the prolonged crisis/distress of the financial system. From the beginning of transition, until recently the system was in a state of "permanent stress." Bosnia and Herzegovina (BIH) did not have a classical banking crisis but serious difficulties during a decade (and it is still not completely over). So, BIH definitely can be classified it in a group of countries with systemic financial crisis.

Bosnia and Herzegovina became a sovereign country in March 1992, when it declared independence from SFR Yugoslavia. This declaration was followed by a prolonged war that ended only in December 1995 with the signing of Dayton peace agreement.

So, during four long years, while some other transition economies were vigorously reforming their financial systems, the people of BIH were fighting a war that ended with more than 250,000 fatalities (or about 6% of the pre-war population). Needless to say, the conflict resulted not only in enormous human losses, but physical destruction (housing, infrastructure, factories) as well, which continues to impede speedy recovery.

But, to start with, at that time the war broke out, Bosnia's financial system was far from orderly. Not only was it coming out of a socialist system (more liberal than most other former socialist countries, but socialist nevertheless[12]), but disruption of the common Yugoslav market together with a pile of bad debt made the need for serious structural adjustment very urgent.

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[11] It has to be noted that not only there is very little work written on Bosnia and Herzegovina's financial system, but available statistical data are of very poor quality. Without going into detail about the causes of this, the reader would be well advised to keep this in mind.

[12] For more detail on banking is socialism see Coats and Skreb (2002).

Numbers on the banking system of that time are scarce. But, according to the last comprehensive analysis of the banking sector carried out by Coopers & Lybrand in 1989, identified cumulative potential losses in the banks of the former Socialist Federal Republic of Yugoslavia (SFRY) amounted to almost USD 10 billion.[13] No data for BIH alone are available, but is safe to say that, when BIH became independent, banking system capital was deeply negative.

Another important element is that in April 1991 all household deposits in foreign exchange in BIH banks were frozen (as in the rest of SFR Yugoslavia). The problem was much deeper than a mere deposit freeze, for the National Bank of Yugoslav had control of the foreign exchange assets of the former country. Bosnia, along with Croatia, Slovenia and Macedonia, was left without counterpart assets to the deposits when it became independent. This problem was in a sense created by the requirement under the monetary system of the former SFRY that the proceeds of foreign exchange deposits be surrendered to the NBY.

The estimated amount of frozen deposits for BIH at that time was DEM 2,7 billion. Without any accrued interest, this is more than 25% of estimated GDP for BIH in 2001. It is worth noting that this problem is still not resolved in Bosnia and Herzegovina (unlike Croatia and Slovenia, for example). So, state banks still have (part of) this debt on their balance sheets and households have claims on banks that they cannot realize.

During the war, the banking system did not function normally. There were four monies circulating in BIH: the Bosnian dinar, the Yugoslav dinar, the Croatian Kuna and the German Mark (DEM). Combined with the fact that there were no governmental authorities with control over the entire territory of BIH, it is understandable that the banking system

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[13] from www.nbj.yu http://www.nbj.yu/english/banks/index.htm

could not efficiently intermediate funds in the economy.

In the meantime, the real sector (and its very limited capacity to pay back the loans in the first place), has only deteriorated further. Combined with war damages (international donor pledges for reconstruction amount to more than US $8 billion according to Tesche (2000)), it is obvious that the overall financial system in Bosnia and Herzegovina was in serous trouble and in need of deep reform.

On top of all the domestic troubles, non-regularized external debt was an impediment to international help. So, immediately after the signing of the Dayton peace agreement, BIH became an IMF member (Dec 20, 1995).

It is only in 1998, after the formation of the central bank, that a single currency (convertible marka) was introduced into the whole of BIH. The establishment of a single monetary authority for the country as a whole (with ample help from the IFIs – for more details see Coats (1999)), and the formation of two licensing, regulating and supervising agencies for the two entities made it possible to start building up and restructuring the financial system in Bosnia. At that time BIH had old, debt ridden, non-restructured state owned banks, whose loan portfolio was almost completely non-performing, and a handful of small, private banks that played no significant role in financial intermediation.

As a result of Dayton, BIH was a decentralized state with two entities, the Federation of Bosnia Herzegovina (FBIH) and the Republika Srpska (RS). It has to be mentioned immediately that reforms did not proceed equally rapidly in each entity. Banking sector reforms were faster (though not very fast) in FBIH than in RS.

In both entities, banking industry reform was two-pronged. First, the banking system itself had to be restructured and second, the payment system had to be reformed. The payment system was a special problem due to its manner of organization

in the former Yugoslavia. Before reform there were actually three payment bureaus (one in RS with direct links to FR Yugoslavia and two in FBIH,). The biggest problem was the monopoly position of each of them for all payment transactions in their respective geographical areas. In addition, the payment bureaus performed numerous other functions (tax collection, audit, clearing house for banks, distribution of government revenues and statistical functions).

To create a normal, marked based financial infrastructure, the payment system had to be reformed. The legal framework for this reform was put in place, both the RTGS and clearinghouse were set up and on January 5, 2001 the new payment system started operating successfully. With this reform, banks got control of payments. Fees for payment services decreased, and now form part of bank revenues, instead of going to state-owned payments agencies. The Central Bank of Bosnia and Herzegovina provided all the necessary preconditions for the proper functioning of the RTGS and Giro Clearing systems, for medium risk transactions. It is worth noting that only banks with special licensed to provide payment services have access to the payment system. The payment services license is issued by the banking agencies in each entity. By end 2001, 42 banks in BIH had licenses for payment system operations, 30 in FBIH and 12 in RS[14].

Another big problem for banks is the external debt generated in former Yugoslavia. The state of BIH has only taken over the liabilities that were guaranteed by the Yugoslav federation or by the former National Bank of Yugoslavia (including London and Paris club debts and so-called frozen foreign exchange household deposits).

Since Dayton, it is not possible to speak about a unified financial system as each entity within BIH has its own banking

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[14] For more details on the payment system in BIH visit http://platni.cbbh.ba/engl.htm

supervision agency. For that reason, we will treat each one separately.

Federation of BIH.

Reforming the banking sector itself was done in three ways. First, old state banks had to be dealt with. Second, an adequate legal framework for banking had to be constructed. Third, institutions had to be built up and strengthened to ensure adequate regulation and enforcement of laws and regulations.

First, old banks. The authorities were wise to decide not to get involved in bank restructuring. The state did not recapitalize banks with fiscal sources, nor did it help with liquidity injections. It has to be remembered that the currency board system in BIH does not have a lender of the last resort facility, in the same that other currency boards in Europe such as Bulgaria and Estonia also do not have lender of last resort facilities.

Since 1998 consolidation of banking in FBIH has proceeded relatively fast. It should be noted that the negative net capital at the beginning of reform was estimated at KM 4,5 billion (Banking Agency FBIH, 2002 p. 6). This can be seen from the following table.

Table 3.2.1. Consolidation of banking in FBIH

Date	Number of banks (of which state owned)	Provisional administrator	Liquidation	Bankruptcy
31. Dec 1998	55 (11)	-	-	-
31. Dec 1999	44 (10)	13	-	2
31. Dec 2000	38 (10)	2	4	4
31. Dec 2001	33 (6)	5	3	-
Total	N/A	20	7	6

Source: Banking Agency FBH (2002)

The strategy of reform in the banking sector aimed at letting the new private banks develop and allowing the debt-ridden, old state owned banks to either be merged, sold to a strategic

investor or be liquidated. Since these banks were plagued with nonrecoverable loans, and with very weak financial conditions, this was a wise strategy.

Another pillar of banking system reform was the adoption of the new legal framework for banks, especially for the liquidation of insolvent banks. What is less commendable is that the deadline to close down state owned banks that have not been privatized or merged has been postponed several times already. This does not create good incentives for disciplined behavior, as at the moment the remaining state banks do not fully satisfy legal capital requirements.

The last pillar was institutional build-up and strengthening. This included implementation of banking supervision and establishment of a deposit insurance system. The banking agency of FBIH was formed by end-1996 and has since grown into a well respected independent institution in FBIH[15]. The deposit insurance agency has recently started working as well. In FBIH, deposit insurance is in place and by the beginning of 2002, 8 banks had licenses for deposit insurance (up to KM 5000 per deposit is insured). In the second part of 2002 deposit insurance agency has been formed at the level of Bosnia and Herzegovina.

In short, banking reform did make substantial progress, but has been slower than warranted (especially the resolution of state banks through merger or liquidation) with strong political influence on the process. The most rewarding fact is that private, foreign owned banks have made significant progress in the last two years, gaining market share and positioning themselves for serious competition in the future.

Republika Srpska[16]

In the RS, a banking agency was formed only in mid-1998,

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[15] From Banking Agency FBIH (2002).
[16] Data for Republika Srpska, unless otherwise stated are taken from Banking Agency RS 2001.

and state banks still dominate the system. The economic space of RS is very small (in 2000 total GDP was estimated to be US $1,2 billion), so a total of 18 banks seems like a relatively large number (with average assets per bank of only about KM 60 million at end-2001). An additional problem is that 10 of 18 banks were predominantly state owned[17] as of mid-201, and they represented more than 80% of total assets.

But the main feature is that banks are not significant financial intermediators. The share of total banking assets in GDP was 43% at the end of 2000. But total household savings (new ones, excluding the accounts frozen in 1991) amounted to no more than KM 50 million or less than 2% of estimated GDP for the RS. This is a very clear indicator of the extremely low trust placed in the banking system.

Some features of the banks in the RS can be seen from the following table.

Table 3.2.2. Balance sheet of deposit money banks in RS - in mil KM

	Dec 1997	Nov 2001
Total assets	748	1 106
-o/w foreign assets	63	101
-o/w claims on private sector	683	946
Foreign liabilities	532	526

Source: Bosnia and Herzegovina, Statistical Appendix (2002) p. 17.

It is obvious that a large portion of the claims on the private sector is old non-performing and non-recoverable loans. By the same token, the most important element in bank liabilities is foreign liabilities that to a large degree cannot be serviced (frozen foreign exchange deposits).

The banking industry in the RS is very inefficient. The main problem with the state banks (and the banking system as a whole) in the RS is excessive employment. As of mid-2001,

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[17] In late April 2002 one of them, Kristal banka, Banja Luka was sold to an Austrian bank, Hypo-Alpe Adria Bank.

average assets per employee amounted to only 234 thousands KM (or less than US $100,000 per employee). This compares rather unfavorably to Croatian banks' average of US $1,100,000 in the same period. (Croatian National Bank 2002b) State banks still have bad loans and frozen foreign exchange deposits on their books and without resolution of these problems, the balance sheet of banks do not reflect the true magnitude of financial intermediation.

During the first quarter of 2002, there was strong international pressure on the authorities to either close down or privatize the three main state banks

3.2.2. Banking problem and crisis management in BIH: assessment

- Banking in BIH has been faced with a difficult socialist legacy, very much like Croatia. The initial negative capital of the banking system, and the fact that banks had played functions incompatible with a market economy meant that restructuring would be a huge task. On top of this, war and political divisions of a highly decentralized country have slowed down reforms and destroyed the real sector of the economy (human resources, infrastructure, productive capacity etc). *De facto* financial sector reform started only five years ago (1997).
- The banking sector strategy had two main pillars: reform of the banking sector (which comprises reform of state banks, creation of a new legal framework and creation and strengthening of institutions) and the reform of the payment system.
- Today, the legal framework for banking is (more or less) in place. So are the institutions (one central bank, banking agencies in both entities). It has to be noted

that deposit insurance is present in FBIH, but not in RS. The problem today is not so much with the banking laws but with their enforcement for all deposit taking institutions. Reform of state banks is underway, at a slower pace than warranted, so the same capital adequacy criteria do not apply to all banks.

- An important lesson to be learned is the need for a comprehensive approach to financial system restructuring. It is difficult to reform the banking system without adequate reform of other parts of the system, especially financial infrastructure. So, a very positive element is the change in the payment system in BIH[18].

- Nevertheless, problems remain in the financial sector. First, the small economic space is divided into even smaller entities. It would be helpful to increase coordination, especially on bank supervision and harmonize regulation. The initiative that supervision should be under the "umbrella" of the central bank seems like a positive one. But, strong political obstacles are still present, and any initiative that "diminishes" the powers of entities is vehemently opposed.

- Foreign bank penetration is much more important in FBIH than RS. Foreign banks are entering BIH in spite of relatively high sovereign risk (BIH has no formal rating, but by all standards sovereign risk is high).

- In both entities the main problem seems to be inadequate and very slow court procedures. Creditors are not sufficiently protected, as under socialism.[19] This is a good example of how reform of the financial sector alone, without adequate legal reforms in other areas

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[18] The policy of a dual approach to transform banks and payment system in post-conflict countries from the IMF is a very positive one. See Lonnberg (2002).

[19] This problem is universally recognized as one of the main problem for speedier development in banking. See for example Governor's Nicholl speech on banking system reform (Nicholl, 2001).

and a coherent and well-enforced overall financial legal framework, is not enough. An adequate legal framework is a comprehensive concept in finance. Not much is achieved by addressing only the question of banking law without clearly defined and well-protected property rights.

- Banking crisis management by the authorities can be labeled as inadequate, especially in the early phases. The biggest problem was politics. The politicians were reluctant to make the bold moves necessary to transform the old banking system, especially to curtail local powers. With strong pressure from the international community, reform is proceeding, but as mentioned slower than warranted.

- Finally, people lost trust in banks due to frozen deposits and wartime. But, it is coming back. In addition to the stability provided by the currency board, some positive external shocks have helped the process. With the "Euro-changeover" process, more money come to banks than was expected. This is a clear indication of strong currency substitution, even with a currency board and little trust in the domestic banking system. But, problems remain.

3.3. CROATIA

3.3.1. Crisis Background

Liberalization and regulation

The Croatian banking market was substantially liberalized in the early 1990's. Even before the break-up of the country, Socialist Yugoslavia introduced a relatively liberal banking law in 1989. Importantly, bank supervision was established, and

the Basle capital standards were adopted.

After Croatia received independence, its parliament passed its own Law on Banks and Savings Banks in 1993. This Law continued the liberalization process. The minimum capital requirement for a bank was set at the local currency equivalent of 5 million DEM, and the minimum capital requirement for a savings bank was set at only 1 million DEM.[20]

Unfortunately, the law gave very little discretion to the central bank regarding licensing. The wording of the law made it difficult to deny licenses in marginal cases where there was simply a strong impression that the candidate was not fit and proper, and no "smoking gun" that could hold up in court. The rationale for such a liberal law, as in many other transition countries, was a desire to increase competition, and also a desire to give local entrepreneurs a chance to enter the banking business.

Under these relatively liberal laws and less than exacting licensing practices, the number of banks increased rapidly from an initial 22 in 1990 to some 61 in 1997. Not all of the new entrants were private: some government-owned entities set up banks as well. In the late 1990's, large numbers of these banks—both private and state-owned—would run into problems. Efficiency analyses actually suggests that the new banks were often *less* cost efficient than the old banks (Kraft and Tirtiroglu 1998). In retrospect, it seems that the benefits of entry created via increased competition and increased learning were balanced or even outweighed by the costs of dealing with the failure of so many of these institutions. That is, the entry regulations were simply too liberal.

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[20] Savings banks originally did not have the right to deal in foreign currency, nor could they make commercial loans. They were given the right to accept foreign currency deposits and limited rights to deal in foreign currency later, and were eliminated as a category separate from banks under the new banking law adopted at the end of 1998.

Figure 3.3.1 Number of banks in Croatia
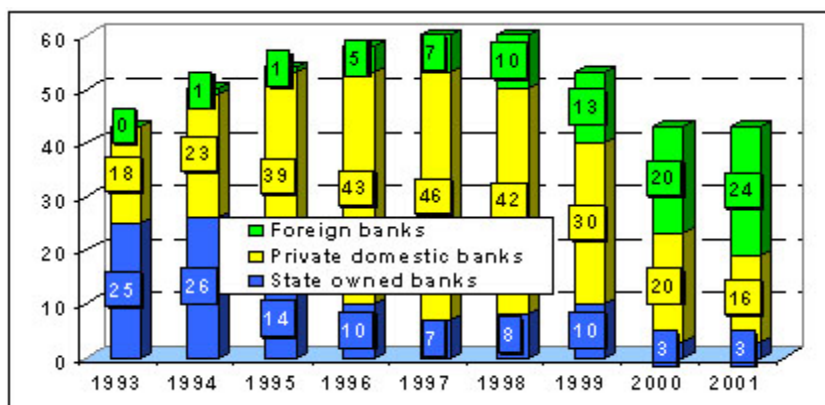
Source: Croatian National Bank

Initial crisis and resolution efforts

Croatia's initial banking crisis occurred in two phases. First, in 1991, the authorities recognized that bank claims on many socially-owned enterprises were uncollectible, and issued bonds (called "Big Bonds") to cover these claims. The bonds totaled $1 billion or roughly 5% of GDP. The timing was unfortunate, however, for it came just before the beginning of hostilities in the summer of 1991. In addition, the "Big Bond" scheme did not include adequate provisions to force banks or enterprises to change their behavior.

The banking system suffered another shock in 1991 when the National Bank of Yugoslavia froze household foreign exchange deposits (see the discussion above for Bosnia). When Croatia was excluded from the Yugoslav monetary system in the summer of 1991, the Croatian banking system was left virtually without any foreign exchange reserves at all.

Although the government guaranteed the frozen deposits

immediately, it did not begin unfreezing them until 1995. It is very important to note that this incident had strong effects on depositor confidence that would be felt throughout the whole decade.

The second phase of the crisis came after the successful macroeconomic stabilization program of October 1993, which succeeded in lowing monthly inflation from above 35% per month to zero or even negative rates in the ensuing months.[21] With the advent of low inflation, banks' accounts became more transparent. It became obvious that the country's largest bank and three large regional banks (ranked third, fourth and fifth by total assets) had failed. The causes of these troubles were a mixture of war-related problems, inherited burdens from the old system, and new problems.

The banking crisis of 1994-1996 expressed itself most strikingly in the behavior of interbank interest rates. Three of the failed banks were chronically illiquid, and borrowed heavily on the interbank markets. Since market participants expected that these banks would eventually be rescued, the banks were able to borrow. But the enormous distress borrowing of these illiquid banks pushed interest rates up to 30%. In addition, in 1994, the banking system as a whole showed net losses.

There was great political resistance to rehabilitating these banks. The incumbent managers argued strenuously that they were not at fault. They were supported by advocates of loose lending policies and government direction of credit. In one case, the incumbents did manage to keep their jobs and receive a bailout. But in the other three, eventually, old management was removed, bad assets (not all, but most) were carved out, cash was injected, and the Bank Rehabilitation Agency became the banks' owner.[22] Subsequently, the banks' performance improved substantially. Ultimately, the

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[21] For more on the stabilization, see Anušiæ et al (1995).
[22] For more on the rehabilitation process, see Lovegrove (1998).

government was able to sell majority stakes in all four banks to foreign partners during 1999 and early 2000.

These measures effectively resolved what Kawalec (2002) calls the stock problem: the existence of a large stock of bad debt on the banks' books. Rehabilitation also resolved the flow problem in these particular banks, as they no longer made large amounts of new bad loans. But, as we will see below, there were substantial flow problems elsewhere in the banking system.

The macroeconomic background

In many ways, the macroeconomic background in Croatia in the second half of the 1990's should have been favorable for the development of the banking system. Inflation was low, reaching a maximum of 5.3% in 1998 thanks to one-off effects of the introduction of the value-added tax. GDP growth was rapid, thanks to wartime reconstruction and the recovery of consumer demand and credit.

Table 3.3.1 Inflation And GDP Growth In Croatia, 1994-2001

	1994	1995	1996	1997	1998	1999	2000	2001
GDP*	5.9	6.8	6	6.5	2.5	-0.3	3.7	4.1
RPI**	-3	3.8	3.4	3.8	5.4	4.4	7.4	2.6

*real rate of growth of GDP
**retail price inflation, eop

There were, however, substantial external imbalances developing. The rapid growth of consumption helped swell the current account deficit from a 5.8% of GDP in 1996 to 11.6% of GDP in 1997. The consumption boom was fueled by rapid growth in consumer credit, which rose by no less than 93% in 1997. At the same time, strong capital inflows began, helping underpin nominal stability of the main kuna-deutschmark exchange rate. The capital inflows had four components: the

repatriation of deposits held by Croatian citizens abroad; government foreign borrowing in the form of bonds; humanitarian aid and other foreign assistance; and, starting in early 1997, when Croatia for the first time received an investment grade credit rating, private capital flows, mainly bank borrowing.

Monetary policy was tightened in mid-1997, with the National Bank decreasing its foreign exchange purchases (the main channel of money creation). Unfortunately, fiscal policy was not tightened correspondingly, and the current account deficit reached threatening proportions.

Seeing that conventional monetary tightening was not slowing the credit boom, the National Bank reacted in April 1998 but imposing Chilean-style capital controls. (Šonje 1998) These controls raised the cost of foreign borrowing and helped slow the credit expansion. It seems clear that these measures led to funding problems for some aggressive banks who had relied on foreign borrowing to fuel their expansion.

The impact of the capital controls was strengthened by unfavorable developments in the international environment. Croatian banks continued to borrow despite the Asian crisis, but they felt the Russian crisis much more. Furthermore, in the fall of 1998, several large German banks began a boycott of Croatia to protest the central bank's refusal to rehabilitate Glumina Banka, a failed private bank to which they had substantial exposures. These elements on the supply-side of international borrowing were also important in slowing down capital inflows.

The slow down in capital inflows and in credit certainly played a part in the onset of recession in the fourth quarter of 1998. Numerous large firms, particularly those associated with the so-called "tycoons" who had put together large corporate groups, had significant difficulties. The recession was to last through the third quarter of 1999.

Political economy problems

As Caprio and Klingebiel (1996), Gavin and Hausman (1996) and Eichengreen and Artesta (2002) point out, credit booms usually lead to banking crises. During 1997, it was clear to the management of the central bank that several banks could be expected to run into problems. However, there were several political economy problems standing in the way of a vigorous effort to resolve these problems proactively.

First, a great deal of political capital had just been spent on convincing the government to deal with the stock problems. The rehabilitation of the four banks had been quite expensive (approximately 4% of GDP), although it is true that much of this expenditure was in the form of bonds and not cash. It was not an easy moment to go the politicians again.

Second, on the surface, everything seemed well. Banks profits were high, credit availability was improving, consumers were finally getting access to goods they had been unable to purchase during the period of war and transition depression. This did not create a good background for warnings of imminent banking problems.

Third, the banking lobby itself had become quite powerful and well-connected. Political influence over bank lending was widely believed to be substantial, and this provided the bankers with political cover. They certainly were prepared to contest any attempts to strengthen banking supervision.

These political economy problems were especially important because it had become clear that the legal framework was inadequate. The 1993 Law on Banks and Savings Banks simply did not provide adequate prompt corrective action measures. Nor did it provide a realistic mechanism for bank bankruptcy. In practice, the only exit mechanism available was rehabilitation, certainly not appropriate for dealing with problems in larger numbers of small to medium sized banks.

For all these reasons, when the banks did begin to fail, the central bank was severely limited in its ability to respond. Perhaps, given the delays in dealing with the stock problems and other political economy obstacles, that was inevitable.

3.3 THE CRISIS

Croatia's "Second Banking Crisis" (Kraft 1999) can be dated from March 1998 when a run on Dubrovacka Banka, then the country's fifth largest bank by total assets, occurred. It quickly became clear that the bank was deeply insolvent, and there were strong indications of criminal activity. The bank was rehabilitated by the government in view of its dominant position in the Dubrovnik regions.

The crisis continued with a slow stream of failures throughout 1998. Matters came to a head in early 1999, as failures came more frequently and overall depositor confidence was shaken. Total deposits fell from February to May 1999, as can be seen from the figure below.

Figure 3.3.2.1. Total Deposits in Croatian Banks, 1997-1999
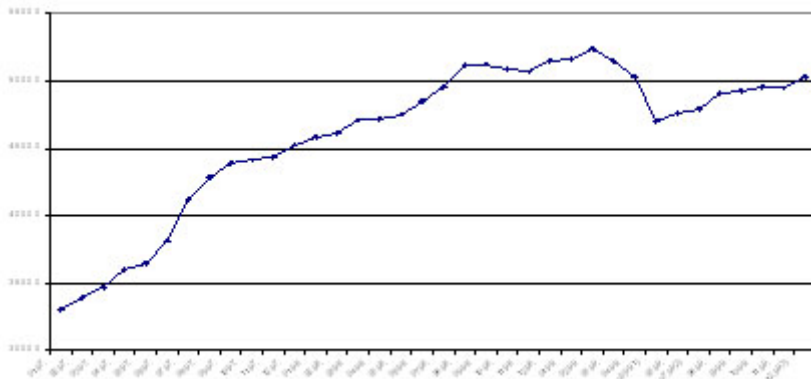
Source: Croatian National Bank

Overall, some 14 banks failed outright in 1998 and 1999, and another 6 received lender of last resort support. The failed banks had accounted for 17.3% of total banking system assets at the end of 1997. Clean-up costs, including the rehabilitation of two banks and deposit insurance payments for the other 12, amounted to 4.8% of GDP.

The failed banks were all privately owned. Some were new banks formed since 1990, while others were older banks formed as regional banks during the communist period. Even in the case of the latter banks, however, it does not seem that the main reason for failure was a stock of bad loans from previous times, but rather imprudent lending in the post-war period. Connected lending was a very significant part of the problem in many banks.

3.3.3. Crisis Management

The failure of Dubrovacka banka at the outset of the crisis was a major watershed. The strong evidence of improprieties put the bank's owners and managers on the defensive, and strengthened the hand of the central bank. The decision not to bail out the bank and to dismiss the management board and supervisory board was an important rebuff to those who insisted that the bank had been soundly managed and was merely the passive victim of political machinations.

However, when the central bank tried to initiate bankruptcy procedures at another troubled bank in May, the weaknesses of the legal system became apparent. The courts refused to open the case, sending it back to the central bank to consider rehabilitation. Nearly six months would elapse between the first bankruptcy filing and CNB's refusal to rehabilitate the bank, which returned the case to the courts.

In addition, when another private bank failed in late June, further problems came to light. The management remained at

the failed bank, engaging in asset stripping, helping individuals to split up deposits above the deposit insurance limit into smaller, fully-insured deposits in the names of friends or family, and bombarding the media with stories of how the bank would soon be saved by foreign investors. Even though the central bank rejected rehabilitation of the bank as economically unjustified in the fall, no resolution was found.

The new banking law was finally passed in late December, and came into force on January 1. Immediately, the national bank sent temporary administrators into the failed banks. The administrators were able to stop asset stripping and deposit splitting. Their reports all clearly recommended bankruptcy. After these recommendations were ratified by the Council of the Croatian National Bank, the CNB requested that bankruptcy procedures be opened for four banks in late March 1999. This time, the courts accepted the requests, and bankruptcy procedures were opened.

In addition to using the temporary administrator mechanism, the national bank also used its powers under the new banking law to provide so-called "liquidity loans" to solvent but illiquid banks in January 1999. These loans were intended to be secret, but were quickly uncovered by the press. The loans came with strong conditions such as limits on lending growth, cessation of dividend payments and improvements in risk management and organizational structure to limit moral hazard.

However, from a crisis management point of view, what is important is that these loans stabilized the situation in the six recipient banks, preventing a much wider crisis. To give an idea of the potential effects, note that the 6 banks constituted 5.8% of the banking system, and all had strong or dominant positions in certain local markets.

The other important step taken during the bank crisis was the decision to rehabilitate Croatia banka. The bank had been judged solvent by external auditors in spring 1998, but ran

into liquidity problems in February 1999. A liquidity loan was granted, but a CNB supervision team soon found that the bank was deeply insolvent. The question then was whether to shut the bank, which did have a fairly extensive national retail network. It was decided that the effects on depositor confidence would be too great, and the bank was rehabilitated. Its reopening for business in March 1999 was an important psychological boost.

After the opening of the bankruptcies in late March, the situation remained tense. Total deposits continued to fall. The war in Kosovo raised the specter of a longer economic crisis. However, there were no more bank failures in April and May, and early June brought the end of the Kosovo war. Deposits began to grow again in June as tourism revived, and the crisis subsided.

3.3.4. Assessment of crisis management

Timeliness of response

One of the key problems in the Croatian crisis was the central bank's inability to respond to banking problems in a timely manner. Thanks to the weaknesses of the old banking law, the central bank was only able to stop a bank's activities when it became completely illiquid and came to the central bank for help. The bank would be granted the "interventive loan" facility, which was available to banks unable to meet their interbank commitments. This facility required the bank to submit a plan to restore its liquidity, and also led to the bank's accounts being blocked. Quite rightly, bankers perceived the interventive loan as a death sentence.

Experience shows that banks may remain liquid but insolvent for quite some time. Because of this, the central bank usually was only able to block the bank's accounts when

it was already deeply insolvent. Furthermore, since it did not have the power to oust incumbent management under the old law, the central bank was unable to prevent asset stripping and deposit splitting in the failed banks.

The new law substantially addressed these problems. The temporary administrator did have the authority to oust management and stop objectionable activities. However, the temporary administrator mechanism could only be activated upon a supervisory finding that the bank was insolvent. This, too, does not fully meet the requirements of prompt corrective action.[23]

Depositors perceived the arrival of the temporary administrator as a sign that the bank would be sent to bankruptcy. However, this was a self-fulfilling prophecy, since depositor runs in some cases pushed the bank over the brink. This underscores the importance of earlier intervention and rapid resolution to allow the bank to be shut quickly and reopened only when viable owners have been found.

Exit mechanisms

As we mentioned earlier, of the 16 banks that failed in 1998 and 1999 14 were sent to bankruptcy, and only 2 were rehabilitated. The Croatian authorities did not resort to forced mergers, nor were they able to use market-oriented measures such as purchase and assumption, assisted mergers etc.

Given that the crisis was mainly one of excessive risk-taking, and not the result of *force majeure* (e.g. war and the legacy of communism), the bias towards bankruptcy was justified. The failed banks were generally deeply insolvent,

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[23] In the banking law currently under parliamentary consideration in Croatia in mid-2002, the central bank is granted the power to remove management even in solvent banks if capital is impaired and the bank has failed to enact a recapitalization plan. In addition, under the proposed law, the central bank would be able to remove management if capital adequacy fell below 2.5 percent.

had weak management, and often had failed to comply with regulations. There was simply no basis to create sound banking institutions out of most of these failed banks. Thus bankruptcy, although very painful, was probably the right solution.

It is also important to note that the two banks rehabilitated during the crisis had a much more difficult time recovering than the banks rehabilitated in 1995-96. Those latter banks actually had been the victims of *force majeure* to some extent. In addition, the authorities were much more able to focus resources on the four big banks than they were on the two banks rehabilitated in the midst of a general crisis.

While we would like to be cautious about drawing general conclusions, we would suggest that the bias towards bankruptcy in a crisis of excessive risk-taking was appropriate. One can discuss whether to save a particular institution at the height of a panic, as was done with Croatia banka, but the general conclusion seems to be that, when market-oriented mechanisms fail, it is better to bankrupt a risk-loving bank than to try to fix it.

Policy coordination

In addition to weaknesses in the banking laws, difficulties in policy coordination were a major cause of slow response to banking problems in Croatia. As Škreb and Šonje (2001) note, there was no coherent plan agreed on to rescue the banking system. There was a clear mechanism for bank rehabilitation, since top officials of the government and central bank were on the board of the Bank Rehabilitation Agency, but there was no clear mechanism for providing funding for assisted mergers, purchase and assumption or other more market-driven transactions. This lack of support was certainly one reason why such solutions were not implemented in Croatia.

More generally, the lack of coordination led to substantial

policy delays and great uncertainty about the direction of crisis resolution. Škreb and Šonje (2001) break down the delays into five lags: perception lag, action lag 1, persuasion lag, action lag 2 and legal lag. Without retelling the whole story here, we can simply recount the main point: fragmentation of responsibility exacerbates delays and makes the crisis more difficult and more expensive to resolve.

Deposit insurance

Deposit insurance was put in place in July 1997. Initially, deposits of households up to 30,000 HRK per person per bank were insured, with deposits between 30,000 and 50,000 HRK 75% insured. Faulend (2001) estimates that this level covered 80% of depositors, which seems to be quite an adequate figure.

However, in the summer of 1998, the Minister of Finance raised the insurance level to 100,000 HRK. This decision was clearly taken under pressure from large savers in some of the failed banks. This level puts Croatia's coverage maximum/ GDP per capita at 3.3, higher than all countries in Europe except Norway and Italy, and even higher than the United States. (Garcia 1999) On the basis of cross-country regressions, Faulend estimates that that coverage level was 92% above the predicted value given the country's characteristics. (Faulend 2001)

Much discussion has revolved around the usefulness of a blanket guarantee for deposits during a banking crisis. However, in Croatia, there is little evidence that the deposit insurance guarantee affected small savers' behavior. Instead, runs occurred based on rumors in many cases, even though most of those running were insured.

Furthermore, the authorities were extremely slow in paying out deposit insurance. In the case of Glumina banka, the largest of the banks sent to bankruptcy, deposits were frozen

in late June 1998, bankruptcy procedures opened in late March 1999 and most depositors only repaid in December 2000. Thus it is easy to understand why deposit insurance was not considered credible.

Our view is that a blanket guarantee would only have raised the cost of crisis resolution. It would have bailed out large depositors who in general should have known better than to put their money into banks offering suspiciously high interest rates. The overall effect on public confidence would probably have been minimal, and the costs large.

A.   Lender of last resort

In the Croatian case, the lender of last resort facility worked well. A concentration of failures during a short period was avoided, safeguarding confidence and buying time for eventual resolution. Of the six banks granted such assistance, two have already been acquired by foreign investors. One was found insolvent in late 1999, but was rescued by a revaluation of big bonds in spring 2000.

There were two keys to the success of the lender of last resort facility. First was the strong conditionality of the loans. This insured that the banks would make full efforts to improve themselves, minimizing the risk of eventual failure. Second was the relatively strong macroeconomic situation, including especially low inflation. The central bank's money creation via the lender of last resort did not have a significant inflationary impact thanks to the general low inflation environment (and the low level of economic activity in 1999). This is an important benefit of sound macroeconomic policies.

It is interesting to contrast the case of Croatia with that of Bulgaria in this respect. When the Bulgarian banking crisis began in late 1995, the fiscal situation was such that no public funds could be offered. In addition, the exit mechanism was

not functioning, so that the only option was assistance from the Bulgarian National Bank. This, however, pushed the country into hyperinflation. (Balyozov 1999, Enoch, Gulde and Hardy 2002). Croatia was spared this fate by better macro policies and the existence of an exit mechanism that, although overly slow and expensive, did allow stock problems to be resolved before creating a macro crisis.

4. COMMON FEATURES OF SYSTEMIC CRISES AND LESSONS LEARNED

4.1. COMMON FEATURES OF FINANCIAL CRISES:

1. Systemic financial crises are very costly, regardless of their different causes. In Albania the crisis was caused by the emergence of non-regulated, informal financial institutions. In Bosnia and Herzegovina the problems were mainly the legacy of the socialist financial system and the devastating consequences of the war. In Croatia, the first banking crisis was the result of transition and war, and the second was mostly due to lax entry policies combined with a weak legal framework and deficient supervision. But in all three cases the economic costs of financial sector crisis are enormous and are probably higher than one-third of yearly GDP. Exact numbers are very difficult to assess. In Croatia, both banking crises together were estimated to have fiscal costs of about one-third of GDP (Skreb and Sonje 2001). In Albania, the total liabilities of collapsed pyramid schemes were more than half of GDP. Not all this turned out to be fiscal costs, but a very rough estimate of the costs as a third of GDP does not sound exaggerated. For Bosnia and Herzegovina the methodology of computing costs is even more difficult, but frozen (and still unresolved)

foreign exchange deposits by themselves account for more than a quarter of 2000 GDP (without any accrued interest). So, total costs of these financial crises can roughly be estimated at one-third of GDP.

2.   The systemic financial crises that we analyzed had a strong "political component." We cannot say that the crises themselves were caused by politics, but political response to the crisis was slow and reluctant to "get involved" in Croatia[24] or deliberately attempted to postpone resolution (in Albania during the pyramid scheme period and in BIH to this day).

3.   Legal problems in preventing and resolving crisis were present in all countries. The lack of an adequate legal framework has delayed action in the cases of Albania and Croatia. In BIH, no action was taken to resolve the problem without strong pressure from the international community. The existing legal framework immediately after the signing of the Dayton peace agreement was inadequate to deal with financial problems. In all three countries, the crisis itself forced the adoption of new legislation and regulation of the financial system, which is a positive feature.

4.   Policy coordination in crisis management and resolution between the supervisory authorities[25] and other institutions was relatively weak in all of the ABC countries. In Croatia, the Finance Ministry was very reluctant to even discuss the resolution of banking problems (see Skreb and Sonje, 2001). In Albania during the rise of the pyramid schemes, no one wanted to deal with them. For quite some time they were "no

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[24] In Croatia conventional wisdom was that as the crisis is "caused" by the central bank, the central bank alone should be blamed for it and consequently should resolve it alone. For more on political opposition to crisis resolution in Croatia see Skreb and Sonje (2001)

[25] In Albania it was not clear for a long time who should deal with the pyramid schemes at all. In Bosnia since 1997 the Banking Agencies in the entities have been responsible for banking issues and in Croatia it is the Central Bank. See Table 2.5.

one's problem". In Bosnia and Herzegovina due to institutional constraints neither the government(s) nor the central bank can get directly involved, but speedier resolution of existing problems (frozen foreign exchange deposits) would increase credibility in the financial system and deepen financial markets.

5.   A positive common feature of the crises is that none of the ABC countries tried to inflate its way out of the problems (see Table 2.1.). In BIH, no government funds have been explicitly used to resolve banking problems so far. In Albania, the government decided not to guarantee pyramid schemes deposits, which at that time was a very brave decision. In Croatia, the government did rehabilitate some banks with fiscal funds (increase in public debt) and paid out insured deposits in bankrupt banks. The newly created Deposit Insurance Fund itself was not adequate to pay all of the depositors. (In fact, it was not adequate to pay more than a small fraction of the depositors.) But in none of these resolutions was central bank money involved (unlike in the Czech Republic, for example, where the central bank's wholly owned subsidiary Èeška finaèni injected capital into banks during the Stabilization program of 1996-97[26]).

4.2. LESSONS LEARNED:

1.   It is very important to have a political consensus to start crisis resolution as soon as possible. Once the crises erupts the losses are already there. They will only get bigger with time, so the main "game" is how to redistribute them. If the attempts to get as small a share of a loss as possible are not resolved soon, the

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[26] See Czech National Bank (1999).

resolution may be significantly denied, and the costs substantially increased.[27] And this redistribution game will not be resolved without political consensus. The sooner one realizes that losses will not go away by themselves, but that someone will have to bear them, the better. All countries would be well advised not to be in denial about the nature of the financial crisis and its costs.

2. One should have a plan to resolve the crisis or a framework for its resolution. None of the ABC countries had a plan *ex ante* on how to deal with financial problems. In the middle of the crisis, when decisions have to be taken in an environment of incomplete information, it is much more difficult to avoid big mistakes. In addition to having a plan, crisis management (or good governance as it is sometimes called) is very important. Here we agree with Fischer (2001) that effective leadership in a crisis is the "single most important factor in financial crisis management" (p. 6). Albania clearly demonstrates how the lack of leadership in the early stages can compound the initial problem.

3. In our view there is no single best policy for resolution of financial crises. Based on ABC countries, it is difficult to come up with a list of "best practices" for such cases. Our view is that crisis resolution is more an art than a science. Crisis resolution (especially for systemic crises) requires that the authorities take into account not only economic conditions, but the political and social environment as well. Resolution should not be based on ideological dogmas of whatever kind[28],

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[27] Argentina is a good case in point, where the "battle" between depositors, banks and the government about the distribution of the losses was still going on at the end of May-2002 (6 months after the default) and has prevented any solution.

[28] In Croatia some economists were vehemently opposed to any bank closure as something "unthinkable" and in and of itself disastrous for financial intermediation. But, one should be aware that banks are special, that contagion does exist and free market principles should not be fully applied to deposit taking institutions.

but should be based on *realpolitik.* So, to repeat the previous lesson, countries would be well advised to think of possible solutions (within a broad framework) well in advance.

4.   Countries should put away contingency funds in "good times" for crises years[29]. At least, they should get their fiscal accounts in order during expansionary phases of the business cycle. An initially strong fiscal position and low inflation (strong monetary control) definitely are positive elements in the resolution of a crisis. On the positive side, Croatia's low inflation environment allowed the central bank to undertake lender of last resort operations without having to be too worried about creating inflation. On the negative side, Bosnia's reluctance to deal with frozen deposits is primarily related to its low fiscal capacity to pay the public debt. Croatia's postponement of paying out insured deposits for two years is of the same nature. And such postponements undermine the credibility of the financial system as a whole. Furthermore, austere budgets inhibit countries and politicians from adopting more popular (vote gaining) solutions like socializing losses of the financial system. In that way they avoid (or at least decrease) moral hazard which is inevitable if generous bailouts are granted.

5.   Finally there is no doubt that financial crises have some positive effects. After a crisis, every country makes additional efforts to stabilize the financial system. Therefore we could even be glad about financial crises . Besides, financial crises are a very common feature in a lot of economies. [30] According to Lindgren at al.

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[29] More about this in Skreb and Sonje (2001).

[30] In Albania it was not clear for a long time who should deal with pyramid schemes at all. In Bosnia since 1997 the Banking Agencies in the entities have been responsible for banking issues and in Croatia it is the Central Bank. See Table 2.5.

(1996), since 1980 more than three-quarters of the IMF's members have had significant banking problems. Based on this one is apt to conclude that they are rather a regular characteristic and not an exception in market economies. So, one should not be surprised by a crisis, but instead should resolve the present one, draw some lessons and get ready for the next one. One may be lucky enough not to have the next crises too soon. But, as Louis Pasteur said: " Le hasard favorise que les esprits prepares." ("Luck favors the prepared").

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