Bank of Albania

MONETARY POLICY, ECONOMIC INTEGRATION AND THE "NEW NORMAL"

Annual Conference of the Bank of Albania,
co-organised with the London School of
Economics and Political Science (LSE)
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Bank of Albania, Sheshi "Skënderbej", Nr.1, Tirana, Albania
Tel.: + 355 4 2419301/2/3; + 355 4 2419401/2/3
Fax: + 355 4 2419408
E-mail: public@bankofalbania.org

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FOREWORD

I am delighted to present the proceedings of the Annual Conference of the Bank of Albania, which took place on 1 November 2018 in Tirana.

While we continued the tradition of a high-level conference, we also strived to deepen further its research and policy content. We welcomed in Tirana prominent central bankers, policy makers and renowned academia from Europe and around the world. Meanwhile, we were honoured by the presence of the Prime Minister of Albania.

As its title Monetary Policy, Economic Integration and the "New Normal" indicates, the Conference covered the most pressing issues and challenges of today's central banking and regulation, with a particular focus on emerging market economies such as Albania. We debated what the "new normal" for monetary policy means; what its new policy toolkit should be; and how advanced economies and emerging markets may differ in these respects. We discussed regulatory policy developments and challenges posed by financial innovation and fintech, but also the opportunities these can offer, if harnessed well. We considered the adequacy of the global financial safety net and challenges for global governance.

We co-organised this year's conference with the London School of Economics and Political Science (LSE) for the first time. This collaboration has produced a fascinating conference, whose results can, we hope, be helpful for central bankers and emerging market policymakers in Albania, in the SEE region and beyond.

Gent Sejko
Governor

Bank of Albania
Tirana, Albania, September 2019

WELCOME AND GREETING ADDRESSES

WELCOME ADDRESS

*Gent Sejko**

Your Excellency Prime Minister,
Your Excellency Minister of Finance,
Dear Professor Berglof,
Dear Governors and Deputy Governors, Your Excellencies, Ambassadors,
Dear professors and representatives of the banking system,

Dear ladies and gentlemen,

It is always a pleasure for me, as the Governor of the Bank of Albania, to have the opportunity to open the proceedings of our annual conference. This year we are organising it in cooperation with the London School of Economics and Political Science (LSE), one of the foremost academic institutions in the field of research on economic and political sciences. The LSE's interest and the professional investment testifies that the cycle of our conferences has matured.

I am sure that this year's conference will uphold and even forge ahead the frontiers of our standards. Engaging in open discussions and sharing our experiences will eventually help us to identify the optimum way for addressing the challenges that lie ahead.

** Gent Sejko, Governor of the Bank of Albania*

This year's theme is especially important not only to central banks but also to all the decision-makers for the economy. While focusing on the direct implications for the monetary policy, it touches on issues that address strong and dynamic changes that economic structures, financial markets, doctrines of economic management, and societies and human communities are experiencing at the local and global level.

Recent reports by prestigious international financial institutions point out that the prospects of economic development remain positive. Likewise, Albania is set on a steady positive trajectory of economic growth.

Our prudent economic policies, the constant improvement of balance sheets in the real and financial sectors, and the ongoing restructuring of the economy and of the growth model have created adequate premises for an increasingly fuller utilisation of production capacities and the convergence of inflation toward the target.

Let me explain this in greater detail. According to official statistics, economic growth in Albania accelerated to 4.4% in 2018 H1, showing a broad base in terms of aggregate demand components, and a diverse composition in terms of sectors contributing to growth. In particular, Albanian exports showed growth, while the level of foreign direct investments remained high, contributing to the narrowing of the current account deficit and the stability of the external position. The dynamism of the exporting sector and the high level of foreign investments are encouraging for a steady economic growth, and testify to the increasing competitiveness and attractiveness of the Albanian economy.

The effects of economic growth have begun to be present in almost all economic and financial indicators. Participation in the labour force and employment has increased, the unemployment rate decreased to 12.4% in 2018 Q2, and wages have started to trend upward.

Also, the growth in aggregate demand has contributed to the improvement of balance sheets of Albanian enterprises and has enabled a clearly downward trend in non-performing loans (NPL).

The NPL ratio dropped to 12.9% in 2018 Q3, almost halved from its peak recorded in the wake of the crisis.

Reflecting its performance and the recovery of economic activity, against the backdrop of low interest rates triggered by our accommodative monetary policy stance, the Albanian banking sector remains liquid, profitable, and well capitalised. This sector appears resilient to potential shocks and has adequate capital and liquidity to cover the needs of the economy for financing.

The currently positive momentum of the Albanian economy has created adequate premises for the growth trend to continue in the period ahead. The expansion of aggregate demand, the favourable financial environment, the improvement of balance sheets, and the restoration of confidence in the economy form a virtuous circle, which will support growth in the medium-term horizon.

Furthermore, the long series of structural reforms - whether already undertaken or being currently implemented - should pave the way for faster, sustainable and comprehensive economic growth.

Dear ladies and gentlemen,

- The topic of today›s conference is related with the challenges that policy makers face in terms of growth as well as of economic and financial stability. From a general perspective, these challenges pertain to:
- Implications arising from the monetary policy normalisation in major central banks on developing countries, especially those that have adopted the short-term debt as their growth model;
- Populist phenomena, which fuel a protectionist rhetoric, are detrimental to global trade, and refrain the free movement of production factors; and
- Risks that remain present in the global financial system.

From a more specific perspective, today's economic, monetary and financial reality appears especially challenging for the monetary policy. This reality is labelled as the new "normal" of the monetary policy. Let me identify a few of these challenges.

- The natural interest rates appear downward, potentially as a result of a combination of several factors: slowdown of productivity and of the pace of innovation; unfavourable demographic trends in advanced economies; and the recycling of savings from developing economies toward advanced economies. The rate fall leads to the reduction of space for conventional stimulating monetary policies in the future.
- The correlation between aggregate demand and the inflation rate has weakened in the short and medium term, as a result of developments in the labour market and increasing integration of the global economy. This phenomenon renders the monetary policy action more costly.
- The financial innovation and the increasing awareness of the correlation between economic and monetary stability, on the one hand, and the financial system, on the other, have reduced the space for conventional monetary policy instruments.

Despite the complexity, recommendations for dealing with these challenges have been put forward. They range from the modification of the monetary policy mandate to enriching the array of instruments it employs, and its better combination with the macro-prudential policy.

I am certain that the issues set out above will be addressed at length during the day.

From my perspective, the consensus on the shape of the new 'normal' of the monetary policy should maintain three key elements:

- First, avoiding multiple, ambiguous and non-transparent objectives related to the monetary policy. This principle would sustain the credibility of the monetary policy, as a prerequisite for increasing the effectiveness and decreasing the side effects from its intervention.
- Second, acknowledging the limits of the monetary policy, both in the short and medium term, and in the long term.

In the short and medium term, the monetary policy often encounters limited effectiveness, especially in the case of financial crises, or negative side effects in the form of heightened risk in the financial system. This limitation stresses the need for supplementing and coordinating it with other economic management policies.

In parallel, the monetary policy alone does not have adequate instruments for generating a sustainable acceleration of the growth pace in the long term. This limitation underlines the argument that the monetary policy is not and may not be a substitute for structural reforms.

- Third, in designing the range of instruments at the disposal of the monetary policy, care should be taken to avoid the risk in the central banks' balance sheet, which would negatively affect their independence.

The experience of the Bank of Albania in withstanding the crisis and fostering growth in the wake of the crisis illustrates some of the key topics I mentioned above.

In response to the aggregate demand slowdown and the subsequent negative implications on employment, soundness of financial balance sheets and inflation, the Bank of Albania undertook a progressive easing of the monetary policy stance, by lowering the policy rate and injecting liquidity vis-a-vis an expanded collateral base.

The monetary expansion policy was supported by a clear focus on price stability and was favoured by the operation of a free exchange rate regime. The latter has served and will serve to absorb short-term shocks to the Albanian economy and financial system.

I want to emphasise a very important principle to uphold, that is maintaining a free exchange rate regime and activating market interventions only in situations when the primary objectives are affected. The sustaining reason is that movements in specific moments toward a new and more stable equilibrium enable our monetary policy to focus on its primary objective - price stability - and contribute to a more productive orientation of human and financial resources in the economy.

The monetary stimulus transmitted through conventional instruments proved successful in containing negative effects from the crisis. It contributed to a calm operation of financial markets, eased the cost of debt servicing, and helped start a restructuring process of the economy.

Yet, some features of the development of the Albanian financial markets limited the effectiveness of the monetary policy action. The low level of development of the financial markets, the phenomenon of the increase in non-performing loans and the high level of foreign currency borrowing decelerated the full transmission of the monetary stimulus to the economy.

In response, the Bank of Albania adopted an integrated approach to boost the effectiveness of the monetary stimulus, which implied the adoption of new instruments as well as the initiation of a series of structural reforms aimed at improving the monetary policy transmission mechanism.

- With regard to instruments, the Bank of Albania began to employ the forward guidance tool, and applied countercyclical macro-prudential measures to support the growth of lending to the economy.
- With regard to the transmission mechanism, the Bank of Albania undertook in cooperation with the Government of Albania a series of structural reforms in the financial system. These reforms were aimed at further developing the financial market, improving the legal and regulatory environment with regard to contract compliance, collateral execution and lowering the credit risk, as well as reducing the phenomenon of foreign currency borrowing.

This integrated approach has yielded the first results, creating a financial environment that is more responsive to our policies, being an additional guarantee for convergence with our price stability objective and maintaining the sustainability of economic growth.
This investment, however, should be further supplemented by creating and maintaining the necessary fiscal space for withstanding shocks, and should be accompanied by structural reforms across the board to boost the resilience and flexibility of our economy.

Dear ladies and gentlemen,

Looking ahead, I would like to underline that one of the valuable lessons we have learned from the crisis is that safeguarding financial stability and maintaining a functioning monetary policy pass through are among the most important investments that a central bank can make for the future of the country.

Nonetheless, the challenges that lie ahead of the global economies will be increasingly complex, implying the need for informed and courageous decision-making in line with the developments of the time.

What in today›s terminology is known as the "New Normal" is characterised by many unknowns, while all policymakers require finding appropriate and necessary options to facilitate the decision-making of a central bank not only from the perspective of the good management of the monetary policy, but also from the perspective of the financial stability, protection of the consumers and of the economy against economic and financial shocks.

Hence, we have brought together with the LSE the best experts from the academia, central banking, international institutions and the financial market to discuss the potential effects of these developments, to generate ideas as to which might be the adequate and optimum policies for addressing these challenges.

The need to coordinate domestic policies, and fostering the cooperation and interaction between the markets and the Authorities is evident. Our experience in this regard is positive. The lessons learned from the crisis, and the scanning of the development level of the financial sector, have enabled us - under a successful cooperation with the Government of Albania - to pave the way for a full restructuring of the architecture for the regulation and monitoring of the financial sector, create functional mechanisms for exchanging information and coordination among regulatory agencies, and pave the way for concrete reforms for the development of the financial system, especially in the field of capital markets and payment systems. This need for cooperation and coordination crosses the national borders. A comprehensive approach, at global and regional level, would contribute to preventing unwanted consequences, not only for small and developing economies - which are often consumers of financial regulation policies at the global level - but also for the large economies, which originate them.

I believe that the conclusions of the conference panels will be very useful for all of us and will thoroughly portray and present the risks and benefits from the issues mentioned above, with particular focus on their treatment from the perspective of decisionmakers.

Thanking you once again for your participation, I wish the conference a complete success and hope all of you will enjoy your stay in Tirana!

WELCOME ADDRESS

*Erik BERGLOF**

Good morning,

I am absolutely delighted to be back here in Tirana and see old friends and get to know some new talent here in Albania.

In my previous life, when I was with the EBRD, my office had to work with more than 30 countries. I had to choose where to focus, and after 2013 I chose to spend a lot of time on Albania. The reason was that I saw real commitment to reform in the new government under the leadership of the incoming Prime Minister Edi Rama and his team, including the current Finance Minister Arben Ahmetaj. There was a real desire to get things done. Of course, there was also the prospect of achieving candidate status and eventually become a member of the European Union. The stars were well aligned for the country to make progress from a very difficult situation.

The picture today compared to then couldn't be more different. That was a time of massive macroeconomic imbalances, huge fiscal holes, massive lack of payment in the system, corruption etc. When you look at Albania today, it is a very different place. It has become a model for how to do macroeconomic stabilisation, how to implement structural reforms, and how to tackle non-payment in the system. All this is a great tribute to the Prime Minister and his team.

** Erik Berglof, Director, LSE Institute of Global Affairs*

I am now back in the academic world and delighted to be at the London School of Economics and Political Science. I was tasked with building up from scratch the LSE's Institute of Global Affairs, and its Global Policy Lab. Our mission is to address global challenges by encouraging locally rooted solutions, which can be found only through partnerships with local institutions. It is in this spirit that we have entered in this partnership with the Bank of Albania.

Local ownership is critical for reforms to be successful. Over the last year, I have been involved in an international G20 exercise, the G20 Eminent Persons Group, set up to review the system of international financial institutions in order to tried to address the global challenges. The fundamental building block in the Eminent Group's proposal is local ownership. This is why an institution like the Bank of Albania is so important. It has competent staff and a lot of experience in its walls - over time it has also built trust and established independence. As a result it can help the government's objective of generating inclusive economic growth and stabilising the financial system. We are developing this conference together, and we look forward to many future collaborations as well. Governor Sejko is a great partner and we are absolutely delighted to work with his team.

One of the core challenges that we see globally is financial resilience. We have improved the health of the financial sector, but we also see massive buildups of debt, not least in the emerging and developing countries. Looking at what Albania has achieved, comparing it to six-seven years ago when I first got involved, is truly remarkable. Again credit to the central bank of the country, the Bank of Albania.

I want to thank everyone involved – it has truly been a team effort. On the Bank of Albania side, in particular, Donald Duraj, Altin Tanku and Enri Herri. They have been working with our team, Mario Blejer and Piroska Nagy-Mohacsi. Massive thanks to all of you for making this possible.

I also want to mention that this is not the first such conference organised by the Bank of Albania. It has been going on for many years. We are really building on that tradition and I am very delighted to see that the past partner, SEESOX and PEFM from Oxford and its new head, Charles Enoch, is here today. We very much want to build on the foundations laid by them.

Thanks again for having us here and we are looking forward to a very exciting day.

Thank you!

OPENING REMARKS

*Arben Ahmetaj**

Your Excellency Prime Minister Rama,
Honourable Governor Sejko,
Dear Erik,
Dear ladies and gentlemen,

It is such a pleasure for me to address the annual conference of the Bank of Albania, which is now a consolidated, prestigious and important platform for exchanging views and opinions with the international experts of economy and finance on important issues regarding Albania's development.

The financial crisis of 2008 had a major impact on the global economy in such a way that it is normal now to refer to it as the era before, or after the crises. It is a known fact that many aspects of economic activity have radically changed since 2008, from the perspective of the global financial infrastructure and of the behaviour of institutional and individual economic actors.

The effects of the 2008 crisis spilled over to other economies through various channels. Fortunately, Albania did not experience the "classic" recession after the 2008 crisis, but its economic activity weakened year after year to reach a trough in 2012 and 2013; in 2012 when Albania was considered to be experiencing uttermost poverty

** Arben Ahmetaj, Minister of Finance and Economy*

and in 2013 when the public finances and the economic situation were in a state that surprised and, at the same time, did not surprise us when we ran a scan on the real situation.

Today, we have a definitely new reality; the Albanian economy has left behind the tough year 2013 and its consequences that we would eventually see and feel, including public employees, senior citizens, people in need, businesses, banks, etc. Now, thanks to the responsible approach of the government and of all the relevant actors, including the Bank of Albania, the Greek crisis was left behind. The Greek crises is now history.

Back in 2013, the crisis was not a fiction, it was a tangible reality and here I take the opportunity to quote the Prime Minister of Albania, during the presentation of the government programme in September 2013, "In fronts of us lays a rock, behind we left a pit", which means there was only one path, and we all walked that path. It has been a challenging walk of reforms and successes, eventually getting out of the pit and breaking the rock ahead of us to pieces. The Albanian economy recorded 4% growth. Everyone asks whether this growth rate is enough. This will be an on-going discussion; 4% is not sufficient, 7% may not be sufficient, 10% may not be sufficient to converge faster with the European Union level. But, when compared with 0.8% recorded in 2013, or the risk of a total collapse, certainly 4% is four times higher and next year growth is expected at 4.3%, considered to be the highest in the region.

Economic growth has relied, in a balanced manner, on both the population consumption and investments in the economy. Unlike in the pre- 2013 period, economic growth was at last accompanied by an increase in employment. I cannot emphasise it enough that employment, in my view, is the most important issue of discussion between governments and other stakeholder in the economy.

In 2018, we expect FDIs to remain at good levels and - at least in nominal terms - the level will be the highest ever recorded. It was not easy to achieve this present economic reality. The Albanian government undertook a series of bold and tough measures to prevent a similar difficult situation the country experienced in 2013.

In 2013, the same actors, now different names, discussed how to overcome the crises. Meanwhile, today we are discussing whether we are moving toward a normal monetary policy or other economic instruments that are related to the second part of reforms and deal with the another leap in economic growth.

The energy sector, which used to be in total collapse, has been thoroughly reformed; the pension reform was undertaken to transform the scheme into a sustainable one, the administrative-territorial reform reduced the local government units from 374 to 61. It looks like simple arithmetic, but in fact this was a very difficult and bold political and administrative exercise, similar to the reform in higher education, etc.

Of course, I must bring to your attention the public finance reform, in cooperation with the IMF, the World Bank, and the [European] Commission. At present, we are part of the countries with adequate, high transparency regarding public finances.

It is worth mentioning that we undertook a broad reform for the modernization of the financial system in Albania, in cooperation with the Bank of Albania and our international partners (WB, IMF, EBRD). Year 2016, as many here can remember, was a year of broad-based discussion regarding the financial system reform. Over the previous mandate, the legislation on the "Financial Supervisory Authority" was revised, the capacities of the Deposit Insurance Agency were enhanced, and the Law "On the Recovery and Resolution in Banks in the Republic of Albania" was approved. A comprehensive strategy was undertaken for reducing the level of non-performing loans, which in turn required for example amending the Civil Code, and changing bailiff service fees. Today, non-performing loans have decreased from 24% in 2014, to 13.3 % in 2018 and they continue to fall.

Thanks to these significant interventions in the Albanian financial system, the system is now much safer and better equipped to withstand difficult situations. Currently, the system is liquid and is reaching pre-crisis profitability levels.

The "Doing Business" report came out yesterday. One of the elements that improved the ranking of Albania by two positions, (it may seem insignificant but it is actually a huge amount of work) is the financial reform, one of the elements of the financial reform.

The Public Finance Management Reform, assisted also by the World Bank, the International Monetary Fund and the European Union, revised the majority of public finance legislation (On borrowing, On Financial Management and Control, Organic Budget Law), etc.

Regarding fiscal policy, the Government of Albania is determined to continue the fiscal consolidation, until the level of public debt reaches acceptable levels for a country like Albania. As to the discussion on how much public debt is tolerable for Albania, the discussion always starts below 50% of the Domestic Product.

Currently, the facts and figures are the best judge of the reforms undertaken. Public Debt has been on a downward trajectory for the third consecutive year, and the presented mid-term budget, clearly expresses our intention to reduce it further in the following years. Today, the public debt is at 68.9%, while the primary balance is expected to be positive for the fourth consecutive year, in and for 2019 it is expected at the surplus level +0.5% of Domestic Product.

The package of reforms has already yielded its results on the economy, not only by addressing the identified issues but also by boosting the confidence of economic actors. The increased consumption in the economy, the high level of FDIs, a higher number of foreign companies operating in Albania and the successful Eurobond issue, ultimately point to a growing confidence in our economy.

Although the confidence in our economy is improving rapidly, among the fastest in the region, we are still convinced that it can improve faster. One of the main reasons of issuing the Eurobond, in addition to debt and liquidity management, was to create more space in the domestic market with regard to crediting; sadly, I must say that the banking system is not yet responding to growth and the challenge of economic growth. The growth of loans to enterprises remains moderate and does not fully play its role in the economy. We believe that after the steps that the government has taken, together with the Bank of Albania, to facilitate the banking system, it is time for this sector to carry out one of its main functions, reallocating the capital beyond the exposures to the government.

I am convinced that after adequate crediting, the growth rates have the potential to return to pre-2008 levels, having a significant impact on the country's economic situation and the well-being of citizens. It is therefore necessary for all actors to work together, as good partners, in order to go a long, tough yet secure way toward success.

We are aware that we do not have the luxury to stop the pace of reforms. I will share with you a particular moment from a government meeting two weeks ago, when in the course of the normal business of the Government meeting, the Prime Minister presented all what lies ahead for us as the cabinet or as a ruling majority and I avail myself of the opportunity to share that, "it is time for the second set of reforms in the country". A country is doomed to fail if it stops trying to make headway. It should, instead, seek to enjoy the success of the initial reforms, within the term of a governing mandate, or in the course of few years. This is the case of this government. Meanwhile, the opening of accession negotiations with the European Union is a very important political and administrative challenge.

These challenges remain present in the context of a more unpredictable international environment, e.g. the recent political developments, those occurring with public finances globally - not only with the Italian economy, and the tendency in the United States to increase interest rates. We do not know who will take the helm of the European Central Bank; it can be a German, it can be a Dutch, but certainly the policies will have their reflection changed.

The Albanian government has already shown its willingness to undertake the necessary measures to improve the productivity and the competitiveness of our economy, to prepare it to operate in the common market. We remain focused on promoting optimal use of growth factors to tackle the challenges that prevent growth and to maximize the benefits from integration.

Concluding, I wish for a successful conference and fruitful discussions in the sessions that will follow.

Thank you!

OPENING ADDRESS

*Edi Rama**

Bank of Albania, indisputable centre of gravity

Dear ladies and gentlemen,

With your permission, I would like to first express my pleasure of seeing several good friends of this country, who have assisted and accompanied Albania during an extremely unique process, hence the transition from dictatorship to a functioning democracy, and are attending the Bank's annual conference today. I would particularly like to greet you, Marek Belka, one of the brightest minds who have been advising the Albanian government in the past, as well as Mario Bleyer, who has returned to Albania, and our friend Erik Berglof, who has returned to serve in another capacity after having been a valuable contributor for many years whenever he has been asked to provide his opinion about our challenges.

Exactly 50 years ago, when the European Union had just been established and still had to show the excellent results of the half century that followed, Sweden's central bank [Riksbank] hosted an international conference about exactly the same question we in Albania are asking ourselves today; "The Central Banks in the face of integration challenge." The then Governor of the Central Bank

** Edi Rama, Prime Minister*

of Sweden, Per Asbrink, predicted that the banks' role would change over the years to maintain not only the internal balances, but also become the last bailout on verge of crisis. According to him, the central banks would become increasingly decisive in maintaining the global balances.

Indeed, seen in the prospect of 50 years later, this is truest nowadays, when monetary policies have crossed the national boundaries and are more than ever inextricably linked to one another.

Today, in a country like Albania, where the European integration question has been raised together with a set of criteria that should be met, as well as with whole new set of condition it creates for the country, the Central Bank needs to provide an adequate answer of its own to this question. It is a seemingly simple question, but a quite complex one in all components of the integration challenge. The experience of other countries that provide a clear answer to this question, since they have gone through this process ahead of us, show that it is not a commonplace response, especially when it comes to an economy that has changed forever following the 2008 financial crisis.

However, what we confidently state is that the Bank of Albania is one of those institutions, perhaps the only one, radiating a constant stability throughout its existence after the fall of the communist regime. The Bank has done a continued praiseworthy job to deal with consequences at certain dramatic moments and has also played an extremely positive role in dealing with the post-crisis period, being continuously a reference point to everyone.

I believe that it is the only institution in this country that has never been anathematized by a party in playing politics against the other party. I think this suffices to perceive and define the Bank of Albania as an important and indisputable centre of gravity, undoubtedly a merit of the team, the management, the Bank's board, and all the governors. It is a very precious legacy and we have the obligation to protect and assist it to be further enriched as such.

I will not take your time to speak about the Albanian economy, whose position and performance is undoubtedly linked to the continued central and determining role of the Central Bank and the harmonisation of the government's fiscal reform and agenda with the Bank of Albania's monetary policy over the past years has turned out to be successful in helping the national economy to develop further while structural reforms remain our main focus.

The indispensability to ensure sustainability to the obvious and continuous economic growth remains our main challenge. The Bank of Albania represents a very solid support, but at the same time it is a very firm guarantee in relation to our government and any government that, also because of the solid and completely independent position of the Bank of Albania, literally has a more limited horizon.

I would also like to recall and bring to the attention the fact that in collaboration with the central bank and international financial institutions, our reform to lower the level of the non-performing loans (NPLs) is one of the most significant spots in the entire map of the areas in which the functioning and organization of the system in Albania has been fundamentally changed. Four years ago, the share of the non-performing loans in Albania's banking system stood at 24%. Today, the NPLs ratio has fallen to around 13%. I believe this is a significant example of the overall performance, but also an indicator of the cooperation with the Bank of Albania, which, I am confident, will continue to yield positive results during the second cycle of the reforms we are launching.

The bank for Albania is a second victory, after freedom - Ismail Qemali stated back in 1913, when the newly-founded Albanian state launched its first efforts to lay the foundations of a national bank and I believe that the Bank of Albania, more than Albania itself and anything else, has best fulfilled Ismail Qemali's dream.

I wish every success to all the people who are the stakeholders and guarantors of the Bank of Albania's functioning.

THE NEW NORMAL CENTRAL BANK: FROM PRACTICE TO SCIENCE

*Ricardo Reis**

It is a real pleasure to be here in Albania for the first time and I am delighted to be able to speak to this audience with so many distinguished central bankers. Many of you have been thinking from a different perspective on some of the same issues that I think about, and on which this talk is based.

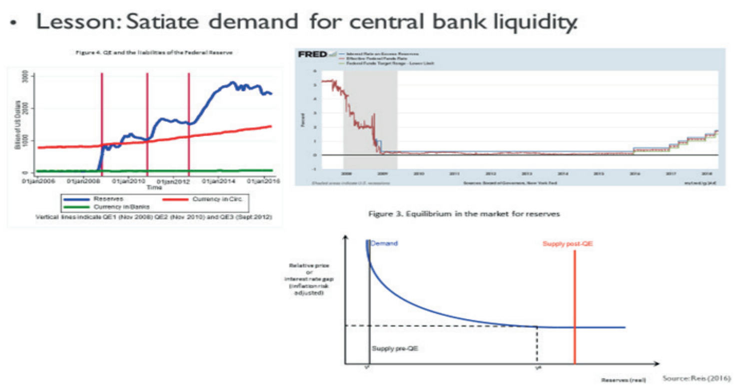
What I want to talk to you about is a topic that is very much on the title of this conference: what is the new normal for central banking? My perspective is to go from practice to science. The last ten years, as many of the governors in the room will acknowledge, were extraordinary times for monetary policy. Central banks were forced by circumstances to take a series of unconventional and unprecedented measures. Unfortunately, it was not the case. Most of those measures had been the result of careful academic study and accumulated knowledge from many decades culminating in policy actions being taken. From quantitative easing, to central banks swap lines, to long term repurchase operations, or to yield curve control, these policies were all implemented with very little literature that has studied them either in theory or empirically. The policies were adopted in response of the crisis and in order to deal with it, so practice moved ahead of theory.

** Ricardo Reis, A.W. Phillips Professor of Economics, LSE*

Now, 10 years have passed since the crisis started, and science has caught up to practice. We have started to make sense of these policies so that, if nothing else, we can understand and give advice on whether they should be forgotten or whether they should become the new normal. From the prospective of a scientist or an academic, the current situation is very exciting. Why? Because we have tried many unprecedented policies in the last 10 years. There is a lot of variance in the recent data, and so there is scope for understanding how some of them work and some do not, when it comes to monetary policy and the macroeconomy.

It would be very strange if, after this period, and after everything that we can learn from it, we would not reevaluate what is the normal for monetary policy. How could it be that after 10 years of learning and experimentation, of shocks and changes, the new normal would be the same as the old normal? It is hard to believe that that would be the case. Let me therefore tell you what I think that we have learned from the experiments, the variance of the data, and the new policies, and what I think this implies for a new normal central bank. Crucially, the word "new" already gives away that I don't think this will be the same as the old normal. I will take mostly the perspective of advanced countries, using examples from the ECB, the Bank of England, and the Fed, but at the end of each point I will try to draw implications for the transition economies under discussion at this conference.

Chart 1 Size of balance sheet



Source: Reis.

Lesson 1. The size of the balance sheet

When it comes to the size of the balance sheet, what did we learn? We learned that when the Federal Reserve (in blue, top left diagram) increased the size of deposits by banks at the Federal Reserve (sometimes called reserves) from close to 0 to roughly 1 trillion very quickly around QE1, interest rates in interbank markets (in red, top right diagram) fell essentially to the same level as the interest on deposits. Before the crisis, the interest of deposits in US was 0%, while the interbank rate that the Fed targeted fluctuated widely, typically between 1% and 6%, depending on the stance of policy and the state of the business cycle. Once the Fed issued one trillion of reserves, those two rates became essentially the same.

Why is this? Well, in theory, as portrayed in the bottom diagram, think of the market for reserves. It has a certain demand, as deposits at the central bank are crucial in our payment system. They are what banks use to pay each other, as they contract trillions of dollars of liabilities from their customerss usage of bank-generated money like debit and credit cards. The opportunity cost of holding reserves is the gap between the interest rate which you can lend in interbank market and the interest rate that you will lend to the central bank. If you expand the supply reserves enough, eventually all that demand for central bank liquidity will be satiated. The cost will decrease to zero.

We can all discuss this in theory ex-ante, but we learned ex-post that you reach this point not when you go through 3 trillion reserves, as we did by the end of QE3, but as early as you go to 1 trillion reserves. Indeed, I don't even know if that number is half of trillion or one trillion since the ramp up was so quick during QE1 that it is hard to distinguish where exactly that point is. It is somewhere less than one trillion.

This should be the new normal: a satiated marked for reserves with interbank rates being very close to the deposit rates. The deposit rate the ECB will be very close to the overnight index swap rate, and the US federal funds rate will be very close to the interest on reserves.

We had not done this before because there were fears the money market would close down. After all, the money market's role is to lend to some banks overnight. If every bank in the economy is sitting on billions of deposits at the central bank, why would they ever want to borrow from another bank? The fear was that money market would close and this would cause financial problems of different types. The evidence spoke loudly: money markets did not close. The overnight euro money market is still working, and the repo market in the US is very active. The federal funds market partly died, although more because of flaws in its institutional design, but in general overnight money markets are alive and kicking. The reason is that financial markets are quite segmented. Some institutions can deposit at central banks, many cannot. Many don't want to, even if they can. Money markets will still exist in order to be able to spread this desire for liquidity of their institutions.

Second, having done so, the policy rate becomes not the interbank rate but rather the interest on deposits at the central bank. Communication of monetary policy becomes communicating what interest on deposits would be. Not the MRO rate in the case of the ECB. This shift happened six years ago and it was seamless. Markets did not freak out. People were not confused.

A third virtue is that in the last ten years there were large liquidity shocks, that is changes in banks' demand for liquidity. These are nothing but shifts in the blue demand curve. If you have your red supply well to the right, shifts to the demand curve will be automatically accommodated. As a result, in the last eight years, we have had no liquidity crises of any kind. Because if we have a satiated market, we have by definition eliminated the liquidity premium. There is still a safety premium, as safety crises can happen, but not liquidity ones.

Fourth, the famous Friedman rule that was defended by Chicago economists for decades is now a reality. It says that if the central bank can create liquidity at zero cost, through central bank reserves which are the liquidity for the banking system, then there should not be an opportunity cost for private agents to hold it. Why would we not satiate something that we can produce for free? Why let people

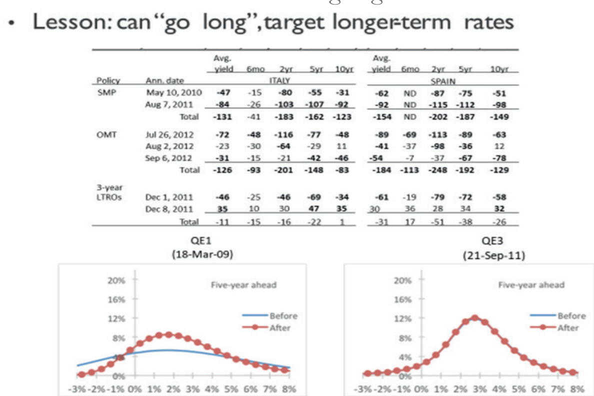
be hungry if you can make food for free? Why let banks be scarce in liquidity if we can produce liquidity for free? We have now achieved this, what Bob Lucas for years said was the greatest free lunch in monetary economics. And we now have it, in terms of reserves.
How to keep on reaping these benefits moving forward? The Governing Council of the ECB or the Federal Open Markets Committee in the Fed can simply start setting as their policy tool the interest on deposits. That is it, just as it used to target an interest on interbank rate like the Federal Funds Rate.

What about the size of the balance, you may ask? No need for any policy statement, simply instruct the markets team in the central bank to vary the size of the balance sheet as needed in order to keep the market satiated. How do we measure this? Is it a trillion or half a trillion? I don't need to know, neither does the markets team. They can issue more or fewer reserves keeping an eye on overnight interbank rates in order to make them be very close to the deposit rate. And so, in the same way that, in the old normal, the amount of open market operations was a choice of the markets' team to implement the target for interest rates, so it will be in this new regime. In the case of the ECB, in the old normal it ran a structural liquidity deficit, as there was always too little liquidity in the market. Nowadays it runs what is called a structural liquidity surplus. The policy rate should go from being the lending rate to being the deposit rate.

This implies an ECB or Fed's balance sheets that are much larger than they were in 2006, approximately half a trillion to one trillion larger in the case of the US. But much smaller than they are today, as we are a few trillion above that. This would allow them to achieve all the benefits stated above. In the case of the ECB, if it insists on setting a lending rate, then at least make the MRO auctions full allotment from now onwards.

In relation to some of the things that we talked about in this conference, this discussion touches on capital-flows management. Sudden reversals in capital flows arise in response to safety crises. Investors want to flee to safety and therefore leave some jurisdictions and enter others. But some of the flows also rose because of liquidity crises. Sometimes, some banks, just have to take their money out of Albania, put it in Europe, because they need a quick liquidity. Under this policy of satiation, the liquidity crises will be over. There should not be liquidity crises, which is not to say that there won't be safety crises all the same.

Chart 2 Going long



• Lesson: can "go long", target longer-term rates

Policy	Ann. date	ITALY Avg. yield	6mo	2yr	5yr	10yr	SPAIN Avg. yield	6mo	2yr	5yr	10yr
SMP	May 10, 2010	-47	-15	-80	-55	-31	-62	ND	-87	-75	-51
	Aug 7, 2011	-84	-26	-103	-107	-92	-92	ND	-115	-112	-98
	Total	-131	-41	-183	-162	-123	-154	ND	-202	-187	-149
OMT	Jul 26, 2012	-72	-48	-116	-77	-48	-89	-69	-113	-89	-63
	Aug 2, 2012	-23	-30	-64	-29	11	-41	-37	-98	-36	12
	Sep 6, 2012	-31	-15	-21	-42	-46	-54	-7	-37	-67	-78
	Total	-126	-93	-201	-148	-83	-184	-113	-248	-192	-129
3-year LTROs	Dec 1, 2011	-46	-25	-46	-69	-34	-61	-19	-79	-72	-58
	Dec 8, 2011	35	10	30	47	35	30	36	28	34	32
	Total	-11	-15	-16	-22	1	-31	17	-51	-38	-26

Source: Krishnamurty et al (2017), Reis (2016).

Lesson 2. How did central banks in advanced economies change their interest rate policy?

Central banks went long. What do I mean by that? It became routine in the last six years, for the ECB, the Bank of England, the Fed, or the Bank of Japan to speak of policy in terms of long-term interest rates. In the case of ECB, when it announces its security market program, or its different quantitative easing or forward guidance policies, it evaluates their effect in terms of how much they change the 2-year, 5-year and 10-year interest rates. A program that lowered the 10-year rate in the euro area was perceived to have been effective. Targeting long-term rates became what monetary policy was about.

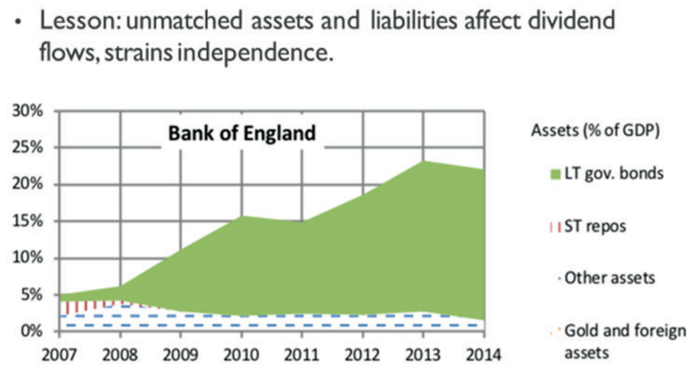
From an implementation perspective, this policy was a success. The ECB throughout the last 8 years kept quite close control of the yield curve across maturities. When the ECB wanted to lower the 10-year rate, it lowered the 10-year rate. When it wanted to lower the 5-year rate, it lowered the 5-year rate. Again, fears that the central bank could only control a very short rate, over one week or 90 days, and that if it ever ventured to try to control a 2-year rate, it would fail, were proven to be wrong.

Should it do so? If you hit the zero lower bound on the short-term policy rate, but not on long-term rates, then going long is a way to boost real activity. It is a way to provide further stimulus and it is a way to reinforce the commitment to inflation targeting. Why? Because by targeting long-term rates, the central bank is targeting real interest rates plus expected long-run inflation. By targeting long-term rates in periods of high uncertainty, the central bank is communicating its commitment to the long-run inflation target. At times when you have lost leverage in terms of the short-term rate, it becomes important to provide a steady anchor, to keep on providing policy signals, and you can do so through a long-term rate.

Are there limits to do so? Probably. QE3 or further rounds of QE were much less effective than QE1. There may be diminishing returns to central bank interventions. But going long was important in keeping inflation anchored, for instance when there were doubts in 2009 in the US.

Did QE have a big effect on the expectations of inflation? Once the market for reserves is satiated, it is hard to have a big effect. By the time of QE3, the policy had virtually 0 effect on inflation expectations. Diminishing returns hit, so that while there was anchoring, there less and less kick for the extra billion euros of successive rounds of QE. How does "going long" relate to our discussions in this conference? The policy stance at some point in the future for central banks may be to remove monetary stimulus. If so, then the central banks are not just going to have to raise the short-term rate, but also to raise the deviation of the long-term rate from its long-run equilibrium. At the same time, secular stagnation has led the real interest rate to fall. Will the long-term nominal rate on a 10-year yield of a German bund rise or fall in the next 24 months? That will be a crucial determinant of what the policy stance is. And that will have important implications for countries like Albania in terms of capital flows and the cost of investment. Pay as much attention to the short-term rates movement that the ECB will eventually make as you do to the long-term interest rate. The 10-year bund rate is a key determinant for the direction of capital flows into and out of the eurozone and the policies of "going long" have made it a policy target.

Chart 3 Composition of B/S



Source: Reis.

Lesson number 3. The composition of the balance sheet

The Bank of England provides a nice example here, so let me focus on it. Like all central banks, in its liabilities it has its short term reserves, overnight deposits of banks. In the old days, it used to have on its assets, short term government bonds - three months or one-year gilts. But when the crisis hit, this changed. Now, it has a balance sheet almost entirely formed of long-term government bonds 5, 10 or 20 year government bonds.

What have we learned about this?

When a central bank creates such an imbalance between its liabilities and its assets, like any other finance institution it exposes itself to gains and losses. If you have an unmatched balance sheet, you will either make money, if you are a finance institution because that is what you are achieving to get, or you will suffer the risk of losing money, which perhaps should be a bigger concern for a regulator or for a policymaker like the central bank. Because of the disconnect between the maturity of the assets and the liabilities, it becomes now possible, even likely in some cases, that fluctuations in the slope of the yield curve will translate into gains and losses for the central bank. In the old days, when the central bank had its assets and liabilities matched, it always had a very steady flow of seigniorage revenues that would be distributed to the treasury.
In this new world, central banks are subject to the danger that sudden

movements in the yield curve could mean that the central bank in some years could lose money. It would then have a negative income and so no check to send to the fiscal authorities. Fiscal authorities are used to get a check every year, as every central banker here will surely remind me of. They will not be happy. Why is this important?

If a central bank moving forward will have a larger balance sheet, then this imbalance will be present in conventional times. Central banks will have to develop the tools in their mandate to deal with the negative income: either to be recapitalized in some situations, or to be able to provision against future losses, or after losses have happened to be able to recapture them by being able to withhold future dividends. Only then will central banks be solvent.

Solvency here really means independence. To what extent are you independent of the fiscal authorities? Can you make your choices without having to go back to ask for recapitalization to the fiscal authority? Solvency is about fiscal support. A company that loses money, or a bank that loses money, worries about the fact that they lose the backup support of its creditors and shareholders. That's what we call insolvency. A central bank is insolvent if it loses the backup of its shareholders who expect a dividend flow. For the central bank that is the fiscal authority.

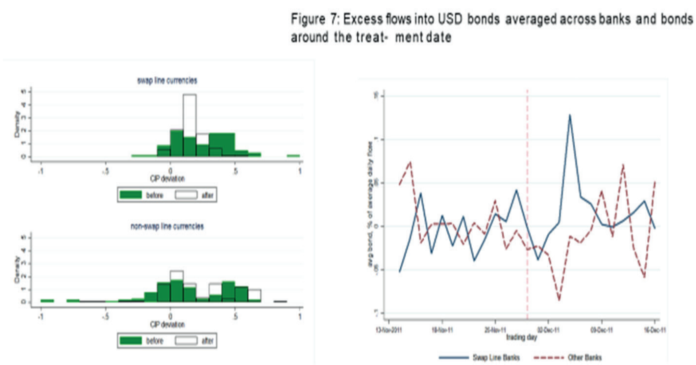
In normal times, how can insolvency be avoided? One way is to just go back to the old normal, and only have short-term assets. But in unconventional times, going long is often desired by monetary policy. While it does not have such, this often comes with holding long-term assets and, as we have learned, it is eventually inevitable. What we must do in normal times is to prepare for the mismatches between assets and liabilities in unconventional times.

A central bank can do so by taking risk management seriously. A crucial step in this is certainly to use the standard tools of risk management to understand the possible income gains and losses in its portfolio. But importantly, and this is where the central bank is unique and unlike other banks, risk management has to always be understood terms of the fiscal support that it has. The Bank of England bought long term bonds, but it also obtained an explicit fiscal support in the sense of a letter of indemnity from the Treasury saying that on its long portfolio position any losses would be immediately taken over by the treasury. As a result, from a risk management prospective, the Bank of England has no risks on its long-term assets. From a risk management prospective, it has a very safe balance sheet, unlike how it might have appeared 5 minutes ago when I showed it to you.

The ECB on the other hand has a very risky balance sheet. The rules of Maastricht imply that the ability to be recapitalized, which will have to be approved unanimously at European Council is extremely limited.

Turning to the topic of this conference, these risks and the way in which central banks will manage them will affect in the future which assets they may buy or not. Especially, going forward they will affect also the way they manage their foreign exchange rate holdings, and what fiscal backing comes with them. Latin American countries learned this a long time ago. The central bank's foreign exchange reserves are technically held by the government but managed by the central bank. If you are successful disinflating, your exchange rate appreciates and your foreign reserves therefore are worth less and less in domestic currency and you suffer very large losses. And that's when your solvency becomes threatened. Central banks in Latin America dealt with this by being fully fiscally supported in their exchange rate of foreign reserves holdings.

Chart 4 Liquidity/ lending programs



Source: Bahaj, Reis (2018).

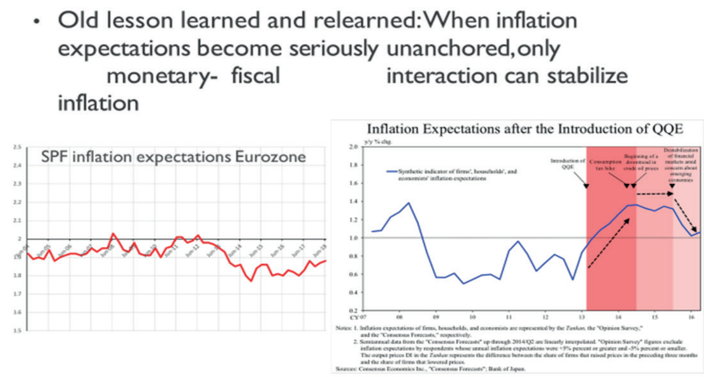
Lesson 4. Liquidity and lending programs

During the crisis, the central bank swap lines were effective in stopping fire sales of dollar assets, failures of Eurozone banks, and reducing funding costs in currency hedging. European banks were exposed to the long-term investments in the US market, funded by USD money markets. When the USD money markets withdrew it in 2009-2010, many European banks were in the verge of collapse. The USD swap lines, set up by the Fed and the ECB as well as a few other central banks, were crucial in allowing the ECB to give lender of last resort in dollars to the Eurozone banks, preventing them from fire selling the USD assets and from realizing those losses. It is clear in the data that if you look at the costs of hedging their funding, in the sense of the cross-currency basis, these actions have an enormous impact on the currency to swap line and non in the non-swap line currencies. In Chart 4, I compare the basis before and after a small rate change in the swap line. In other words, the cost for European economies to hedge the exchange rate risk with respect to the dollar fell significantly in response to the swap lines of the Fed. Albanian banks did not have that luxury. The cost of hedging their exposure to the dollar was very large during the crisis.

Why are these swap lines necessary? Because financial investment and market funding today are global. Companies and banks now invest in dollars, euros, yen and other currencies in many places outside their jurisdiction. Having lenders of last resort that are purely national is inconsistent with this global financial market. What we had to do in a patchy way was to create a global lender of last resort through these swap lines. So that the ECB could indeed provide the lender of last resort backed by the Fed being, if you want, the lender of last resort of the ECB in dollars. The limits of this are that these are bilateral arrangements as opposed to multilateral. The Fed can cancel these swap lines or even more clearly, give them to the ECB but not to Albania, or to India, or to Pakistan or some other place. It is dangerous to live in a financial world where lenders of last resort should be steady institutions that you can count on, but instead you have bilateral arrangements that can quickly change, according to the fickle vagaries of politics and policy.

Having the lender of last resort, as we learned 200 years ago from Bagehot in a national financial system, is crucial to stop panics, safety flows, and sudden stops. If there had been no dollars swap line, it is possible that there would have been a sudden stop in the Eurozone as a whole, a collapse in the Euro and an enormous global meltdown. It is much like we experienced at a national level, when the domestic lender of last resort was not sufficient in say Ireland or even Iceland, given the size of the banking sector.

Chart 5 Two (fiscal) challenges



Source: Reis (2018), Shiratsuka (2017).

Lesson 5. Fiscal challenges

Finally, in my remaining 5 minutes, two fiscal challenges, two lessons learned and lessons still to be learned.

The first lesson that was learned or relearned, or one that many countries know very well but advanced economies seem to have forgotten, is that ultimately when you lose anchoring of your inflation expectations, only fiscal policy can re-anchor them. The IMF is often referred to with some sympathy in Washington as "it's mostly fiscal". The saying goes that if we want to stop a hyperinflation it's all about fiscal reform. If you have lost control of nominal, it is important to regain it through fiscal.

Now if you are an advanced economy like the ECB that for 20 years has benefited from being able to anchor the expectations of inflation-

-throughout this whole crisis, long-term inflation expectations never fell below 1.8%--then maybe you can ignore the fiscal part. Monetary policy is independent of fiscal policy in this regard. Japan, on the other hand, in spite of having a 2% inflation target, which is here at the top of the axes, has been unable to push inflation expectations upward. In spite of lots of pink bars and lots of arrows denoting the many policies it has. Every single one of these policies is a monetary policy without any fiscal interaction or commitment. And if you do so, you are not going to be able to change the anchor of expectations. That is an old lesson that has been learned and relearned, and now re-learned for advanced economies too.

The second fiscal challenge concerns macro-prudential policy. Beyond the issue of mandates or how to reconcile it with the other objectives of monetary policy, a key issue with macroprudential policy is that the step between regulating someone and repressing someone is a very small one. Telling you, you must be safe by buying safe assets, and telling you the safe asset is the bond that we the governments need to sell, is almost indistinguishable. It is not a coincidence that the increase of regulation has coincided with the increase of the safety premium of government bonds, reflected on the extremely low rates on the German bunds and the US treasuries. This means that as we are all trained as central bankers or students of monetary policy to recognize the temptation of printing currency to generate seignorage and fiscal revenues, and we have spent decades setting up institutions to resist. We should also be aware that it will be very tempting in the near future, when the next fiscal crises comes (maybe sooner than later the state of public finances in countries and the apparent consent that austerity is a bad thing) for treasury officials to look for a source of quick revenue and learn that while they can't instruct the central bank to print some currency, they can tell them to tighten macro prudential policy, to ask for more government bonds to be held safely by. If you think that it doesn't happen, look at Italy and to what happened to Italian banks' holdings of Italian bonds over the last 18 months.

We need to rethink the independence of central banks in this regard. We have many tools to stop the Ministry of Finance in Albania to call the central bank and say print some money quickly, because we know how quickly this can cause hyperinflation. We need to think also how to stop it from making that phone call when it comes to macro prudential, how to at least discipline that temptation, or otherwise hyperinflation will result in the next crises.

In this conference, there was much discussion of Fintech, so allow me to make three observations on Fintech and central banking as relates to fiscal policy:

The first is one that the Riksbank has felt already. If currency usage falls quickly, as has happened in Sweden, then seignorage revenues collapse. Ultimately, a central bank makes resources by making money, by printing pieces of paper with nice pictures in it that people are willing to hold and to give goods in exchange. If people don't want to hold your paper currency, there is also no more revenue for the central bank. We have gotten used to this nice equilibrium where the central banks bring pieces of paper and get revenue. They rake a little bit to pay the wages of their employees and then return the rest to the treasury. When that goes to 0, we have to fund the central bank in some other way. Maybe it is by increasing the equity of the central bank. The Federal Reserve has almost 0 equity because the seignorage flow is very nice. The Riksbank has now higher equity and is discussing increasing equity because than it has to live out of the dividends of its equity to fund its operations.

Second, crypto-currencies and others. As was well put by Ousmene earlier, there is a lot of variety in Fintech, crypto and in others. The part that gets a lot of attention is to what extent will cryptocurrencies replace the fiat currency produced by central banks. It is important to emphasize that this has not happened yet, at all. Whenever people get excited by bitcoin, they get excited about how many dollars or euros they can get in return for their bitcoins. Not about the cows that they can buy with their bitcoins. Very few cows have been bought and paid for with bitcoin. And what does that tell you? That the central bank currency, which we used to call outside money, continues to be crucial in the creation of inside money by the financial sector, whether that is checking accounts, loans, credit cards or others, through the famous money multiplier. What we are learning from the crypto and fintech is that the money multiplier is going to change. An extra dollar of currency of reserves, are now going to imply a lot more dollars or bitcoins being created. That does not imply that central banks are less powerful. They are more powerful. Now the extra dollar or euro that you print has a larger multiplier effect. And therefore, you have to be more careful doing it. But crypto does not threaten the power of monetary policy, it enhances it. It may scare you, because of course your errors also may get enhanced, but that's what it does.

Thirdly, on the transmission of monetary policy, this may well get faster through all the financial innovations. Actions by the central banks will show up in other interest rates more quickly.

Conclusions

Let me conclude my talk on the new normal central bank with what I think science has learned from practice and how I hope science will inform future practice. Let me pick on the ECB since it is the nearest advanced economy central bank. If science is successful in informing future practice, in a few years, the ECB will have a larger balance sheet than it had before; not as large as now, but larger. Maybe I would say 2 trillion euros. *Second*, in unconventional times, there will be shifts in the communication and focus of policy from short term rates to long term rates. *Third*, these actions will be backed by a solid risk management department that understands the risk management in a central bank is about interactions of fiscal risks. *Fourth*, the ECB will provide lender of last resort to Albanian, Romanian and Polish banks through swap lines and others, that hopefully by then will be not by a bilateral discretionary choice, but by a multilateral standing facility. *Fifth*, it will have a new mandate stating how its macro-prudential policy should be independent of the fiscal authority and what are its connections. *Finally,* it understands that FinTech, broadly defined, makes monetary policy more powerful, and renders mistakes more costly.

Thank you very much.

FIRST SESSION:

THE "NEW NORMAL" OF MONETARY POLICY

The session discusses the key elements of the "new normal" of monetary policy and central banking in advanced economies, and assesses their implications for emerging economies and in particular small integrating emerging economies in the "policy sphere" of the ECB.

Chair: Piroska NAGY-MOHACSI, Programme Director, LSE Institute of Global Affairs

RETHINKING INFLATION TARGETING: SOME LESSONS FROM ISRAEL

*Leonardo Leiderman**

Good morning everyone,

I would like to begin by thanking Governor Sejko, Bank of Albania, LSE, Piroshka, Mario, Erik and all the good people that have organized this conference. This is my first time in Tirana and Albania in general. I'm very much impressed with your country and the achievements.

I think, looking at a broad range of small open economies around the globe, that your country has a great advantage. Namely, in my opinion, you have a proper macro-economic regime in place. By this I mean the existence of an autonomous Central Bank, of sound fiscal policy, of an inflation targeting regime coupled with a flexible exchange rate, and so on. So, I think this framework, and the very good performance it has achieved, should be very useful ground for the future developments including the negotiations with the European Union.

I have only one modest advice to Governor Sejko in the area of central bank communication. Instead of calling the program of De-Euroization, from my experience in Israel, and this is purely semantics, you can call it the Lekization program. Like in Georgia they did it as Larisatsia, or Larization. This would emphasize the growing role of the domestic currency under the new regime.

* *Leonardo Leiderman, The Jack and Lisa Yael Professor of Comparative Economics, Berglas School of Economics, Tel Aviv University, Israel*

Anyway, I would like to share with you, what I believe is one very important message from the experience of Israel with inflation targeting and I admit it's a controversial message. While I do not have the theorem or the econometric results that will prove that the following idea is right, many sound and leading economists like Barry Eichengreen, Eswar Prasad, Claudio Borio and others, have been advocating the view that I would like to put forward.

The typical legal mandate for an independent central bank includes three main goals: price stability, support of real economic activity (especially when this does not compromise price stability) and financial stability. Now, ever since the introduction of IT, central banks have stressed in their current policies the first two goals: inflation targeting or price stability and supporting employment or real economic activity, to the extent that it is possible. As it happens, the whole issue of financial stability was dealt with via the macro prudential tools. That has been also the case of Israel, especially under Governor Stanley Fischer, who strongly advocated this view. I believe that given the strong impact of monetary policy on financial markets, there is a need to rethink inflation targeting, in a way that results in upgrading the role of financial stability in the whole inflation targeting, and interest rate setting, scheme.

Chart 1 Twenty five years under an IT regime in Israel

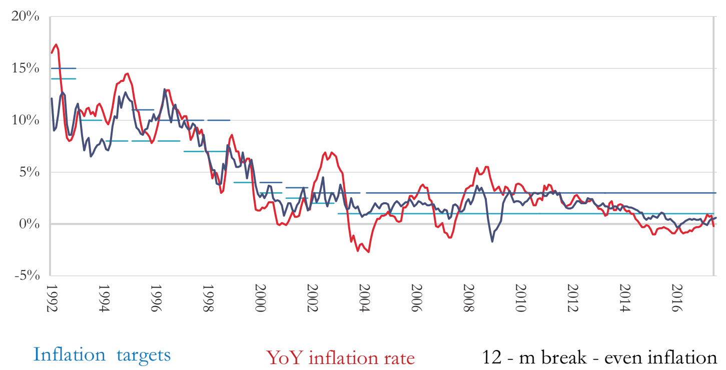
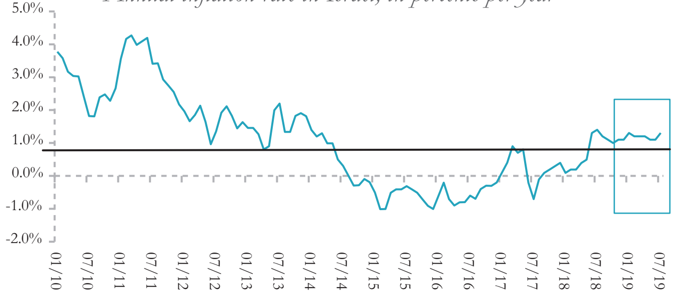


Chart 1 depicts the history of 25 years under an IT regime in Israel. We began with inflation of about 15% per year in the early '90s, and from there on, inflation targeting has been used both for the process of disinflation and for sort a stable and durable situation with low inflation rates.

Chart 2

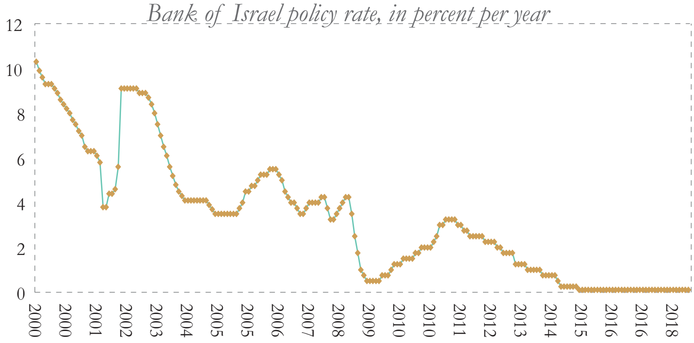
Annual inflation rate in Israel, in percents per year



One very interesting phenomena that I would not have imagined early on, is that a country with a history of high inflation like Israel, would have three consecutive years of price level decrease or deflation while the real economy was growing and the labor market was relatively strong. This happened in 2014, 2015, 2016 especially due to lower import prices, especially energy, as Israel is an energy importer. There were also some deflationary measures done by the Ministry of Finance, like reducing import tariff rates and the fees on a variety of administrative procedures that almost every citizen goes through at various times. Hence, the Central Bank faced an inflation rate much lower than the lower bound of the inflation target band (given by 1%-3%).

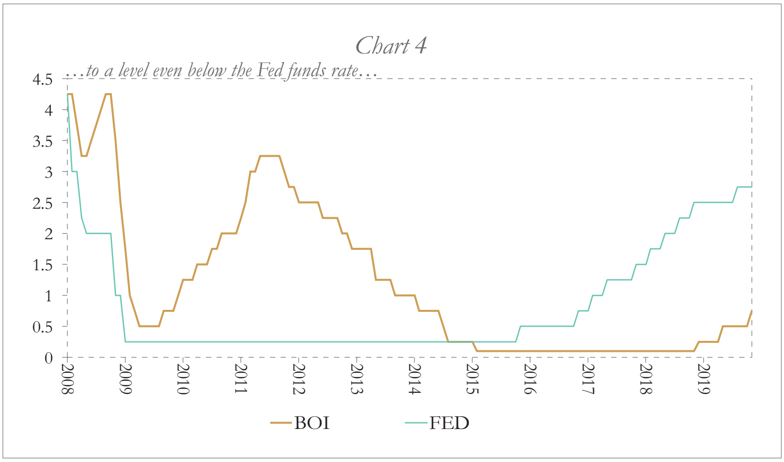
Chart 3

Bank of Israel policy rate, in percent per year



The monetary policy response was to lower the interest rate quite dramatically since 2013-2014. We never went to negative interests rates like the ECB for a simple reason, the economy is operating on their full employment so you do not need that sort of boost in activity on employment that you needed there.

Another sort of graph that would have been very hard or almost impossible to imagine in the older days, is to compare our policy rate with the Fed policy rate.

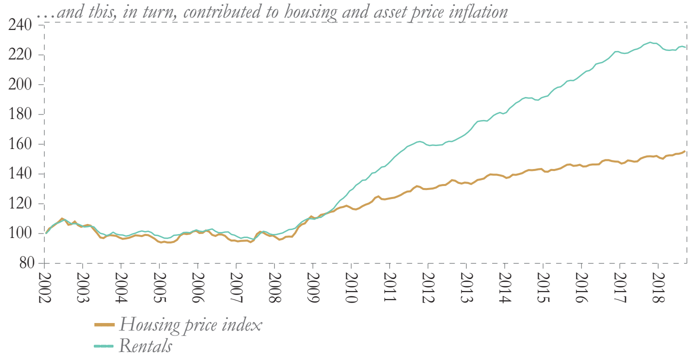


Being a small open economy operating in the turbulent Middle East, it has been typical for Israel to exhibit a domestic interest rate that is higher than that in the US and Europe. Yet, as the foregoing chart shows, since 2015, the domestic policy rate has been lower than the Fed Funds rate.

A bit with a critical eye, I believe that Israel's policy rate was held at a too low level for an excessively long time period, to the point of compromising the stability of the financial system. In particular, as known from various crises around the globe, very low interest rates may stimulate what later on could be discovered as asset price bubbles, which in turn could represent a serious risk to financial stability. In the case of Israel, the concern has been with the very rapid inflation in housing prices.

Chart 5

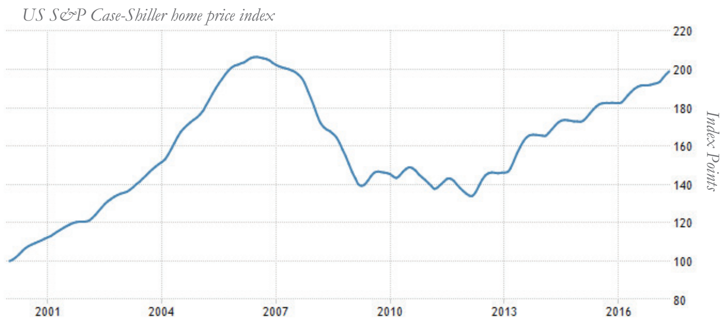
…and this, in turn, contributed to housing and asset price inflation



Following the seminal work of Robert Shiller and other economists, when one sees a chart like the foregoing one, where at some time since 2009 the path of housing prices has a much more positive slow than the path of rentals, this could be one manifestation of a growing housing market bubble. So far, we had not had a housing market crisis following these events, yet there have been a variety of social protests, especially by young people, about the high cost of housing. In sum, I believe these developments reflected to a large extent the long period during which the Central Bank maintained the policy rate at an extremely low level.

Chart 6

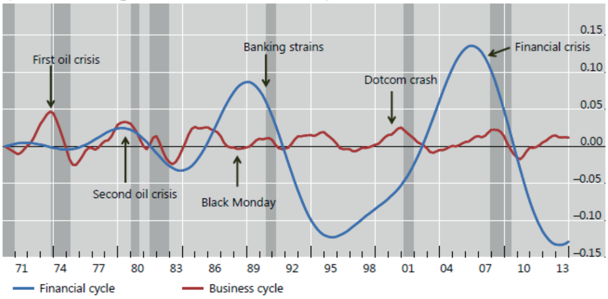
The evidence is similar to the US, where Fed fund reductions were followed by higher housing prices…



Source: TRADINGECONOMICS.COM: STANDARD & POORS.

Chart 7

Studying these types of developments, the BIS (e.g. Claudio Borio) provided evidence of how ample financial cycles can be compared to real sector business cycles

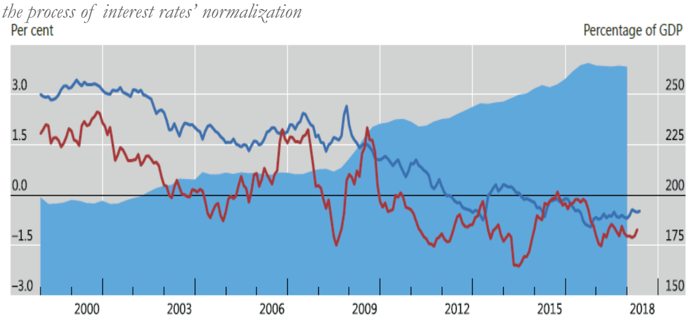


The financial cycle as measured by frequency-based (bandpass) filters capturing medium-term cycles in real credit, the credit-to-GDP ratio and real house prices. The business cycle as measured by a frequency-based (band pass) filter capturing fluctuationsi in real GDP over a period from one eight years.
Source: BIS.

This brings me to the very good work by the BIS, under the leadership of Claudio Borio that has stressed the importance of the financial cycle in recent years, when compared to the real business cycle. A central bank that explicitly worries about the financial cycle, would probably reduce its policy rate, if needed, by a smaller amount, and for a shorter time period, than a central bank that deals with the financial cycle only via macro prudential measures.

Chart 8

Globally, very low policy rates have been followed by a sharp rise in debt and leverage, which complicates now the process of interest rates' normalization



Lhs:
—Real policy rates[1]
—Long-term real estates[2]
Rhs:
Debt[3]

Source: BIS

As shown by the BIS in various publications, the secular decline in global interest rates has been accompanied by a sharp increase in debt. The latter represents one of the main worrying aspects of the global economy, and could be a source of vulnerability should there be a slowdown in economic activity and/or a process of interest rate normalization by central banks.

So to conclude:

I believe that we need a broader form of inflation targeting. Back in 2011, Eichengreen, Prasad, and Rajan, together with a committee comprised of additional well-known economists, stressed the need to move to a broader, more “holistic”, framework, in which financial stability plays a more fundamental role in current central bank policies.

Research work by Claudio Borio and other economists at the BIS over the years has produced very useful arguments for such an augmented framework, in what they call “a financial stability-oriented monetary policy” (See e.g. the 86th Annual Report of the BIS). I believe that there are very good insights from this work for small open economies like of Israel. Yet, of course, we will need a lot more research to be on safer grounds about these issues.

Thank you very much.

MONETARY POLICY IN A LOW INTEREST RATE WORLD

*Dimitris Malliaropulos**

The theme of my presentation is "Monetary Policy in a low interest rate environment". I think this is related to the major challenges which central banks are facing today. I will try to present the bigger picture of monetary policy in the "new normal" and ask three questions related to central bank policy in a low interest rate environment. Answering these questions is currently a major challenge for central banks.

We will probably all agree on the fact that we live in a low interest rate environment. Compared to historical standards, interest rates following the global financial crisis have trended down to historical lows. This low interest rate environment gives rise to three questions.

The first question is: Will it last? And if so, for how long?

In answering this question, I will touch on several issues such as: Is quantitative easing (QE) a global factor driving interest rates? In fact, following the Global Financial Crisis of 2007-2008, central banks have made large scale asset purchases. Have they also contributed to the current low interest rate environment? Is this contribution a permanent or a temporary factor? This is the major question we have to answer in order to be able to say something about the new

* *Dimitris Malliaropulos, Chief Economist and Director of Economic Analysis and Research, Bank of Greece*

normal. I will also touch on the issue of the secular decline of the natural interest rate, the equilibrium interest rate which the Governor mentioned in his speech. And I will ask: is it in fact a secular decline or is it rather related to some temporary but persistent headwinds, which have resulted from the global financial crises of 2007-2008? And I will also ask: What is the view of bond markets? How do bond markets view the current interest rate environment and what do they expect from monetary authorities in the future? In other words, what can we extract from bond market valuations about investors' expectations about the future path of short-term interest rates? Do markets expect the low interest rate environment to persist in the future?

The second question I will ask is: Will central banks continue to use QE in the future (and why)?

The third question is a normative one: Should central banks - independently of whether they will continue to actively use unconventional monetary policy measures in the future - keep large balance sheets and what are the benefits of large balance sheets?

I will first argue that low interest rates are likely to last, but not forever. We will go through a substantial period of low interest rates but the forces pushing rates to low levels will gradually fade and, eventually, interest rates will increase. Hence, the current low interest rate environment, although persistent, is not a permanent phenomenon. Second, central banks will continue to use QE in the foreseeable future for several reasons and, in my view, mainly because the zero lower bound (ZLB) will remain binding at least until the next recession hits and maybe some time longer. And this will be, in my view, the main constraint, which will lead central banks to continue to use QE in the foreseeable future.

On the third question, I will argue that central banks should consider the benefits from keeping their balance sheets adequately large, and these benefits are related to two issues:

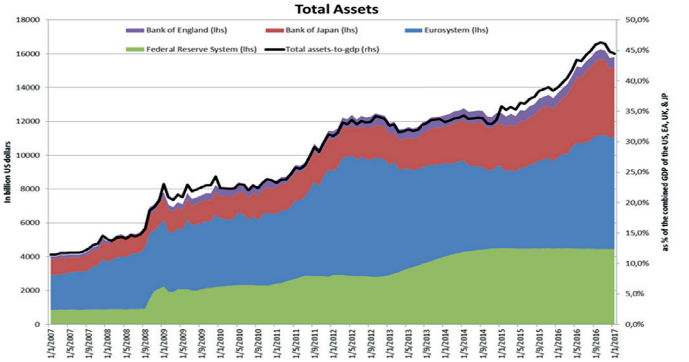
First, by expanding their balance sheets, central banks have responded to the shortage of safe assets, which the global financial system experienced in the aftermath of the 2007-2008 financial crisis.

Following the subprime crisis in the US, some securitized markets such as the ABS market or the ABCP market collapsed. This collapse has led to a shortage of safe assets in the financial system (the so-called 'safety trap'). The euro area debt crisis has made the problem worse as a number of euro area sovereigns have been downgraded, leading to a further decline in the supply of safe assets. Central banks have stepped in and filled the gap by providing safe assets to banks and financial markets. They have done so by expanding their balance sheet. Hence, a significant benefit from keeping large balance sheets in the future is to ensure that there are enough safe assets in the financial system.

Second, by keeping large balance sheets, central banks ensure that the financial system does not enter into a 'collateral trap'. Banks and financial institutions use two types of collateral in order to receive funding: external collateral, such as government securities, and internal collateral, such as securitized assets with a high credit rating. The collapse of the ABS and ABCP markets during the global financial crisis has led to a shortage of internal collateral, i.e. a so-called 'collateral trap'. Monetary authorities responded by providing adequate liquidity to substitute for the lack of internal collateral. By continuing to keep adequately large balance sheets, central banks ensure that we do not get in situations of collateral traps again.

Overall, I will argue that due to financial stability considerations, central banks should continue to keep their balance sheet adequately large. My small contribution to this debate is that, in order to ensure financial stability, central banks must be aware that the currently low interest rate environment is also the result of the massive expansion of their balance sheets. So, if central banks go quickly into reducing the size of their balance sheet, global interest rates of sovereign debt will increase significantly. This, in turn, will affect vulnerable sovereigns and banks that have large exposure to sovereign debt as well as highly leveraged companies. Hence, for financial stability considerations, central banks are advised to keep for the foreseeable future their large balance sheets. If they go into a normalization of monetary policy they should do it in very careful and small steps. This is the overview of what I will present and please allow me now to go into the main part of my presentation.

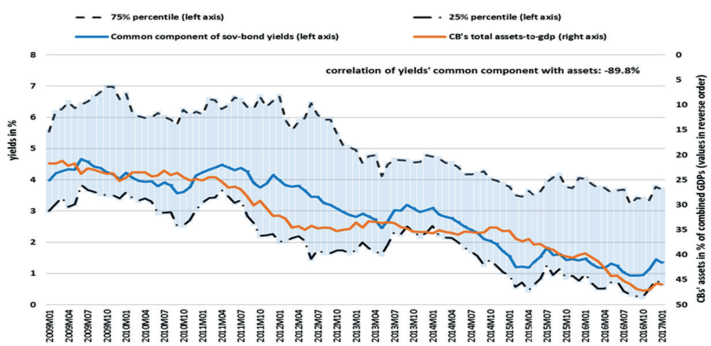
Chart 1 Combined balance sheet of four major central banks



Source: Malliaropulos and Migiakis (2019): Unconventional monetary policy and sovereign bond yields: a global perspective (Bank of Greece Working Paper).

Let's look first at the facts. Chart 1 shows the combined balance sheet of the four major central banks: the Fed, the ECB, the Bank of England and the Bank of Japan. On the left scale, figures are given in absolute dollar terms, whereas on the right scale as a fraction of the combined GDP of the four countries/economic areas. The Chart suggests that central banks have gone to a massive expansion of their balance sheets. The size of the balance sheet of the four major central banks has increased from $ 4 trillion back in 2007 to about $ 16 trillion in 2017. And this represents 45% of their countries GDP on average, going up from about 10% of GDP in 2007. This move represents a 35% of GDP increase in central bank balance sheets.

Chart 2 QE as a global risk factor



Source: Malliaropulos and Migiakis (2019): Unconventional monetary policy and sovereign bond yields: a global perspective (Bank of Greece Working Paper).

QE and, in particular, large scale asset purchases of central banks, have basically switched risky assets with reserves and this has led to a decline in long-term sovereign bond yields. What I claim is that QE has to be seen as a global factor, a global risk factor in sovereign bond markets that has led to lower interest rates. Chart 2 provides a motivation of what I am claiming here. What you see here is the evolution of central banks' total assets to GDP (red line), plotted on the inverse right axis, along with the common component of sovereign bond yields (blue line), which is the first principal component of 45 sovereign bond yields in the world, consisting of both developed economies and emerging market economies. Yields are 10-year bond yields and, by applying principal components, we just extract their common trend over time. The Chart suggests that the two series co-move over time with a correlation of 90%. Hence, the increasing balance sheet of central banks seems to be strongly related with the negative trend of bond yields globally, not only in the respective economies where the central banks were acting.

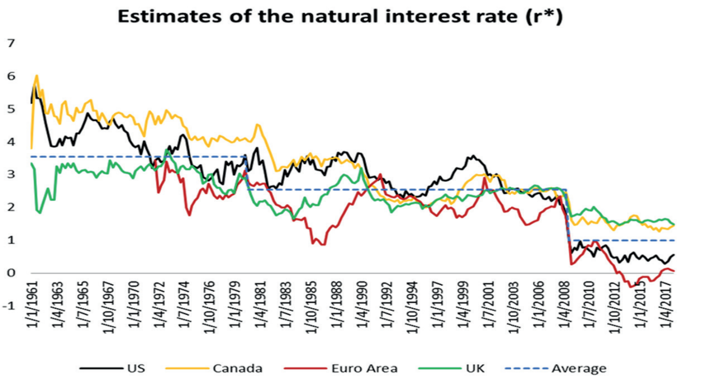
Now, apart from this motivation and in order to provide adequate empirical evidence on this relationship, we have run a panel regression of the individual countries' bond yields on their credit ratings (which measure the effect of country fundamentals), the aggregate size of global central banks' balance sheet (measured as their total assets to GDP ratio) and an interaction term, which is the central banks' total assets interacted with the credit ratings in order to estimate whether the effects of QE differ across sovereigns with different credit ratings, which is something we would expect.

$$R_{it} = \alpha_i + \beta_1 c_{it} + \beta_2 \left(\frac{CBs' total\ assets}{GDP}\right)_t + \beta_3 \left(\frac{CBs' total\ assets}{GDP}\right)_t \cdot c_{it} + e_{it}$$

where R_{it}: 10-year bond yield of sovereign i, (i=1,…45) and C_{it}: credit rating of sovereign i and (*CBs' total assets/GDP*): size of the balance sheet of the four major central banks as a fraction of GDP.

The results of this regression suggest that the increase in the size of central banks' balance sheet has led to a permanent decline in sovereign bond yields globally between 2007 and 2017, ranging from 250 bps for AAA rated bonds to 330 bps for B rated bonds. This is a significant decline in bond yields due to quantitative easing. The interpretation of the permanent nature of this decline is along the lines of the portfolio balance model: if central banks make large scale asset purchases, they effectively reduce the outstanding stock of government bonds available to the private sector. A lower net supply of bonds leads to permanently lower bond yields, at a given demand.

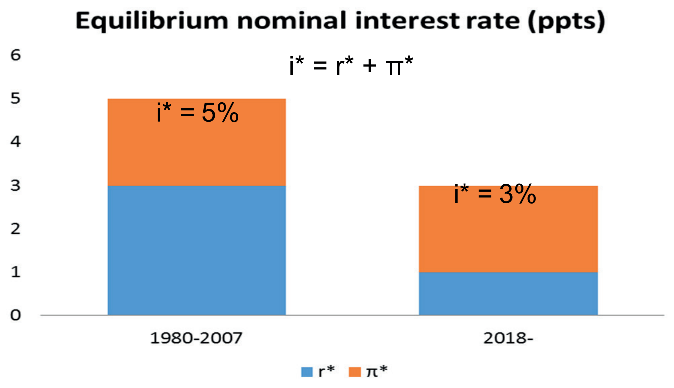
Chart 3 The secular decline in the natural rate



Source: Holston, Laubach and Williams (2017).

Much of the discussion about the new normal of monetary policy is related to the issue of the secular decline in the equilibrium real interest rate or, as we often call it, the 'natural interest rate'. Chart 3 plots the estimates of Holston, Laubach and Williams (2017) of equilibrium interest rates and they show effectively that there is a downward trend. Equilibrium interest rates declined from 3.5% in the 1960s-70s to a level of 2.5% on average at the end of the 1970s and to about 1% on average following the global financial crisis of 2007-2008. The secular decline naturally can be related to a number of factors such as the slowdown in trend productivity, or the secular stagnation hypothesis; the decline in the growth rate of labour supply due to ageing of population; the increase in life expectancy (people must save more for retirement, hence are ready to accept a lower real return on their savings); global factors such as the "global savings glut" (Bernanke 2005); the decline in the relative price of capital goods (Rachel and Smith 2015); the decline in aggregate investment relative to savings; the increase in the share of services sectors (Summers 2014), which are less capital intensive, hence less investment is needed on aggregate to produce the same value of output.

Chart 4 A lower natural rate implies lower nominal short-term rates



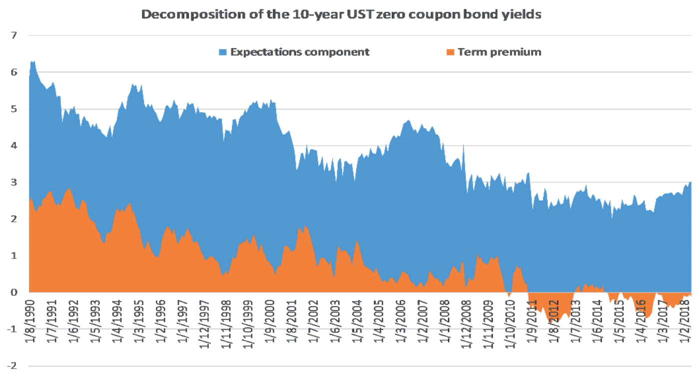
These are all possible explanations, and if this is true that there is a secular decline in the natural interest rate, this has important implications for monetary policy. This is the case if monetary policy follows a Taylor rule in setting the nominal short-term interest rate:

$$i = r^* + \pi^* + \alpha(\pi - \pi^*) + \beta(y - y^*)$$

where $(\pi - \pi^*)$ is the deviation of inflation from the target (π^*) and $(y - y^*)$ is the deviation of output from potential (output gap).

If the Taylor rule is an adequate description of monetary policy, in equilibrium, the nominal interest rate should be equal to the natural rate plus the target inflation rate of the central bank. Hence, if the equilibrium ('natural') real interest rate declined to 1% after the global financial crisis, compared to 3% before (Chart 4), the room from maneuver for monetary policy authorities is much lower until they hit the ZLB. This has significant implications for conventional monetary policy. Central banks have less room for maneuver in a possible downturn, implying that unconventional monetary policy measures will be used more often in the future.

Chart 5 Bond yield decomposition



Sources: FRED (FRBSL), Datastream, own calculations.

What do financial markets think about this? Chart 5 plots the decomposition of the 10-year Treasury yield in the US into expectations of future short term interest rates and the term premium. The blue area shows the average short term interest rate, the Fed funds rate, expected over the next 10 years. The red area plots the estimate of the term premium. As you can see, the US Treasury bond market discounts that the average Fed funds rate in the next 10 years will be on average 3%. So bond markets basically agree with the view that the natural rate has declined rather permanently and that the ZLB will be much more binding in the future.

There are a number of proposed strategies to mitigate the decline in the natural interest rate. As the Governor [Sejko] already mentioned in his address, the focus should be on structural policies because the real rate is driven by real economic forces, so monetary policy cannot do much about it. Such supply-side strategies include e.g. policies focused on investment in education, private and public capital, R&D and pension reforms. Second, more intensive use of countercyclical fiscal policy. Given that monetary policy has less room for maneuver during economic downturns, fiscal policy must fill the gap. Monetary policy can either raise the inflation target or switch to a price level/ nominal GDP target, apply negative interest rates or abolish cash all together.

All the above proposals to reevaluate the monetary policy framework are based on the hypothesis that the natural interest rate (r*) has declined permanently. However, there are several econometric and conceptual issues in estimating r*, which limit the usefulness of this concept for monetary policy.

First, there is parameter uncertainty and *ex-post* data revisions, which make the estimation of r* very imprecise. Since r* is a non-observable, which has to be estimated, there is a lot of uncertainty around econometric estimates of r* which makes the concept not very useful for monetary policy.

Second, the predictions of the neoclassical growth model about a stable relationship between real risk-free rates and economic growth does not work well empirically. There is the so called 'risk-free rate puzzle' of Weil (1997), which says that if we assume a high degree of relative risk aversion in order to solve the 'equity premium puzzle', the model predicts a much higher average real risk-free rate than actually observed. So, the theory itself cannot explain the average level of the short-term interest rate.

Third, if the hypothesis of a secular decline in r* is true, then the return on capital should also decline over time but this is not something we observe. In contrast, we observe an increasing return on capital in major economies. This is inconsistent with the theory itself.

Fourth, the equilibrium real interest rate is sensitive to regulatory constraints, the level of inflation, asset bubbles, headwinds to economic recovery and monetary policy itself (Hamilton et al. 2015).

These observations suggest that the decline in r* may be less secular than we think.

Chart 3 suggests that r* has been quite stable over the 30-year period preceding the global financial crisis. Maybe the sharp drop in r* that took place in 2008 is basically what we have to explain and this is mainly related to temporary but relatively persistent headwinds, which are related to the financial crisis itself rather than structural factors. The factors driving the decline in equilibrium interest rates after the global financial crisis maybe related to hysteresis of potential output, as some may suggest, the slow deleveraging process of the private and public sector due to the debt overhang, leading to a 'balance sheet recession', as Reinhart and Rogoff suggest, a 'debt super cycle' or the decline in the global supply of safe assets, i.e. a 'safety trap', like Caballero and Fahri in a recent paper suggest.

So what would monetary policy in the "new normal" be like?

In my view, there is no strong case for a fundamental change in the monetary policy framework. Nevertheless, central banks will continue to use the size of their balance sheet and forward guidance as a complement to the standard interest rate policy in the future. There are a number of both theoretical and practical reasons for doing so:

1. The ZLB will continue to be a binding constraint on interest rate policy in a low inflation - low interest rate environment. There is a race against time for central banks until the next recession hits! Central banks will be caught in a situation where they will not have enough room to reduce interest rates in order to stimulate demand, hence the use of unconventional monetary policy measures will become inevitable.
2. There are good arguments in favor of central banks keeping large balance sheets.
    - Liquidity is desired, especially in a crisis, and creating liquidity enhances financial stability. Central banks should provide short-term safe assets to the financial system when there is a shortage of safe assets (Caballero and Fahri 2014). This enhances financial stability and helps to restore the transmission channel of monetary policy to the real economy when money markets malfunction.
    - Due to profits from seigniorage, central banks have a cost advantage over treasuries in the provision of safe assets. While treasuries have costs in producing safe assets (the government must pay interest to bondholders), central banks can do this even at a profit, because they finance the purchases of long-term assets with bank reserves. As long as the yield of long term asset is higher than the interest paid

for bank reserves (which is currently negative in the euro area), central banks make profits. Having said this, there is of course the risk of inversions of the term structure, in which case central banks face the risk of making losses.

- Central banks can use collateral swaps (swaps of high-quality against low-quality assets) to mitigate "collateral traps" (Boissay and Cooper 2014).
- If QE has led to a permanent decline in global bond yields, then reducing the size of the balance sheet too fast may induce financial instability (Malliaropulos and Migiakis 2018).

The short-term dilemma facing central banks currently is about the timing and pace of monetary policy normalization. There are two main issues: (a) when to start hiking interest rates and at what pace and (b) when and at what pace central banks reduce the size of their balance sheets. There is an obvious trade-off between effectiveness of monetary policy and financial stability. The faster the pace of normalization of interest rates, the more leeway is created for monetary policy to be effective in a future economic downturn. On the other hand, the faster the pace of normalization, the higher the risk of destabilizing financial markets and of pushing the economy into a recession. Given this dilemma, the odds are that central banks will unwind their balance sheets at a very low pace, holding a large proportion of their assets to maturity. Divergence of monetary policy across advanced economies is also an important issue: the fact that the Fed is well ahead in normalizing the policy compared to other central banks creates upward pressure for the dollar and global interest rates. Emerging market economies with large public and private debts are particularly vulnerable to this situation, especially if debt is denominated in foreign currency.

In the medium to long term, the main dilemma is whether to return to the previous or to a new normal for the monetary policy framework. It is reasonable to expect that the "new normal" will likely be a mix of the old and the new tools, probably with little or no change to the main mandate of monetary policy, i.e. price stability. Financial stability will remain the main focus of macro-prudential policy, although monetary authorities will increasingly take into account financial stability considerations in formulating policy.

CENTRAL BANK AND MONETARY POLICY: THE UNCERTAINTIES AFTER THE CRISIS

*Mario I. Blejer**

"Markets detest uncertainties but they detest even more the certainty that they are not understanding the signals nor grasping the consequences of current actions by policy makers"

A senior central banker quoted by *The Economist*

The 2008 global financial crisis left a large number of wounded, destroyed many reputations, and raised a large quantity of policy and theoretical questions. But there were also some winners. Monetary and central bank policies were such winners. They were regarded as decisive components of the government arsenal of instruments deployed in order to stabilize global finance. Moreover, as the situation started to unravel, central banks gained further prominence that reached the point where they were seen as the "only game in town". And they were indeed ready to act. They had the capability and they were willing to use it. The centerpiece of the strategy was, as it is almost always the case, to throw money at the problem. Only that this time it was going to be done in a more sophisticated manner or, rather, it would be called by a more sophisticated name: Quantitative Easing (which became QE).

** Mario I. Blejer, Former Governor of the Central Bank of Argentina and LSE Visiting Professor*

We do not discuss here the actual characteristics of QE implementation in each country nor the specific results obtained in each case. It suffices to say that, in general terms, it involved the active utilization, through various mechanisms, of the central bank balance sheet in order to achieve a massive expansion of the money supply. The unprecedented increase in the monetary aggregates that took place following QE had, as its counterpart, a massive increase in public and private sector debt. The objective, to sustain aggregate demand and prevent the recessionary impact of the crisis was, in general, reached and the QE policy (and the central banks behind it) were considered successful, as a whole, though with clearly diminishing returns (Stephen Roach (2018)).

There was not much new in QE except its gigantic size and, in some countries, the nature of some of the assets purchased by the central bank from the private sector. As it is to be expected from a program with soft or no upper constrains on monetary aggregates, the rapid and voluminous expansionary monetary policies and the ensuing falling interest rates did prevent a global financial collapse. This was broadly expected because the program was implemented with determination, perseverance and coordination by central banks. At the same time, it was also expected (or feared) that the rapid acceleration in money creation could set off existing and new bottlenecks and create dislocations in the economy, reigniting inflationary pressures despite the prevailing low level of resource utilization. These negatives, however, were for the long run while the financial crisis was a clear and present danger. But even as time went by, these harmful effects did not become visible despite the fact that some unusual phenomena, such as negative nominal interest rates, did emerge following QE implementation.

With positive policy outcomes and no serious immediate side effects, there was a good feeling in the monetary quarters. However, some voices started to rise warning that the large and growing gaps in the balance sheets of the central banks were bound to create eventual troubles, particularly in the inflationary front and also regarding the solvency of the central bank at least on paper (which is more a political problem), and that the continuous growth in the stock of money cannot continue unabated forever. Moreover, the post QE debate centers on the question whether the current situation should be regarded as abnormal and "normalization" is the next objective of monetary policy makers. The practical question is whether central banks should take actions to reverse what they have been doing, i.e as the crisis subsides, should central banks actually withdraw the additional liquidity they have poured into the markets? And if so, how much, and how? Should the balance sheets of the central banks come back to their original sizes? And if not, what is the risk? And what is the risk of continuing with QE for long periods of time? Inflation, at least as it is measured, is underperforming in countries with QE. Does this mean that the link between money and prices has been broken?

It is probably too early to try to answer these questions. You cannot comment on the football game result at the beginning of the second half. But it has been said that in policy making the future is usually behind us and we better understand it now if we want to have any impact. Perhaps, a good way of understanding what is going on in the monetary world today is to try to understand the reasons why it was felt necessary to introduce this unconventional policy (unconventional at least in size and instrumentation). As a digression one should recall here that many observers have criticized the characterization of QE as an unusual policy. Kenneth Rogoff (2017), for example, claims that the Fed´s QE program simply consisted in buying up long term government bonds in exchange for bank reserves and trying to convince the American public that this magically stimulated the economy. For Rogoff, QE is not more than smoke and mirrors and the same result could have been reached by the Treasury issuing one week debt without the Fed intervening.

But let's return to the original question, i.e., why the central banks felt that to prevent the crisis from causing a deep recession it was appropriate to engage in such a massive monetary expansion, without risking reigniting inflation? I can see two quite robust arguments that have been made in the academic and in the policy-making literature to explain the apparent inflation neutrality of the QE across the world. These arguments appear convincing but have not yet been proven properly. The first argument relates to the last question in the list above and is at the core of monetary policy: is the linkage between monetary aggregates and inflation broken? The second argument claims that, because of the crisis, lending was impaired and, therefore, the Fed´s created liquidity did not go into the money market.

Regarding the first argument, if universally true, it would raise many eyebrows. In fact, it would change monetary policy forever. Hundreds of scholars and tens of Nobel Price winners have based their research on one of the cornerstones of modern macroeconomics, i.e., the Quantitative Theory of Money that links money and inflation. It cannot be simply dismissed. Moreover, coming from where I come from, Argentina, it would be difficult even to imagine that this relationship does not exist. Together with about 20 countries in the world Argentina continues to have inflation in two-digit levels that is highly correlated with the growth of monetary aggregates. Traditional theory seems to apply quite well to the 15-20 countries which have inflation rates (annual) above 17% a year. So, what explains this conundrum?

The explanation of all this may lay on the simple fact that there are always non-monetary factors affecting the price formation process and that below a certain lower bound for inflation (around 2% a year) these non-monetary factors overwhelm the money-inflation link and start playing a decisive role in determining inflation rates. Those non-monetary factors are, more often than not, supply side and structural factors. The implicit claim of the QE supporters is that at present time, at this specific conjuncture, the impact of non-monetary factors has been particularly colossal and is bound to neutralize the demand effects of the massive QE induced liquidity expansion. In other words, while QE has increased enormously the money supply, and this should have been reflected in higher inflation, exceptionally powerful structural and supply-side factors have prevented this effect to appear and money expansion has been therefore helpful in sustaining aggregate demand and averting a recession during the financial crisis, without threatening to reignite inflation.

If so, the question shifts to the supply side. What have been these structural factors that break the well-established money-inflation link? The answer has several layers, but the main discontinuity is in the labor market and is due to large increases in the available labor supply from the globalization of labour markets particularly from the side of China and Central-Eastern Europe in the 1990s and technological innovations that "turbocharged" disinflationary pressures in the past decade (Goodhart and Pradhan (2017) and El-Erian (2019)). These factors weaken the link between labor demand and prices by eroding the pricing power of labor. In other words, a monetary induced increase in aggregate demand is not reflected in prices because wages do not increase accordingly. Therefore, the linkage money- aggregate demand-wages-prices breaks down due to technology advance and to labor market globalization.

In general terms, these structural forces operating in the labor market derive from a number of sources. At the technological level, the goods distribution chain has been strongly affected by the internet competition. Improvement in marketing pushes down prices by allowing consumers to go around costly intermediaries and by reducing search costs. New technologies also allow to increase productivity by increasing the utilization of existing capital equipment (the example here is Uber) bringing down the pricing powers of existing large firms. El-Erian documents the disinflationary consequences of these effects that interact with the huge increase in the availability of low wage labor that follows the incorporation of millions of new workers into the global labor force. The globalization of labor markets also reduced the bargaining power of organized labor. Wages became much more stable, probably falling in real terms, weakening the linkage between money and inflation.

The second explanation for the QE inflationary neutrality is that it was introduced at a time of crisis and that the huge liquidity placed in the markets by the central banks did bit go into the money market. The money multiplier practically collapsed and the amount of lending dwindled. Despite the increase in the central bank balance sheet, the money supply did not change much.

There is of course a third view that claims that we are confronting a huge statistical mirage. In fact while consumer prices are stable a lot of the additional liquidity liberated by QE turns to asset markets creating high asset price inflation. Casual observation of prices in key asset prices, including real estate and art markets seem to validate this claim but does not seem to be quantitatively enough to provide a full explanation. If this is the case, how much need is there for normalization? The answer to this question depends on how permanent and how transitory (how "normal" and how "abnormal") these events are. For example, if the money multiplier goes back to its normal level, the implication is that it would be necessary to mop up part of the excess liquidity, because it will otherwise eventually go to the good market and cause traditional inflation.

Is there a "new normal" in monetary policy? The answer to this question depends on what do you believe regarding the recurrence (or not) of the supply side and structural effects and, more general, about the future of globalization and of its impact on the behavior of labor markets. Little can be said here without the help of concrete hypotheses and empirical evidence. However, one can point out that many of the relevant supply-side factors continue to operate but their impact is significantly lower given the one-time nature of the structural effects of new technologies. Moreover, current threats to globalization and to free trade and free-factor mobility may reduce further the impact of non-monetary factors and it is apparent that the trend is toward convergence at lower levels of change. This would enhance the importance of traditional monetary factors in determining inflation and would call for some degree of QE moderation and for the withdrawal of some of the huge excess liquidity poured over the last few years. On available information, there does not seem to be a permanent new normal and without careful and traditional management of the central bank's balance sheets we are bound to see some resurgence of inflation in advanced economies with expected consequences for emerging markets.

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WILL THERE BE A "NEW NORMAL" IN MONETARY POLICY ANY TIME SOON?

*Marko Škreb**

1. **Will there be a "new normal" in monetary policy any time soon?** Firstly, one would have to be more precise what is ment by normal in this context. By "normal" we usually consider some past "average" of what we were used to or what most of us perceive as normal in behaviour or dress code. Something we can focus on and rely as a kind of benchmark. "Normal" in medecine for example means some range in blood pressure (120/90 mmHg) or cholesterol level (below 200 mg/dL) that does not harm our long term health and well being. Normal weather is the one that we are used to in a typical season in the number of years. When something deviates from that "normal", we consider it "abnormal", for examples now in summer in Europe or blood pressure above 200 mmHg, etc. In economics and in monetary policy benchmarking is more difficult than in medicine or meteorology. There are a lot of reasons why standards in economics are more difficult (to be explained later). But it does not mean we do not have views on "normality" in economy. For european economies, especially EU members (and candidates for EU), Maastricth criteria[1] are an attempt to have standards which can be considered normal macroeconomic

* *Marko Škreb, Former Governor of the Croatian National Bank and Centralbanking Consultant. Contact: markoskreb@gmail.com, web site markoskreb.hr*

[1] *They were adopted in 1991. https://ec.europa.eu/info/business-economy-euro/euro-area/enlargement-euro-area/convergence-criteria-joining_en*

numbers. Yes, they are specific conditions for entering the Eurozone, but their importance is larger than the Euro itself. Before the Global Financial Crisis (GFC) most economists would agree what "normal" is. For example, most advanced economies would consider as "normal" inflation around 2%. The number was somewhat higher for emerging economies, but usually normality would be a single digit inflation. For inflation around 2% nominal interest rates around 5-6% were considered "normal"[2]. And there was a "normal way" of conducting monetary policy to achieve those values. It is called inflation targeting, which linked with central bank independence and indirect instruments of monetary policy were the standard. From the 1980-ies until 2008 a lot of central banks switched or were planning or at least aiming to achieve this standard. So normality was, for central banks, to focus only on a single goal and price stability and inflation targeting were the best ways to achieve it. Economies were growing steadily and everything seemed to be "just right". Some referred to it as "great moderation". Others considered that ideally central banking should be "boring". Flexible exchange rate, indirect instruments of monetary policy, deregulation and liberalization of financial markets were the way to run the economy and conduct monetary policy. Following dictums from the "Washington consensus" was recommended to almost all countries around the globe, from Australia to US, from Albania to Zimbabwe. But, GFC and its aftermath have destroyed this view. Central banking has changed and is still changing without clear direction how. The question therefore is what is the new normal and/or will there be a new normal if there is not one now, during rapid changes?

2. **GFC has changed central banking from 1990ties**. In May of 1996, I attended my very first Bank of International Settlements (BIS) All Governors' Meeting in Basel. I was eager to learn everything I could. The then Chairman of the BIS Board, Swedish Governor Urban Bäckström, was giving the following advice: "To be a good central banker one has to remember only four things: inflation is always too high, interest rates are always

[2] *Summers et al (2018). Episodes of very high interest rates like German of 14% in 70ties or mortgages rates of about 18% in US in 80ties were considered exceptional, not "normal".*

too low, if the economy is growing healthily it is because of the central bank, and if it has problems, blame it on the Finance Ministry." And he was not the only one with such wisdoms. The late Baron George (Eddie George, Governor of Bank of England at that time), while chain-smoking his cigarettes[3], would often say: "Central bankers have only one simple mantra to repeat and it is: "price stability". It was a simple world for central banks, back then. Today's central bankers have a more difficult task. They must take decisions in a more complex, dynamic and more uncertain world than ever. And there is no consensus on what exactly central banks should do. It may be useful to divide the history of central banking into periods as one of central banking's most prominent economists and historians, Charles Goodhart (2010) did. He distinguishes the periods of consensus and the periods of uncertainty. The periods of consensus in central banking are: 1) the Victorian era (1840s – 1914) with the main characteristic being the gold standard 2) government control (1930s – 1970s) with fiscal (Keynesian) dominance and 3) the triumph of the markets (1980s – 2007) with central bank independence and inflation targeting. He pointed out that the interregna between those periods are often confused without a clear consensus on what central banks should do. Does it sound familiar? Monetary policy and its "captains", the central banks, are changing course.

a. **Defining an appropriate target for a central bank has been questioned.** Arguably, the biggest change in central banking mandates since the 2007-GFC has been the explicit addition of the goal of maintaining financial stability. And this is very often the case, regardless of whether central banks do microprudential supervision or not. Even more so, regardless of whether their laws state it or not, central banks are expected to be the custodians of stability of the overall financial system. Systemic risks, how to measure and manage them, and the use of macroprudential tools are all relatively new games for central banks. But, every reputable central bank must publish not only its Inflation Report but a Financial Stability Report as well. Furthermore, the consensus that central banks should

[3] *Yes, it was possible to smoke at BIS in the last century, times they are 'changin'.*

aim at price stability[4] has been disputed. Some (Frankel, 2014 and Summers at al. 2018) claim that the goal of price stability (and inflation targeting as a tool to achieve it) is too narrow and central banks should target nominal GDP. Summers suggests nominal GDP growth of 5-6%. But nominal GDP is not only central banks's responsibility nor can it achieve the target by itself. This adds a new dimension; Who should define the target the government or the central bank itself? This has major implications for the governance structure of the central bank (Lybek and Morris, 2004). More central banks are adding employment/unemployment as their goal. Not long ago some were criticising the Fed for its dual mandate . However, the new PTA (Policy Target Agreement) between the Reserve Bank of New Zealand (RBNZ) and the NZ Government, mentions employment as a goal, on top of inflation. This was linked to the initiative to amend the RBNZ act accordingly. The problem with New Zealand moving in that direction is that they "invented" inflation targeting. Et tu, Brute? More and more discussions are focusing in Europe on the need to have the inflation target defined over an average period of time (say 2% over five years). This would mean that having inflation above 2% in some years is not a negative feature. Or have the target above 2%,

b. **Monetary policy should not be intentionally sectoral or have intended distributional effects.** Before GFC, it was accepted that monetary policy should not be sectoral, i.e. should not intentionally have distributional effects. In the early nineties, the Croatian National Bank still maintained the selective, sectoral loans, as they were called, from the primary emission to companies (via banks). It was considered a relic of socialism and a cause of inflation, making the quantity of money endogenous, outside central bank control. It was abolished by mid-nineties. Post GFC, ECB, considered among the most modern central banks, has not only tripled its balance sheet by buying government bonds and extending ultra cheap loans to banks, but – it is even buying corporate bonds.

[4] *Discussions on how to measure inflation, either with CPI, HICP, core or headline inflation seem small issue compared to more global goals.*

Within unorthodox monetary policy toolkit buying bonds from LVMH, Nestle or Shell is considered efficient monetary policy that will improve monetary transmission. So, Corporate Sector Purchase Program (CSPP), as it is officially called, is considered efficient and even necessary, a non-standard monetary policy invention while what the CNB did in the past was a relic of socialism that was pushing inflation up. Since 2017 ECB has been buying corporate assets on the primary market[5]. Otmar Issing (2018) warns that: ”The biggest threat for independence lies in possible actions by the central bank itself. One comes from using instruments with distributional consequences, such as cheap credit to special groups, banks or companies.” Only time will show if Mr. Issing, former chief economist of ECB, was right or CSPP as part of broader Asset Purchase Program by ECB has been a necessary invention, part of "whatever it takes" to save the Euro.

c. **Another change of heart post-GFC is to be seen in interest rates**. In the last century, the first lesson one would learn as a precondition for sound growth and an efficient allocation of resources was to have positive real interest rates. This is Econ 101, is it not? The ECB has nominal deposit interest rates in the negative territory for several years now. And it is not only the ECB. The central banks in Switzerland, Denmark, Japan and Sweden do the same, although not for the same reasons. Negative interest rates sound attractive to economists. So, some experts want to abolish cash so that negative deposit rates on individual's bank accounts could be a tool to fight the next crisis (and stimulate demand). With no cash, households cannot stash money, but must spend it to avoid being taxed with negative interest rates.

d. **View on capital controls has changed.** With the Washington consensus, the idea was that, after the current account liberalisation is fully done, the next step should be a complete liberalisation of the capital account. The free movement of capital around the world would lead us if not

[5] https://www.euromoney.com/article/b12kqkczffm5dx/ecb39s-corporate-sector-purchase-programme-cspp-what-you-need-to-know

to Utopia directly, then at least to continuation of Great Moderation, i.e. the reduction of volatility in the business cycle. Today we know better. For example, the Croatian National Bank (CNB) introduced capital controls around 2005 against the IMF advice and kept it for several years, until the GFC of course. This has understandably created a lot of criticism from the commercial banking community and (too) liberal economists. However, the CNB today is vindicated for its foresight. Capital controls are kosher again. This is a good example how each country should focus on its own specifics and not blindly follow, usually bona fide advice from multinationals or academics.

3. **Why is it difficult to find the new normal?**

About 10 years ago in 2008 during her first visit to LSE the Queen asked why nobody saw the financial crisis coming. Some did see the rise of risks (Ragu Rajan) but the bulk of the profession did not. Why? Because according to Nassim Taleb it was a Black Swan. And for sure there are more black swans swimming in the lake of the international financial community. How does it relate to the question of if there will be a new normal? I do not think we will son have the "new normal" as we did before the GFC because:

a. **Economies are changing rapidly, and so are central banks. In a rapidly changing world, it is difficult to say what is "normal" as normality is usually defined by steady past.** Changes in monetary policy after GFC clearly indicate that consensus of great moderation or "market dominance" (with inflation targeting and price stability) is not the "end of monetary history". As we today understand that Fukuyama's book had a short shelf life, so does a simple approach to monetary policy. We must also keep in mind changes in social attitudes. Populism is one of them. Will it put additional pressure on central bank independence? Will it influence central bank mandates, i.e. by putting more emphasis on employment in the future or subjecting banks to short-term political goals? Questions abound, but answers are few. Another, linked to it, is rising protectionism. There is no doubt that a China-US trade war will have consequences not only for those two countries but for the global economy as well. How will it affect growth, will it have an effect on the way monetary policy is conducted in the future? As discussed previously, central banks typically shy away from intentional distributional policies. But income and wealth inequalities are a hot topic. In the post-Piketty world, not even central banks can ignore these questions. One of the indications of such social changes translating into central banks mandates is the mentioned new PTA in New Zealand. Will others follow?

b. **Financial systems have became more complex and less predictable**. Other important factors to pay attention to are digitalisation of financial services in general and cryptoassests. Digitalisation is changing the landscape of the financial industry very rapidly. There is an abundance of literature on this topic, without a consensus view of the outcome for central banks. Some central banks embrace Fintech and promote their own sandboxes to allow stakeholders to play and see the consequences. Others ban outright trade in Bitcoin, for example. Some play with the idea to issue their own digital currencies, the Central Bank Digital Currency (CBDC), like Riksbank, the Reserve Bank of India, the People's Bank of China, etc. Others, like the Swiss national bank are vocal with warnings on the unmeasurable risks of issuing CBDC. All seem to agree that the distributed ledger technology (blockchain) has a lot of potential, but it is not clear when its daily use will be functional and efficient. In the meantime, Iceland can hope that not all miners will move to their island and that they are left without electricity for their daily use. Obviously, digitalisation is here to stay and expand, so the challenges are how to reap the benefits and, at the same time, adequately regulate and manage risks, especially the systemic ones. Here, I will only mention the growing issue of cybersecurity. With an increasing interdependence and interconnectivity of institutions, including central banks, the consequences of a potential cyber-attack for the stability of the financial system are growing. Artificial intelligence (AI) and machine learning will also play an important role. Will AI replace central bankers one day? Probably governors need not worry about their jobs in the short run. The other day I asked Siri over my iPhone: "Hey, Siri, should the US raise its interest rates?" Siri replied: "My web search turned something up for: US raise interest rates" and suggested five articles, all recent and relevant. I can only wonder if Bezos' Alexa would have a better response. But, I am sure that in five years from now their answers will be more sophisticated. Obviously, there are benefits as well as risks in using AI for central banks. This is well explained in Wuermeling (2018). Some central banks like the Bundesbank (and I am sure others) are using AI to monitor parts of the financial markets. Combined with big data and data analytics, and central banks have plenty of it, AI could be wisely used to increase our knowledge. But supervisors should beware as relying too much on AI can make markets less stable. We do not know, so let us be cautious. Remember the LTCM Fund? Two Nobel laureates were certain they had managed all their risks. The real world proved them wrong.

My last comment on AI is that, to the best of my understanding, AI can deal with measurable risks. As the old saying goes: "Not everything that counts can be counted, and not everything that can be counted counts.". This is the very nature of human behaviour and our economic system.

Digital currencies by central banks, cashless societies, how will it affect the traditional transmission mechanisms, we do not know yet. Are we facing secular stagnation? Monetary policy has been shaped by political influences. By taking additional tasks on their back, central banks became more vulnerable to political influences. So has their environment. And they are part of societies, so as societies values change, so will central banking. Look at Trump and its pressure on the FED, or Turkey or India. Black swans indicate that we shold not try to find a "new normal" and aim economies with monetary policies towards those standards (independend central banks, inflation targeting aiming inflation "close to but below 2%) but make them resilient.

c. **Globalization has put focus on all countries, not just advanced ones. Diversity among countries is a challenge for "new**

normal". Before GFC, it seems that globalization forces and in general convergence of countries were justifying the "one size fits all" approach. For example, Basel supervision standards are supposed to be valid for most countries, having in mind "proportionality". But I think that even before GFC those "normal" standards did not take into account diversity among countries. Benchmarks in medicine are produced by large numbers of observations (we know that people that smoke have a higher probability to get lung cancer. However some smoke their whole life and do not get one and some unfortunately have lung cancer without ever smoking a cigarette, but probabilities are high) and are averages. I doubt that in medicine there is a "one size fits all" approach in many illnesses. And variability among economies in the world is much larger than among human beings on the planet. Height and weight of humans have much less extremes or standard deviation than say GDP/per capita, inflation, population of countries and probably any other indicator of an economy. Saudi Arabia has a PPP GDP about 40 times larger than one of its border countries, Yemen. Think what would that mean for say adult height? Or even weight? Blood pressure etc... And this variability among countries has to be taken into acount when discussing a "new normal". Therefore applying averages to all countries does not sound right to me. So, one should expect not to have one "new normal" but a lot of "new normals". Similar to the concept of multiple equilibria. Or even more so. Modern trends in medicine refer to personalized medicine. One tries to tailor the treatment for a patient based on one's genome. It does not mean that each country should have its "normality", some could be grouped. Probably similar countries could have similar "normal" indicators, but comparing for example Ethiopia with USA does not make much sense. How can one even think of giving similar advice to those so diverse countries?

4. What to do?

If it will be difficult to have a simple "new normal", what should one do? It is much better to work on resilience, be prepared for rapid changes and be unorthodox. Actually a lot of measures that central banks (advanced ones) have used since GFC to save the financial world from melting down are called unorthodox. Well it seems that more than a decade since it started, now they are quite "orthodox" i.e. normal. What the future brings is anyone's guess. Therefore, let's work on buffers and resilience, be innovative and "think outside the box".

Will there be a new period of consensus within central banking or new normal in the distant future? Not possible to say, but it does not seem we will have one in the next couple of years. Therefore, my final humble advice to policy makers in any country is: think about your country and first and foremost trust yourself. Try to find the best ways on how to cope with future challenges that are appropriate for your country and to assist your people.

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MONETARY POLICY AMIDST RAPID STRUCTURAL CHANGES: BANK OF ALBANIA'S EXPERIENCE WITH THE POST-CRISIS "NEW NORMAL"

*Elisabeta Gjoni**

Dear Mr Chairman,
Dear ladies and gentlemen,

It is a great pleasure to be among esteemed colleagues, here at Bank of Albania's 2018 Annual Conference, and to be able to discuss and share our accumulated knowledge and experiences on such important and contemporary topics for us policy-makers.

I will focus my contribution today on sharing with you the specific policy-making experience of Albania in dealing with the post-crisis rapid structural changes and navigation through uncharted "new normal" monetary policy territory. In this, the preceding presentations by Guido and Dimitris gave an invaluable insight into better understanding what has happened in Albania. In a way, this a mirror image of events in other countries.

My colleagues discussed extensively and shared their insights on the unprecedented steps and unconventional policy measures undertaken by Central Banks in the developed world to calm financial markets in the aftermath of the global economic and financial crisis. In addition, discussion focused on monetary policy effectiveness operating at the zero lower bound (ZLB) and the challenges facing policymakers.

* *Elisabeta Gjoni, First Deputy Governor, Bank of Albania*

Several structural impairments were identified, such as:

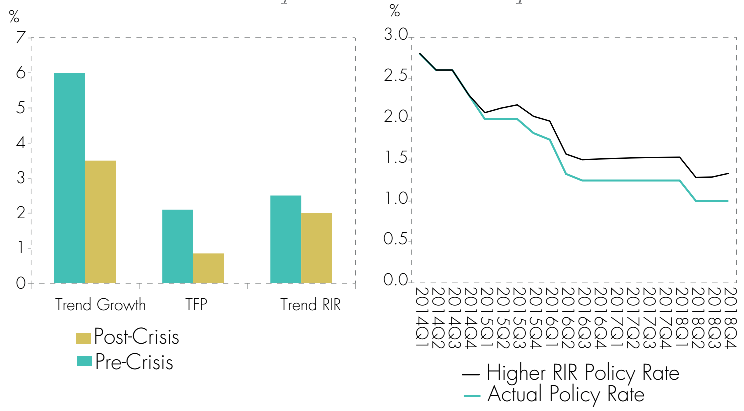
1. Secular decline in natural real interest rates in the developed world due to decrease in productivity and aging populations (Laubach & Williams (2001), Giammarioli & Valla (2003))
2. Impaired transmission mechanism because of stressed and disrupted financial markets in the aftermath of the crisis (IMF (2014))
3. Continuous flattening of Phillips Curves due to intensified globalisation, higher central bank credibility and more detached long term inflation expectations from short-run developments (Blanchard (2016), Watson (2014), Yellen (2012)).

Furthermore, several potential solutions were proposed, focusing on modifying Central Bank mandates but also enhancing its policy toolkit to allow for more flexibility in decision-making. These topics were extensively covered and the conclusions were comprehensive and invaluable.

My presentation today focusing solely on the Albanian experience will start with the crisis implications for monetary policy in Albania and the main challenges we have had to deal with. Then, I will speak on the policy responses we have undertaken, the outcomes and results achieved and I will conclude with some takeaways and lessons learned.

One of the primary challenges we have had to take into consideration in policymaking is the declining equilibrium or natural real interest rates, exacerbated by the economic and financial changes that happened after the crisis. More worryingly though, this decline reflects also other underlying structural changes in the economy. According to recent research in the Bank of Albania (Çeliku, Çela & Metani (2018)), trend growth rate of the Albanian economy has slowed down post-crisis, largely driven by decelerating TFP growth and by decelerating productivity of production factors. The trend growth rate is a crucial structural component guiding the evolution in time of natural real interest rates. Furthermore, changing demographic trends are closely linked to a slow but steady increase in saving rates, putting further downward pressure on natural real interest rates.

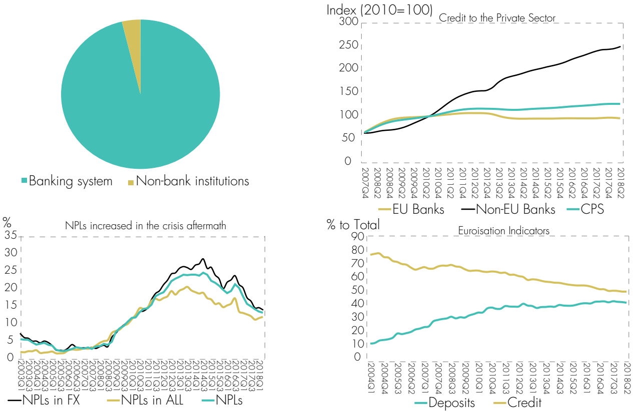
Chart 1 Crisis implications – Lower RIR equilibrium



As explained meticulously earlier by Dimitris, it is very important to factor-in the decline in the equilibrium interest rate in the process of monetary policy decision-making. First and foremost, we need to constantly be aware and update our estimations on the evolution of the equilibrium interest rates in time. Pinpointing its, at least approximate, position in time serves well the purpose of not inadvertently committing a policy error. To illustrate this, on the right chart, we see the implications of not taking properly into consideration the impact of the decline in equilibrium real interest rates on the monetary policy space in Albania. The black line illustrates our actual monetary policy path, ex-post, when we are fully aware of the decline and behaviour of the equilibrium interest rate. The red line illustrates our hypothetical behaviour if we had not factored in the decline.

Monetary policy decisions would have been in the right direction and consistent with the cyclical behaviour of the economy. However, the intensity of the monetary policy stimulus would have been sub-optimal and we would have been relatively more restrictive without wanting to do so. That would have entailed both objectives of inflation target convergence and output stabilisation to be delayed.

Chart 2 Crisis implications – Weakened transmission mechanism



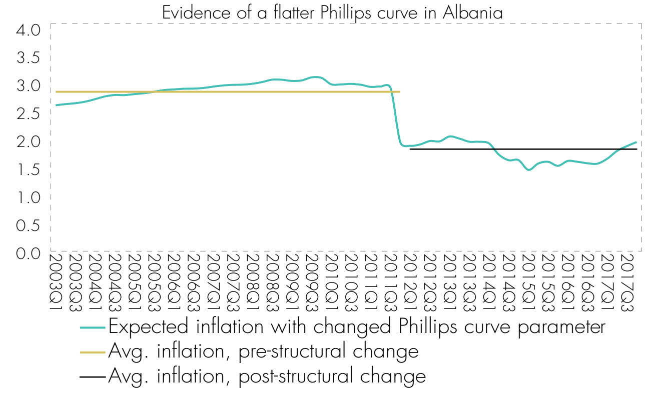
A second challenge that complicates monetary policy-making in Albania is linked to the prospect of a weakened transmission mechanism. The latter has been exacerbated by some structural weaknesses in the composition and functioning of the financial market, which has reduced somewhat the efficiency and scope of the monetary policy transmission mechanism. In the upper-left chart, I have included a summary of the structural composition of the financial market in Albania. The latter is largely bank-based. This explicitly entails no direct transmission onto asset prices or other forms of capital financing.

The next chart, on the upper right-hand side, shows the ownership composition by origin of banks operating in the country. EU-based banks are predominant. While it is a highly beneficial market characteristic, in terms of having quality banks with an esteemed international reputation, it also exposes us to restrictive EU regulation at the core that curbs EU banks' appetite to take risk in Albania, regardless of economic conditions in the country. Post-crisis, this has induced a slowdown in their intermediation activity and a deleveraging from the country. Despite the whole banking sector having ample liquidity to finance economic activity and dependent largely on domestic financing, the expansion of lending activity post-crisis has come largely from non-EU banks, as indicated by the red line in the Chart.

Beyond the structure of the financial market, two other underlying and inhibiting structural weaknesses have complicated the transmission of monetary policy impulses to the real economy. Firstly, despite declining steadily from a peak of almost a quarter of the loan portfolio of banks, the still prevailing high NPLs rate have strengthened the perception of credit risk and have had a direct implication for credit growth.

The second factor that we cannot neglect and is a more challenging structural weakness to tackle, is the high presence of foreign currency, the euro in our case, on both sides of the balance sheet of the banking sector. This renders the full transmission of monetary policy impulses to all the sectors of the economy even more difficult. In this case, monetary policy can only affect interest rates in euro through risk premia fluctuations, the latter largely dependent on domestic economic conditions.

Chart 3 Crisis implications – Flattening of Philips Curve



Similar to trends in the developed world and other developing countries, Albania has also experienced a flattening Philips Curve. Recent empirical research at the Bank of Albania (Çeliku et al. (forthcoming)) tries to identify the main factors behind this development. It concludes that both labour market structural dynamics and a slight de-anchoring of inflation expectations are the two most crucial underlying adverse factors. Of course, all this shift in the behavioural structure of the Phillips Curve requires monetary policy to respond accordingly. As a consequence, the monetary policymaking process has become more forward looking and pro-active, tracking more attentively deviations of inflation expectations from target and becoming more aggressive in its response.

Chart 4 Policy response

But what are the policy responses we have undertaken to address these major challenges?

Obviously, any policy response needs to be similarly complex, comprehensive and well-designed to the challenges it has been designed to tackle. We have acted accordingly. We have made use of all conventional monetary policy tools as well as some additional unconventional instruments. We have furthermore implemented a range of structural reforms to strengthen the transmission mechanism as well as macro-prudential measures to complement and support monetary policy.

On the monetary policy front, the policy rate was lowered several times, from 6.25% to 1.0%. We extended the spectrum of eligible collateral for our bank refinancing operations, and we injected ample and long-term liquidity. However, what is more specific for this period, we made regular and consistent use of unconventional forward guidance, through which we started to communicate our expected future policy path along with economic conditions that would warrant a change in the policy stance. Futhermore, we introduced a package of macro-prudential countercyclical measures aimed at:

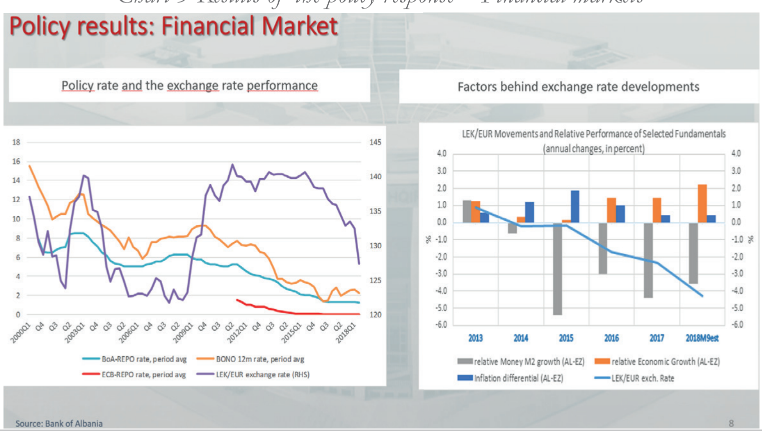
- expanding credit growth, by reducing risk weights for credit portfolio growth above a specific threshold;
- easing off debt service burdens, by encouraging early loan restructuring;
- discouraging bank funds' outflows, by increasing risk weights for new placements abroad.

Furthermore, to improve the monetary policy transmission mechanism, several structural reforms were undertaken, primarily to tackle the high NPLs and address the euroziation in the balance sheets of the financial sector.

- A comprehensive plan for NPL resolution was introduced in 2015. The latter is in its implementation phase and has already contributed to marked decline in the NPL level.
- Last year, we introduced a de-euroziation strategy to promote intermediation in domestic currency and make lending in foreign currency more expensive.

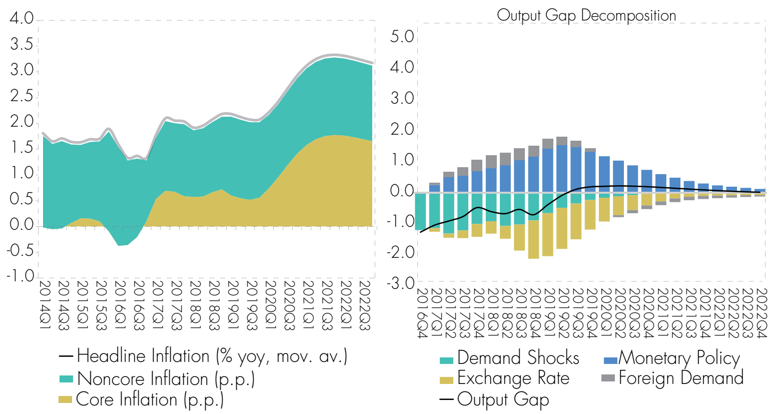
I must add here that we put a lot of effort and time to set up contingency planning, and scenarios with unconventional tools available to the Bank of Albania to use when needed.

Chart 5 Results of the policy response – Financial markets



The measures and structural reforms taken at the central bank aimed at tackling vulnerabilities in the financial market generated very discernibly visible positive results with significant and broad-based impacts. On the left Chart, we can clearly notice that monetary policy impulses have been fully transmitted to financial market interest rates. Consequently, financing conditions were eased significantly, both for households and businesses, boosting consumption and investment expenditures, which are key growth drivers domestically. Furthermore, credit growth is still very gradually, albeit steadily, progressing to our desired levels. We would have envisioned a faster expansion and progress here, but we have to be patient and allow the necessary time needed for structural reforms we have undertaken to realise their full potential.

Chart 6 Results of the policy response – GDP & Inflation



In terms of GDP growth and inflation, we have achieved good results. Core inflation is trending upwards, the output gap, on the right chart, is closing, and the economy is expected to operate above the potential in the years ahead. Favourable financing conditions, a robust labour market and a steady income and profit growth are expected to continue to support private consumption and investment. The sustained economic expansion and increasing capacity utilization levels are expected to support the strengthening of inflationary pressures. We forecast inflation to converge gradually to target in the medium term and economic growth to average at around 3% to 4%, similar to current growth rates.

Chart 7 Lessons for the future

What are the main lessons that we have learned from these developments?

It is clearly evident that we have to focus and remain committed to our main objective, price stability, as well as be clear and transparent about policies undertaken to ensure it. We should avoid overlapping or burdening it with unattainable or conflicting objectives. Also, there is ample space to strengthen our approach to central bank operations. One of the obstacles that we have faced and that we see imperative to improve is further communication and coordination with other relevant institutions. This is of utmost importance. On the other hand, it is equally important for contingency planning to be part of the standard policy toolkit. In addition, we need to make continuous use of selective unconventional tools proven to be successful in Albania. We should not be shy to make use of them when needed regardless of the complexity of the situation we are in.

Having discussed at detail the policymaking experience in Albania, I would like to make a quick wrap-up of the points made in my presentation. Yes, monetary policy in Albania was clearly affected by the aftershocks of the global financial crisis. Our response required the use of a complex monetary policy toolkit - conventional and un-conventional - and especially reforms and measures targeting key structural changes. This was very important for us. For the future, we should strive to enhance our policy options and increase our potential choices. We need to be focused on one very clear objective, which has to remain price stability.

Thank you!

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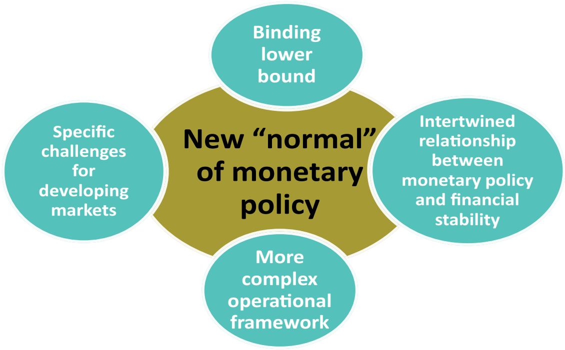
THE "NEW NORMAL" OF MONETARY POLICY

*Guido Della Valle**

I would like to thank the organizers, BoA and LSE, for having invited me as a speaker to this conference. It is a great honor and a great pleasure to be back in Tirana, where I have very fond of memories of my time as IMF Advisor to the Bank of Albania and where I feel at home.

Chart 1 Introduction and the context



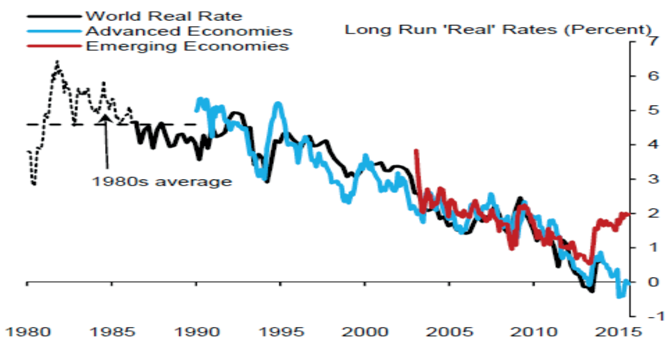
* *Guido Della Valle, IMF consultant and former IMF Resident Advisor to the Bank of Albania*

In my presentation I will argue that the new "normal" of monetary policy will be characterized by:

1. An effective lower policy rate bound that will become more frequently binding in a context of lower equilibrium real interest rate
2. A stricter and more intertwined relationship between monetary policy and financial stability;
3. These factors have implications on the monetary policy operational frameworks and monetary policy toolkit with the exclusive reliance on steering short-term interest rates towards a Taylor rule-consistent policy rate called into a question;
4. Developing markets have specific features that will make the tools and approaches developed in advanced economies not immediately applicable. This will require more research and operational experience.

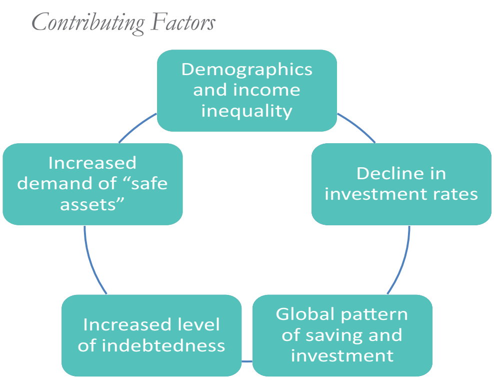
In my presentation I will focus on the first two features of the "new normal" via which I will illustrate the consequences on the operational frameworks and the challenges for the developing markets.

Chart 2 The low interest rate environment



Back in the 1980s, world real interest rates averaged around 4%. With an inflation rate of 2%, this meant that nominal interest rates averaged around 6% over the course of a typical cycle. At those levels, monetary policy would have plenty of room for maneuver above the zero bound – 6 percentage points - to cushion the effects of troughs in the business cycle. Over the past 30 years, however, world real interest rates have been in secular decline. At the dawn of the crisis, they had halved to around 2%. Since then they have fallen further to around zero, perhaps even into negative territory. With a 2% inflation target, that would now put nominal interest rates, on average over the cycle, at 2%. And that would mean there is materially less monetary policy room for maneuver than was the case a generation ago.

Chart 3 The low interest rate environment



The observed decline in the equilibrium real interest rates can be attributed to several factors including:

i. Demographics, with a higher share of middle-aged population compared with those aged 65 as the middle-aged have a higher propensity to save. The greater the proportion of the total population that is middle-aged, the larger the quantity of saving that will occur. Bean et al. (2015) note that falling interest rates have coincided with an increase in the high-saving middle-aged population's share of total population, relative to the share of the population that is aged 65 and over;
ii. Greater income inequality: Since the rich have a higher marginal propensity to save, it is intuitive that rising inequality within countries will result in higher saving rates. As documented by Atkinson et al. (2011), the wealth and incomes of the richest segment of the population have been rising much faster than

that of the rest of the population over the past several decades.

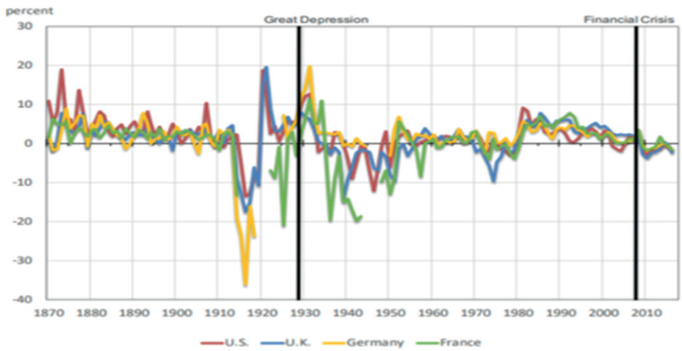
iii. A general decline in investment rates due to a slowdown in technological advances;

iv. A global savings glut, with higher income in emerging markets with underdeveloped capital markets: higher income in emerging markets with underdeveloped financial markets has led to a surge of savings recycled into advanced economies. Bean et al. (2015) find that China's partial integration into global financial markets and the associated capital outflows have put downward pressure on interest rates. Rachel and Smith (2015) suggest that this effect has been exacerbated by a significant increase in foreign exchange reserves in many emerging markets as a precautionary measure following the Asian financial crisis in 1998;

v. Increased levels of private and public indebtedness with recurrent deleveraging attempt that sap demand, leading to lower rates: the increased levels of indebtedness in advanced economies may be both a consequence and a cause of low interest rates. When debt levels are high, an income shock may cause households, private sector agents, and even governments to reassess their debt position and begin to pay down their debt to a more sustainable level. When done at a macroeconomic level, this can weigh on demand (Vlieghe, 2016). To stimulate demand, the natural reaction of a central bank is to lower rates. However, if households are determined to delever then this deleveraging process will continue regardless and will continue to sap demand from the economy, leading to lower rates.

vi. Finally, as Del Negro et al. (2018) have highlighted, the lower real interest rates may be the result of the heightened demand of "safe assets" and of the higher premium investors are ready to pay for safety and liquidity. Treasury bonds are valued not only for their financial returns, but also for their safety and liquidity. Del Negro et al. attribute much of the steady decline in Treasury rates since the late 1990s to an increase in the premium that investors are willing to pay for those characteristics.

Chart 4 Three-month ex-post real rates since 1875



Source: Gourinchas, P-O., H. Rey, 2018.

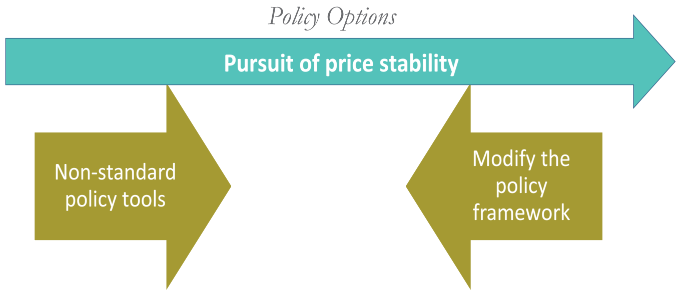
One might argue, that several of the factors contributing to lower real interest rates are cyclical in nature and real interest rates are due to return back to "norm". This argument does not seem compelling. First of all, if some of the factors contributing to lower real interest rates are surely cyclical, others may be more structural and long-lasting. Furthermore, If we look back at the real rates since 1875 calculated as the nominal interest rate on 3-months Treasuries minus realized CPI inflation, since 1950, as evidenced in the slide, it is rather the high real interest rates of the 1980s to represent an exception and a parenthesis necessary to engender the dis-inflation during that decade after the repeated inflation shocks and upward inflation surprises of the 1970s.

If this is the case, the Effective Lower Policy Rate Bound will become much more frequently binding.

A recent research by Kiley and Roberts (2017) illustrates the potential severity of the problem. Based on simulations of econometric models, these authors show that the use of conventional, pre-crisis policy approaches could lead to policy rates being constrained by the zero lower bound (ZLB) as much as one-third of the time, with adverse effects on the Fed's ability to hit its 2 percent inflation target.

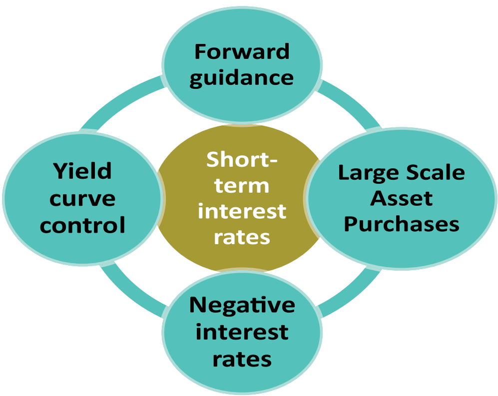
3. POLICY RESPONSE

Chart 5 The low interest rate environment



There are two broad possibilities with which central banks can respond to a low interest rate environment. They are interrelated and not mutually exclusive. First, rather than relying on the management of short-term interest rates alone, monetary policymakers could make greater use of new tools developed in recent years. A second broad response to the problem is to modify the overall policy framework, with the goal of enhancing monetary policymakers' ability to deal with such situations.

Chart 6 Monetary policy toolkit



Regarding the new tools developed during the crisis and widely deployed, the forward guidance, the large-scale asset purchases, also known as quantitative easing, the negative interest rates and the yield curve control that, by now, can be considered almost part of the standard monetary policy toolbox of advanced economies, should be mentioned. They have become the new tools advanced economies have deployed at or close to the lower effective bound.

There is already a very substantial body of literature on most of these tools. It is however useful to point out two aspects.

First, the increasing reliance on these instruments complicates the operational frameworks and entails a shift away from an exclusive reliance on short-term interest rate management. Cœuré argues that "the quantity of liquidity to be supplied could become a quasi-intermediate target almost on a par with the level of the policy rate" (Cœuré, 2016a).

Second, the experience of developing markets with these non-standard instruments is more limited. There might be several features of developing markets that make these instruments relatively less suitable and effective in these context so that the question remains of what would be the most appropriate instruments to cope with a low interest rate environment in developing countries.

Chart 7 Developing markets features

Larger, difficult-to-forecast shocks and less sophisticated forecasting capabilities

- They make "Odyssean" forward guidance undesirable and "Delphic" forward guidance unlikely to be abided by.

Under-developed capital markets

- It is more difficult to anchor medium- and long-term yields of a wide range of financial instruments within a bank-centric financial system funded via short-term deposits.

Greater risk of fiscal dominance

- It may impair the effectiveness of monetary policy and contribute to a unsustainable policy mix

Greater vulnerability to destabilizing financial stability developments

- Interest Rates need to remain positive at a spread over the "anchor" currency to prevent asset redenomination, destabilizing capital flows and bank disintermediation while encouraging saving and capital formation.

In my view, the developing markets' features that impair the effectiveness of the recent non-standard monetary policy instruments deployed in advanced economies include:

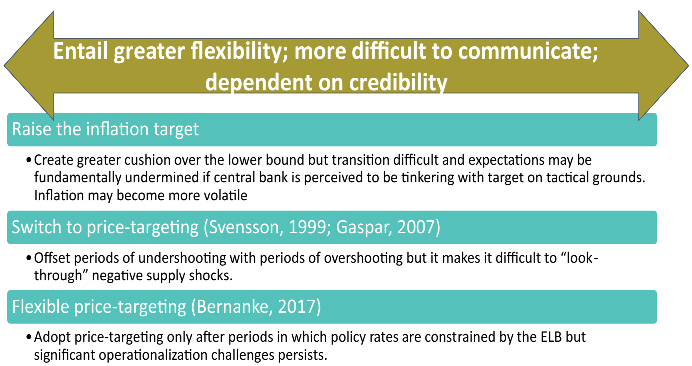
1. Larger, difficult-to-forecast shocks and, with due exceptions, less sophisticated forecasting capabilities that make "Odyssean" forward guidance undesirable and "Delphic" forward guidance unlikely to be abided by.

2. Under-developed capital markets that make it more difficult to anchor and steer medium- and long-term borrowing and lending costs in bank-centric financial systems relying on short-term deposits intermediated by the banking system mostly into variable rate loans.

3. Greater risk, or perception thereof, of fiscal dominance that may impair the effectiveness of monetary policy and contribute to an unsustainable policy mix. This may increase the risks and reduce the benefits of large-scale asset purchases.

4. The greater vulnerability to destabilizing financial system developments lifts the effective lower bound and make it unlikely that negative interest rates may be deployed in developing markets due to the need to maintain a positive spread vis-à-vis the anchor currency and positive nominal interest rates (Della Valle et al. 2018).

Chart 8 Modify the policy framework



The second set of options to cope with a low interest rate environment aims at altering more fundamentally the monetary policy framework rather than introducing new instruments within the current frameworks.

Although the different approaches have been widely discussed in the US, they have not been adopted so that it may be a bit premature to consider them part of the new norm of monetary policy.

They include the idea of raising the inflation target. The idea is simple and intuitive. If, as a consequence, of lower equilibrium real interest rates, the effective lower policy bound becomes more frequently constraining, one may lift the inflation target to have a greater cushion over the lower bound. But this idea ignores the one-off costs to effect the transition to a higher target, the impact of central bank's credibility if it were perceived to be tinkering with the target on tactical grounds and the higher inflation volatility at higher levels.

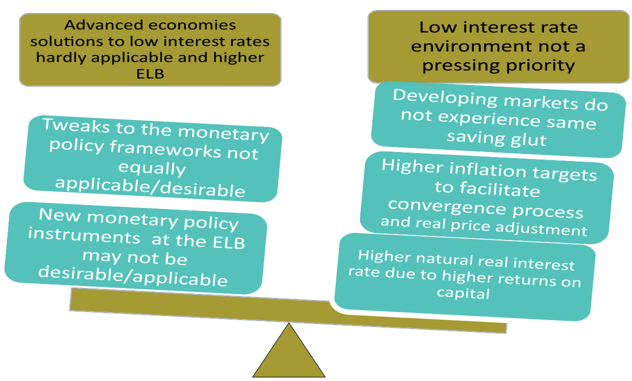
They also include the idea of switching to price-targeting. Effectively, a price-level targeting central bank tries to keep the long-run average inflation rate close to a targeted value, say 2 percent. The principal difference between price-level targeting and conventional inflation targeting is the treatment of "bygones." An inflation-targeting central bank aims to keep inflation stationary around its target, an approach that allows policymakers to "look through" a temporary change in the inflation rate, so long as inflation returns to target after a time. A price-level targeter, by contrast, commits to reversing temporary deviations of inflation from target, by following a temporary surge in inflation with a period of inflation below target; and, likewise, following an episode of low inflation with a period of inflation above target.

Although a once-and-for-all commitment to such an approach is theoretically optimal (under full credibility), in practice the commitment to reverse the effect of supply shocks by engineering a period of below-target inflation might not be credible; if not, efforts to offset positive inflation shocks would likely be costly.

A third option, which is a variant of the second one, is to adopt a flexible price-targeting, that is to apply a price level target and the associated "make-up" principle only to periods around zero lower bound episodes, retaining the inflation-targeting framework and the current 2 percent target at other times. This type of policy would result in temporary overshooting of the inflation target in order to make up for the previous period of undershooting. But such policy is difficult to calibrate, communicate and over time may undermine credibility. One additional challenge of the proposed framework is specifying a path for the policy rate immediately following lift-off that smoothly and gradually eases inflation back down to target and facilitates a gradual adjustment of the labor market.

Besides these drawbacks, in my opinion, these options entail greater central bank flexibility, may be more difficult to communicate and their effects more critically depends on credibility. Therefore they are, *a fortiori,* not suited in contexts in which the central bank should still assert its inflation targeting credibility and there are greater risks that the central bank may be subject to pressures to tweak the frameworks, by, for instance, further adjusting the target or allowing a longer than warranted inflation overshooting.

Chart 9 Developing markets concluding considerations

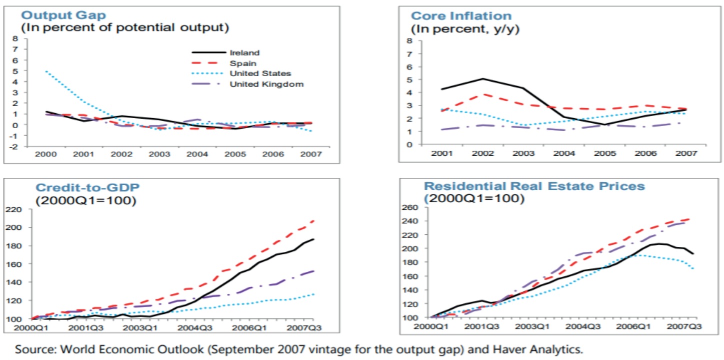


Let me conclude this section of the presentation with some remarks concerning developing markets.

If it is true that the advanced economies reaction to low interest rates may not be directly applicable to developing markets and that developing economies may have a higher effective lower bound. It is, however, equally true that the low interest rate environment problem does not feature to the same extent in emerging markets as they do not experience the same saving glut and demographics, have normally higher inflation target and higher natural interest rates.

4. MONETARY POLICY AND FINANCIAL STABILITY

Chart 10 Close-to-target inflation and output gaps not sufficient for macro stability

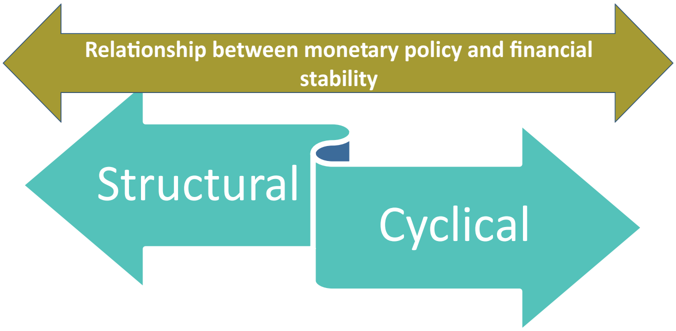


Source: World Economic Outlook (September 2007 vintage for the output gap) and Haver Analytics

Something else the Global Financial Crisis (GFC) taught us is that close-to-target inflation and output gaps and a focus on the micro prudential supervision and regulation are not sufficient for macroeconomic stability. Financial stability risks grew, largely undetected, beneath the surface of seemingly close-to-target inflation and output gaps. There was a sharp increase in the ratio of credit to GDP and in real estate prices—two important measures of financial vulnerabilities – evidenced in the slide. The GFC also taught us that financial crises are costly, in terms of long-lasting output losses, and policy should aim to decrease the likelihood of crises, not only rely on dealing with their repercussions once they occur.

The new Keynesian models' assumption that—under broad conditions— price stability would keep output around its natural level was shattered by the GFC as the materialization of financial stability risks brought about a large, and long-lasting output loss.

Chart 11

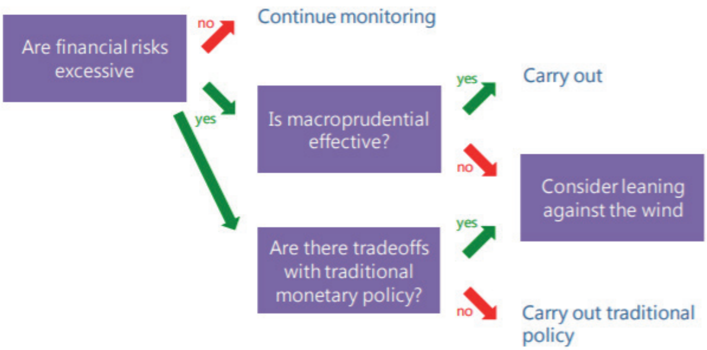


There are two dimensions of the relationship between monetary policy and financial stability: a structural and a cyclical dimension.

Structural financial stability policies rely on capital and liquidity requirements, as well as on limits to exposures to foreign exchange or redemption risks. Recent work suggests that strong policies aimed at structural stability can materially improve systemic resilience. In these cases, the burden on cyclical policies—including on monetary policy— to support financial stability could be lighter. However, empirical evidence and my experience of the field prove that such structural policies have significant impact on the effectiveness of the monetary policy transmission mechanism and the design of the monetary policy operational framework.

The cyclical dimension refers to the extent in which monetary policy should be used, in certain circumstances, to "lean against the wind" and contribute to mitigate major sources of financial stability risks that, if materialized, may have a significant, long-lasting impact on output.

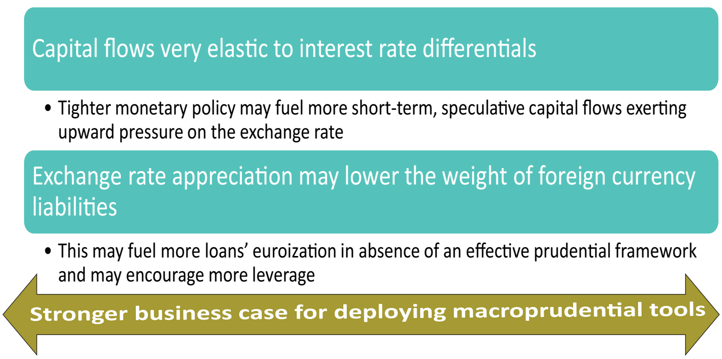
Chart 12



Source: IMF staff.

Not surprisingly, given the limited empirical evidence and the lack of an accepted theoretical framework, the question of the extent in which monetary policy should be used to lean against the wind is a matter not entirely sorted yet. Influential economists and policymakers espouse very different views, some praising the virtues of monetary policy to affect lending and potentially risk-taking behavior in all markets, others underscoring the risks and costs of using one instrument for two targets. The scenario under which it could be used is illustrated in the slide. It is a scenario in which there are growing financial risks against which macro prudential measures are perceived to be ineffective and there are tradeoff with the traditional monetary policy reaction function calling for a tighter

Chart 13



than otherwise warranted monetary policy to burst asset bubbles and prevent later more severe output losses in case the risks materialize.

If the question of the extent in which monetary policy should be used to lean against the wind is a matter not entirely sorted yet in advanced economies, it is even more problematic in developing economies. The business case for "leaning against the wind" monetary policy in case of a build-up of financial stability risks is less compelling in developing markets for several reasons. In these economies, tighter monetary policy may exacerbate financial stability risks rather than attenuating them due to the higher elasticity of capital flows to interest rate differentials and the balance sheet euroization. In fact, tighter monetary policy in response to financial stability risks may fuel more short-term, speculative capital flows exerting upward pressure on the exchange rate. At the same time, the exchange rate appreciation may lower the weight of foreign currency liabilities fueling more loans' euroization and leverage in absence of an effective prudential framework.

Chart 14 Structural major impact of capital and liquidity regulations on market functioning and market behavior

They penalize the interbank market and the circulation of liquidity

- Pre-crisis operational frameworks relied on the interbank market for the redistribution of liquidity
- In the post crisis operational framework banks will rely more on central bank's intermediation role

They make financial arbitrage more difficult

- More difficult to steer interest rates unless central banks interact with a plurality of counterparties in a plurality of markets and segments

Banks interaction with central bank increase as consequence of regulation and Basel III ratio compliance

- It is doubtful the extent in which central banks should and could hinder the use of their facilities for regulatory purposes.

There is another dimension of the relationship between financial stability and monetary policy: the structural dimension. Structural financial stability policies while enhancing the overall financial system resilience, thereby reducing the likelihood of crisis against which monetary policy may need to lean against, have major implications on the functioning of financial markets, particularly on the functioning of the money market, which is the starting point of the transmission mechanism.

I think they have three major implications.

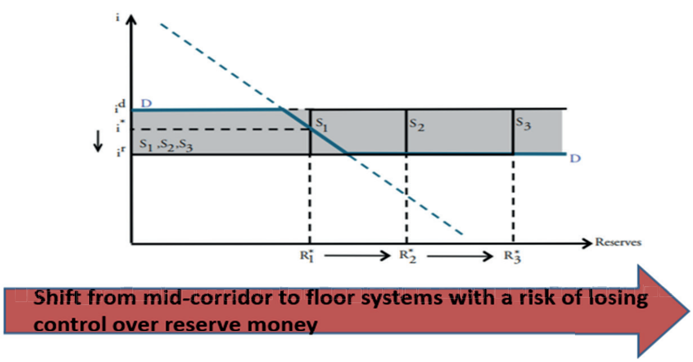
First, the penalize the interbank market and the circulation of liquidity. Most of the pre-crisis operational frameworks relied on the interbank market for the redistribution of liquidity. In the post cris operational frameworks, banks will likely rely more on the central banks' intermediation role.

Second, they make financial arbitrage more difficult and more costly. This mat make it more difficult to steer short-term interest rates close to the policy rate and minimize their volatility unless the central bank interacts with a plurality of counterparties in a plurality of markets and segments.

Third, banks interactions with central banks increase as consequence of regulation and Basel III ratio compliance. It is doubtful the extent to which central banks should and could hinder the use of their facilities for regulatory purposes. These implications may call for changes in the way central banks interact with markets.

I think they call into question the pre-crisis operational frameworks in which central banks provided to the market the precise amount of reserves necessary to stabilize short-term interbank rates at the mid of interest rate corridor and relied on the interbank market to redistribute such liquidity while keeping the suite of interest rates in different segments, once adjusted for risk, in line with the central policy rate.

Chart 15 Major impact of capital and liquidity regulations on market functioning and market behavior



In other words, if central banks cannot rely any longer on the interbank market, the effectiveness of mid corridor systems may be questionable.

This is acknowledged by the ECB, Cœuré (2016b), that in a 2016 speech at Jackson Hole explicitly acknowledged that, quote: "In the new regulatory environment there may be a need to accommodate a structural excess demand for liquid and safe financial claims. This may call for a framework where the central bank can separate the level of reserves from the level of policy rates on a permanent basis. Fixed-rate full allotment would support such a disentangling of interest rates from liquidity conditions."

This new operational framework is in essence a shift from a mid-corridor targeting a market rate to a floor system or to a mid-corridor system with the policy rate attached to a central bank instrument (Adrian et al. 2018). However, while in a mid-corridor system targeting a market rate, central banks had to tightly control and calibrate money supply, in a floor system or in a mid-corridor system with the policy rate attached to a central bank instrument, they may lose control over money supply as the short short-term operational target may be achieved with different quantities of reserves as displayed in the slide. They may be tempted for all kind of reasons to inflate money supply beyond what strictly necessary with negative fiscal and exchange rate repercussions.

These risks may be incumbent not only to developing countries central banks with transitional monetary policy frameworks retaining elements of money targeting but also to fully fledged Inflation-Targeting (IT) countries in which there is still a need to tightly control the size and composition of the balance sheet.

5. CONCLUSIONS

The GFC has not shattered the key planks of pre-crisis monetary policy, but it has highlighted the necessity of using a plurality of new tools in a low interest rate environment and it has enhanced the role of macro prudential policies to prevent the build-up of financial stability risks, identify them at an early stage to deploy appropriate instruments and increase the overall system resilience to financial stability shocks.

Key questions of the post crisis new norm remain unanswered so that the new "norm" of monetary policy is still a work in process.

At the same time the macro prudential framework is still being refined, enhanced and central banks need to get acquainted with new indicators, and tools (including counter-cyclical buffers).

Some preliminary conclusions can however be drawn at this stage: Rather than a new norm we might have a plurality of different twists as also evidenced by the different non-standard instruments deployed during the crisis;

Specific features of developing and emerging markets make some of the arrangements of advanced economies undesirable or not applicable there so that more research and empirical evidence will be needed on most appropriate solutions in those contexts.

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SECOND SESSION:

FINANCIAL GLOBALISATION AND THE EVOLUTION OF GLOBAL AND REGIONAL COOPERATION ARRANGEMENTS

This panel considers the experiences and lessons from several emerging economies; the coherence and complementarity in the newly emerged safeguarding landscape; and implications for home-host supervisory collaboration with non-members.

Chair: Natasha AHMETAJ, Second Deputy Governor, Bank of Albania

THE END OF THE GLOBAL FINANCIAL SAFETY NET?

*Charles Wyplosz**

This is a summary of a recent study (de Gregorio et al., 2018) on the IMF, written jointly with José de Gregorio, Barry J. Eichengreen and Takatoshi Ito. We revisit what has changed at the IMF since a previous report published twenty years ago (de Gregorio et al. (1999).

1. IMF RESOURCES

Table 1 presents the resources of the IMF at the end of 2017 in billions of US dollars. The quotas have doubled a couple of years ago. These resources are complemented by two borrowing arrangements, NAB and Bilateral borrowing Arrangements. The total stands at $ 1400 billion, which is a bit less than 2% of world GDP. The bad news is that the NAB agreements will start expiring in 2022, unless they are renewed. The bilateral borrowing agreements will start expiring in 2020, unless renewed. Renewal requires that each and every government agrees, including the USA. At this stage, obviously we don't know whether the agreements will be renewed. If yes, which ones for what amounts. If not, the resources of the IMF will be halved from their current level. This threat is not new. Since its creation, the IMF has periodically faced threats to its resources.

* *Charles Wyplosz, Professor of Economics, The Graduate Institute, Geneva*

The current political circumstances are more worrisome, however.

Table 1. IMF Resources

	End of year		
Source	2000	2008	2017
Quotas	306	316	691
New Arrengaments to Borrow (NAB)	76	76	265
Bilateral borrowing	n.a.	n.a.	450
Total	382	392	1,407
Percent of Global GDP	1.13	0.62	1.77

n.a. = not applicable; IMF = International Monetary Fund
Notes:
(1) Individual items may not be total because of rounding.
(2) All nondollars figures are converted to US dollars from Special Drawing Rights (SDR) at the January 24, 2018 rate of $1.4547 per SDR. (The rate on March 20, 2018, was 1.4509 per SDR).
(3) Bilateral borrowing includes some commitments that have not yet been formalized; see footnote 4.
(4) IMF financial resources are not all usable in IMF lending operations because the external financial condition of some countries is too weak for them to fulfill their commitments; on average about 15 percent of the total would not be avaible, a larger percentage for quota commitments and a smaller number for NAB and bilateral borrowing sources because the latter are with member countries that are generally in stronger external financial positions.

Source: Edwin M. Truman, "IMF quota and Governance Reform Once Again," PIIE Policy Brief 18-9, March 2018. Table 1.

2. REGIONAL FINANCIAL ARRANGEMENTS

At the same time, we witness the extension of regional financial arrangements. The larger ones or the more systematic ones are:

- FLAR (Fondo Latino Americano de Reservas) in Latin America includes a number of small Latin American countries, with limited amounts. It is designed to mostly serve as a bridge to IMF loans during the application process. For this reason, it does not include conditionality. The oldest regional arrangement, it has not grown.
- The Chiang Mai Initiative brings together the ten small South-

East Asian countries and the three large ones, China, Japan and Korea. It operates as a network of swap arrangements. Initially, the arrangements were bilateral but they now are multilateral, which makes it look a bit like the IMF. At the beginning, the IMF was concerned the Initiative could become a competitor. So, the first steps were modest and lending beyond a ceiling was conditional on an IMF program. Gradually, the ceilings have been raised. Nowadays, the amounts available reach $ 240 billion. If the IMF's borrowing agreements are not renewed and its reserves fall down to close to $ 700 billion for the whole world, Chiang Mai would be available to provide its members with comparable or even larger amounts.

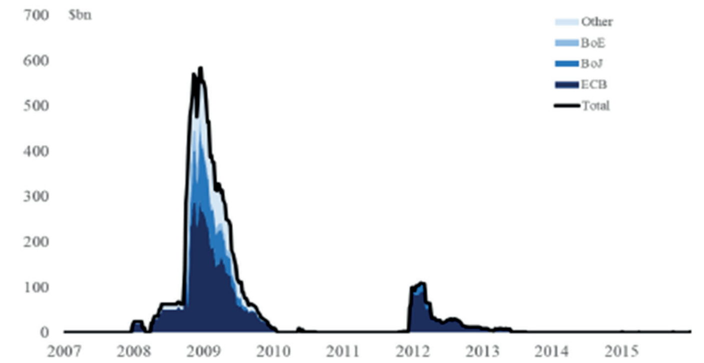
- The most recent regional arrangement, the European Stability Mechanism, was created in 2011 during the sovereign debt crisis. It operates much in the same way as the IMF, with conditionality and detailed oversight. With a current financing capacity of $ 580 billion, which is likely to be increased, it is about the size of the IMF in case the agreements are not renewed. For European needs, it offers much more than the IMF can afford on its own.

These developments mean that the IMF is no longer the only game in town. Worldwide multilateralism is receding in front of regional multilateralism.

3. BILATERAL SWAP AGREEMENTS

In the aftermath of the global financial crisis, the FED, the ECB, the Bank of England, the National Bank of Switzerland and a few others, have started to provide swaps to each other. The purpose was to allow banks with position in the corresponding currencies to obtain emergency resources. Chart 1 shows that swaps in dollars offered by the Federal Reserve to other central banks – the largest swap lines – developed in two waves. The big one occurred during the global financial crisis and the other one during the European debt crisis. It is important to note that, during the first wave, the amount lent by the Fed is close to $ 600 billion at the peak, which is of the same order of magnitude as IMF's own resources.

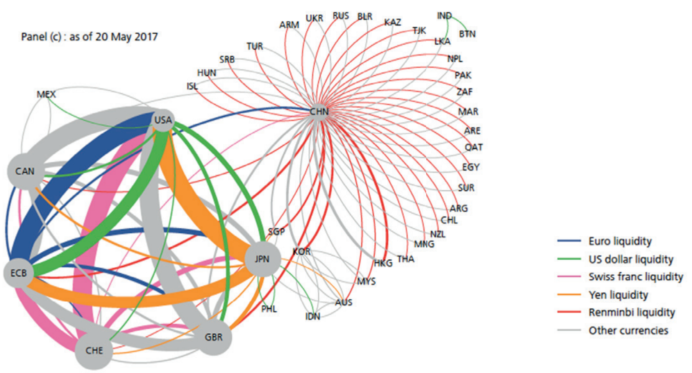
Chart 1 Swaps in dollars offered by the Federal Reserve



Source: Bahaj and Reis (2018).

Since the occurrence of these two crises, the Central Bank of China has created a whole network of bilateral swaps. Chart 2 illustrates the state of play. On the left, it shows the bilateral swaps among major central banks previously mentioned, all of which are bilateral. China's own network is shown on the right. Although the numbers in the China-centered network are small, the sheer number of agreements – which are likely to keep growing – and their global coverage indicates that a new system is emerging.

Chart 2 Swap lines



Source: Essers and Vincent (2017).

4. THE CHINA FACTOR

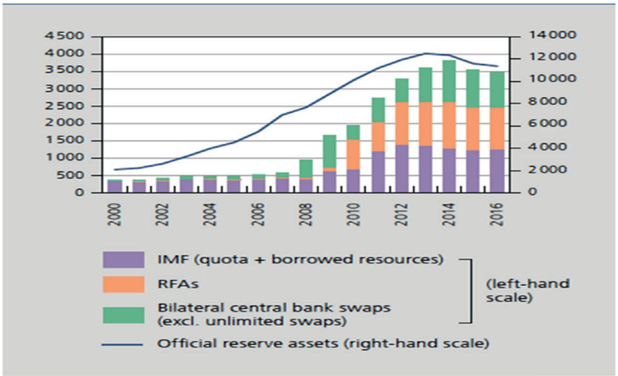
Most likely China will eventually be the world's largest economy and this will have implications for the IMF. The voting share of China will have to be raised and, one way or another, China will hold the largest voting share at some point. The implications are massive. First, the IMF's Articles of the Agreement stipulate that its headquarters are located in the country with the largest quota. Second, the top management will have to reflect the new situation. Currently, it is agreed (informally but firmly) that the Managing Director is from Europe while the First Deputy Managing Director is from the US, as is the President of the World Bank. What will that mean for what the IMF does, and how will it work once it is not the USA that leads and houses the institution? At this stage, we do not know what China wants to do with this new power and it is probable it has not yet thought through its own intentions. One thing is sure, the IMF will be a different animal from what it is now.

5. CONCLUSION

Whether its resources decline because the borrowing agreements are not renewed, the IMF is no longer the sole international lender in last resorts. The multilateral order created in 1944 is gradually being replaced. In its stead, we see the emergence of regional multilateral institutions and of bilateral global arrangements (the swap lines) in addition to self-insurance through the accumulation of national foreign exchange reserves. Chart 3 shows that the IMF resources represent less than a third of the total available, and that accumulated national foreign exchange reserves are even larger than these three sources of financial assistance taken together.

Not only has the IMF become a small part of the global safety net but the USA and Europe will have to give up their control of the IMF (and the World Bank). Maybe ways will be found to keep the IMF in Washington but the changes under way are truly historical. The most surprising aspect of this evolution is that it is not being discussed, neither at the official level and nor in academic research.

Chart 3 Resources for global lending in last resort



Source: Esserts and Vincent (2017).

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MAKING THE SYSTEM FUNCTION AS A SYSTEM – GLOBAL FINANCIAL GOVERNANCE REFORM IN THE TRUMP ERA

*Erik Berglof**

I cannot help, since I am speaking after Charles Wyplosz, but I have to say how much Charles has meant to me personally in my career. It was actually through Charles that I got back involved in policy work. I was a very academic professor at the time, but I had, at some point, studied Russian, and Charles convinced me to work with him on reforms in Russia. We were working together during the period leading up to the Russian financial crisis. Charles was my main informant, so to say. I had really only seen the Swedish and the other Nordic financial crises close-up, and never seen it happening in an emerging economy. Charles had been through several emerging economy crises and wrote a monthly letter for me. I would say that for the 12 months leading up to the crisis I was looking incredibly well informed, a genius, but it was all thanks to Charles. So, thank you Charles.

Anyhow, I think my presentation will complement very well that of Charles'. Actually, I will pick up where he left, showing some of the weaknesses in the global financial safety nets. I will try to connect the regional financial safety nets to actions at the national level, particularly to what are the implications for a country like Albania. I will do this based on an exercise that I have been involved with in the G20 – I served on the Secretariat of the G20 Eminent Persons Group on Global Financial Governance. We had the benefit of the

* *Erik Berglof, Director, LSE Institute of Global Affairs*

report Charles had co-authored when we wrote this report for the G20. So, hopefully, there should be some consistency.

The argument behind the G20 exercise was that we may need perhaps to go back and look at the global financial system as a whole, as a system, and see if it is really working as such or if we could do better. Of course, an important reference point was the Bretton Woods in 1944. The WWII was still going on and countries on the winning side were meeting in this resort hotel in the US state of Vermont to decide on the post-war global architecture. You could argue that now, 75 years later, we again have a Bretton Woods moment. As Charles was suggesting, we need to think of what system we have and whether we can make this system work better in a rather different multipolar world. China and other emerging economies have become much more important, and new institutions have emerged and there has been "mission creep" in some of the existing institutions. The world has committed to a very ambitious agenda 2030, a set of sustainable development goals in a very broad range of areas. There are increasing threats to the global commons, including climate change, pandemics and forced dislocation.

But there are also a changing political landscape and different atmospherics. President Trump's name has already been mentioned a few times today and, of course, this is a very different US from the one we saw in the process leading up to Bretton Woods, and the one that has anchored the system created out of the Bretton Woods.

So, how can we - in this very complex world - create a system that really works for all?

The G20 decided, under the chairmanship of Germany, to create an Eminent Persons Group on Global Financial Governance, bringing together 16 people, 8 from advanced economies and 8 from emerging economies. Governor Belka was one of the members of the Group and I served on the secretariat. The Group was led, very importantly, by Tharman Shanmugaratnam, the Deputy Prime Minister of Singapore, an emerging economy. The mandate was to look at the entire system of international financial institutions - all the development banks, including the World Bank, the regional development banks and the IMF. Is it really working as a system, can we do better? The final report was presented a couple of weeks ago at the annual meetings of the World Bank and the IMF.

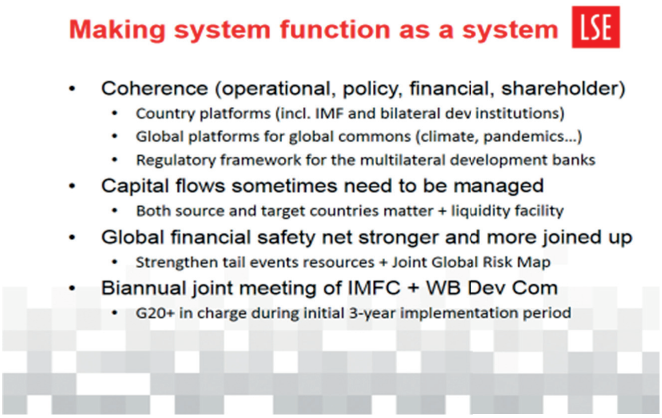
The overall objective of the report is to ensure that capital flows from capital-rich countries to capital-poor countries. This is what economists have always viewed as desirable – capital should be much more useful in emerging and developing economies – but very rarely observed. We have a lot of capital floating around in the global financial system, but basically it is not flowing into these markets today, particularly not into productive investments in infrastructure.

Chart 1

To achieve this overall objective measures are required in emerging and developing as well as in developed economies. In developing and emerging economies it is about improving governance and human capital, and getting investments in the broader infrastructure and developing local financial markets. We also need much more effective and more coherent intermediation by international financial institutions, and a better framework for regulating capital flows, making sure that these flows are much more dependable, more sustainable and supported by a functioning global financial safety net.

The coherence of the global financial system must apply not only to the global and the regional players, but also very importantly, to the bilateral and national institutions. Again, China is very important here - the China Development Bank, for example, is much larger than any of the other international development institutions. We must get them to work together - that is the message of this report.

Chart 2



But how do we get the system to work in a more coherent way? This is the governance challenge. The report proposes that biannually the two key committees on the global stage - the IMFC and the World Bank Development Committee – be brought together to look at how the system works as a system.

Chart 3

Let me finish with the specifics on the global financial safety net. A lot of resources today are wasted because people or countries put too much in reserves. The massive build-up of self-insurance implies a very inefficient use of capital. We need to find ways of creating a better safety net. Charles Wyplosz spoke about the IMF and the regional arrangements. We need to make these two levels work together much better – this is also an important lesson from the global financial crisis. In addition, we must make sure that the global institutions, mainly the BIS, the FSB, and the IMF, work together, without necessarily agreeing on everything. The report suggests that the exercise should aim to agree on a common global risk map, ensuring that the different information and perspectives are properly reflected. We know that the BIS, for example, had a lot of valuable information on the global financial crisis that did not filter through to final policy decisions.

Finally, we need to get a much better understanding of tail risk events and how to respond to them. What could be done to increase the resources available compared to now? Could we maybe use the markets? Could we use some of the dormant resources inside the IMF or inside institutions attached to the IMF? There are many ideas worth exploring.

Chart 4

So, what does all this mean for Europe? First, we should acknowledge that we have a much better regional safety net today than just a few years ago. Yet, there are still some unresolved issues, including the lack of a deposit insurance at the European level and a clear role for the IMF. What is the role of the US in the global system? Much still relies on the US playing along. Will the global safety net be available to countries that do not necessarily agree with the current President of the US?

What will happen to countries like Albania, or like my own country, Sweden, that are part of these regional financial systems, but actually don't have access to these backstops? We discussed this issue during the second phase of the Vienna Initiative in the region. How we can use the fact that we know have the ESM and the Banking Union to help anchor policies and promote financial stability outside the Eurozone? We have come some way, but there is still a lot to think about.

Let me end on the very last point of relevance for Europe. There is a discussion, very much in the trajectory of the Eminent Persons Group, and it is about what is going to happen to the European development finance architecture? It has worked, I would argue, quite well in the accession process. We have had all kinds of complaints, but if you look at development effectiveness around the world, what happened in Central Eastern Europe is truly unique and Albania is a case in point. I am not saying that what happened here was mainly achieved by the accession process, but it lent useful support to domestic reform ambitions and created a sense of political momentum. Can we make the European development architecture work also outside accession countries? Could we make it work in North Africa? Maybe we could even make it work in Sub-Saharan Africa? What happens to these countries affects Europe. EU recently decided to appoint a High-Level Group of Wise Persons on European Development Finance Architecture. Albania has been a beneficiary of this support over time. Once you are a member of the European Union, you will have to think through, like Poland has done already, about the role Albania and its development experience can and should play in shaping the future European development architecture.

T*hank you very much!*

CAN A SMALL OPEN ECONOMY PURSUE AN INDEPENDENT MONETARY POLICY? EXAMPLE OF POLAND 2010-2016.

*Marek Belka**

Poland's transformation experience is usually associated with a big-bang strategy. This is only partially true. Indeed, price liberalization, opening of the conomy and elimination of subsidies for the state-owned enterprises happened more or less in one swoop. Basic macroeconomic conditions for a free market economy were thus created. Building necessary institutions (tax system, capital market, competition rules, etc.) took more time, but proceeded without delay.

However, monetary policy and price stabilization was another matter. Worried about significant social cost of transformation, rising unemployment and massive bankruptcies of state firms, the government gave up on tackling inflation in the same "big-bang" way. Instead for almost a decade, an "eclectic" monetary and exchange rate policy was pursued in the form of so-called crawling peg.

The exchage rate of złoty was regularly devalued to provide a measure of cushion for domestic producers against foreign competition. Wage indexation added to the inflationary pressure. In result, growth rate of retail prices decelerated only gradually, with the headline rate of inflation hovering over 10% until the end of the first decade of transition. Inflationary expectations became thus quite deeply rooted both among households and firms.

* *Marek Belka, Former President of the National Bank of Poland and LSE Visiting Professor*

In 1998, under the new Constitution, the role of the National Bank of Poland was institutionally strengthened, with an independent Monetary Policy Council made responsible for the direction of monetary policy. The 9-persons strong body took on inflation with a zeal not seen in the previous decade. Inflation targeting was declared as an official strategy. Interest rate was drastically increased, the economy slowed down, unemployment spiked to over 20%, but inflation soon went down to 2-3% range. It stayed in that territory until present days, with a tendency of undershooting the official target of 2.5% (+- 1%). The social and economic cost of fighting inflation was very high which, by the way, suggests that a big-bang anti-inflationary policy could have been (theoretically) less costly. Anyway, low inflation and the concomitant regained trust in Polish złoty is commonly treated in the society as an important achievement.

Just on the eve of the Global Financial Crisis of 2008 (GFC) Polish government declared an intention to join Euro as soon as possible. Literally one week later, those plans were shelved, as the global economy sunk in chaos and uncertainty. The złoty weakened against all major currencies, inc. the euro, which helped Polish exporters survive the colapse in trade that happened in the first weeks of the global turmoil. This became the strongest argument against embracing the common European currency – a recourse to defensive devaluation was viewed as an effective line of defence against external shocks. Looking at the horrors of "internal devaluation" that some Eurozone countries had to go through the above reasoning gained in significance.

However, this argument was probably highly oversold. In the run-up to the GFC the złoty appreciated steeply as a result of massive inflow of foreign capital financing the mortgage credits denominated most frequently in Swiss francs. A sizable difference in the level of interest rates, coupled with deep financial integration (most banks were foreign-owned) made this kind of carry-trade both attractive and easy. These forex denominated mortgage credits offered to the unhedged households turned out to be the most destabiling factor of the otherwise particularly strong and stable banking sector in Poland. It should also be remembered as a reminder of potential consequences of a small open country remaining outside of a bigger currency, with which it is tightly integrated.

In sum, Polish monetary policy was faced with theoretically unreconcilables challenges. On the one hand we had to be vigilant about inflation. Interest rates had to be higher that in the more advanced European countries (Samuelson-Balassa effect, potential revival of inflationary expectations). On the other hand, if we allowed interest rate differential to be high enough we could trigger an unwanted inflow of short-term capital, strengthening domestic currency and possible destabilization of the economy. The 2006-2008 episode was a clear reminder that this was a material danger. Being a member of the OECD and the EU, we were not allowed to use capital controls, although the experience of GFC changed both the practice and theory on this issue. At least this was the prevailing mindset in which we were to operate.

The three elements that our monetary policy consisted of were:
- flexible exchange rate regime,
- occasional interventions on the forex market and
- more active use of macroprudential instruments.

These made it possible for us to pursue an interest rate policy, that we thought was proper for the Polish economy. We were able to react with our policy to the current and prospective pressures and keep the benchmark rate at about 200 basis points over the rate of the EBC.

Flexible exchange rate regime provided for short-term fluctuations increasing the risk for prospective portfolio investors. It may sound surprising, but day-to-day fluctuations result in longer-term stability of the exchange rate. For a successfull implementation of a free float, it is indispensible to convince the market that monetary authority does not have in mind neither any numerical exchange rate target nor a band thereof. Otherwise, speculators will test the determination of the central bank and produce random currency moves.

Occasional interventions. The market in złoty has traditionally been quite liquid. We have noticed at the beginning of the present decade that the volume of transactions in złoty on the international market far surpassed the volume of transactions in a much bigger currency – Brasilian real. This was due to the fact that the market in złoty was treated as a proxy for the whole region of CEE, with a relatively abundant supply of treasury papers and stocks. In result, we observed occasional spikes on the forex market that we could not explain by global or significant domestic factors. We concluded that such occurencies should not be left unattended. Indeed, in a few instances (5-6) we decided to appear on the market with rather moderate amounts, usually below 500 million Euro. Interventions proved to be very effective and the exchange rate returned to the previous level almost immediately. More importantly, the traffic in złoty slowed down significantly for good. This showed that the volatility of złoty had no structural foundations and was caused by rather small-size speculators. Each time we declared that the purpose of intervention was to reduce unjustified volatility and not to achieve any level of exchange rate.

Macroprudential policy. Macroprudential instruments have recently become standard measures to deal with financial cycles. In fact, they were used quite extensively in Asia after the 1997 crisis, especially applied to real estate market management. In Poland, our microfinancial regulator began using certain measures, like system-wide risk weights or LtVs (loan-to-value ratio) even before it was obvious that such measures, macrosystemic in nature, could be legally applied. However, before the GFC macroprudencial policy was used only in a rather random way, led by intuition and not by regular analysis. After the creation of the European Systemic Risk Board in 2012 (in Poland a Committee for Financial Stability – a body corresponding in its powers was established only in 2014) a more structured approach to financial stability was taken. Forex-denominated mortgage loans were all but forbidden, LtV and DtI (debt-to-income ratio) were commonly accepted as practical tools of financial sector regulation. Thus a sudden inflow of capital through the financial sector became improbable.

The above policy mix proved to be highly efficient. All objectives of monetary policy were achieved. However, one should not conclude that such favourable outcome is 100% sustainable. Post-crisis behaviour of financial markets is still marked by a modicum of moderation and low inflation environment prevails in Europe. If these two change, we may again face a dilemna characteristic for small open economies.

CROSS-BORDER BANKING AND MONETARY POLICY SPILLOVERS: IMPLICATIONS FOR EMERGING EUROPE

*Előd Takáts**

ABSTRACT

Much of the international spillovers literature focuses on the United States, the US dollar and the Federal Reserve Board. This is mostly justified. For instance, when thinking about the currency denomination as a channel through which bank lending can transmit monetary shocks, the dollar clearly plays a huge role: the US dollar is the dominant international currency, accounting for around one-half of global cross-border bank lending exposures. Hence, for most countries, most regions and most emerging markets, the focus on the dollar is justified. For most but not all: while the US dollar is dominant globally, the euro is dominant regionally, in particular in emerging Europe. Hence, decision makers in emerging Europe need to pay close attention to euro developments and the monetary policy pursued by the European Central Bank.

INTRODUCTION

Monetary policy spillovers are in the focus of policymakers. The unprecedented low interest rates and unconventional monetary policy tools applied in major advanced economies in the aftermath of

* *Előd Takáts, Senior Economist, BIS and LSE Visiting Fellow*

the Global Financial Crisis raised the questions: How does monetary policy spill over across the border? In this context, what role does cross-border bank lending play? And how does the currency denomination of the cross-border bank lending affect lending?

There is evidence that these spillovers are material.[1] Monetary conditions in advanced economies matter for capital flows, interest rates and liquidity abroad, including cross-border bank lending. In particular, the evidence is accumulating that the currency denomination of cross-border bank lending serves as a channel of transmitting monetary conditions abroad. As an example to what I mean under currency being a channel of transmission: US monetary policy matters for the US dollar denominated cross-border bank lending from the UK lending banking system to a Malaysian borrower – even if neither the lender nor the borrower is under US jurisdiction. Avdjiev and Takáts (2018) show evidence that the US dollar played such a role during the taper tantrum shock. Takáts and Temesváry (2016) shows methodologically that monetary policy transmits through not only the US dollar but also the euro and the Japanese yen over a longer period – and in fact the nature and magnitude of this transmission is very similar across all currencies.
Indeed, policymakers outside the United States considered spillovers through the US dollar and the Federal Reserve Board's monetary policy seriously. As I show later, this focus was largely appropriate: most of cross-border bank lending is indeed denominated in US dollars. In particular, most cross-border bank lending to emerging market economies is denominated in US dollars.

However, and this is the point of this short article, exclusive focus on the US dollar would be misplaced for Emerging European policymakers. While the US dollar is the global currency for cross-border bank lending, the euro is a major regional currency. And it is particularly relevant for cross-border bank lending to Emerging European countries, especially in Central and Southeastern Europe.

[1] *A rich literature investigates the drivers of global cross-border bank lending (eg De Haas and Van Lelyveld (2011), Rose and Wieladek (2011), Cetorelli and Goldberg (2012a), Giannetti and Laeven (2012), De Haas and Van Horen (2012), Buch et al. (2014), Cerutti et al (2014), Cerutti et al (2015)). In addition, a number of papers have investigated lending to emerging markets more specifically eg McGuire and Tarashev (2008), Takáts (2010), Cetorelli and Goldberg (2011), Schnabl (2012), Avdjiev et al (2012), Beck (2014)) and Avdjiev and Takáts (2014).*

Hence, policymakers in this region should not only focus on the US dollar and the monetary policy pursued by the Federal Reserve Board, as could be appropriate in many other regions. They might want to closely follow the movements of the euro and the monetary policy of the European Central Bank to understand better the potential spillovers relevant for their economies.

THE US DOLLAR NETWORK IN CROSS-BORDER BANK LENDING

The US dollar is the dominant currency of cross-border bank lending (Table 1). Roughly one-half of total lending is denominated in US dollars, both in interbank and non-bank lending (top panel). However, the variation in the currency composition of cross-border lending across borrowing locations is considerably larger (bottom panel).

The dollar has a large role in lending to advanced economies outside the euro area, accounting for almost all (close to nine-tenth) of lending to the United States. The lending to the euro areas seems to be an exception with very low share of the dollar (less than one-fifth). The dollar share is particularly low for intra-euro area lending (less than one-tenth). Lending to emerging markets tends to be primarily denominated in US dollars with around one-half of the total volumes closely matching global averages. However, in this respect, Emerging Europe is an exception where the share of the US dollar is at around one-third of the total.

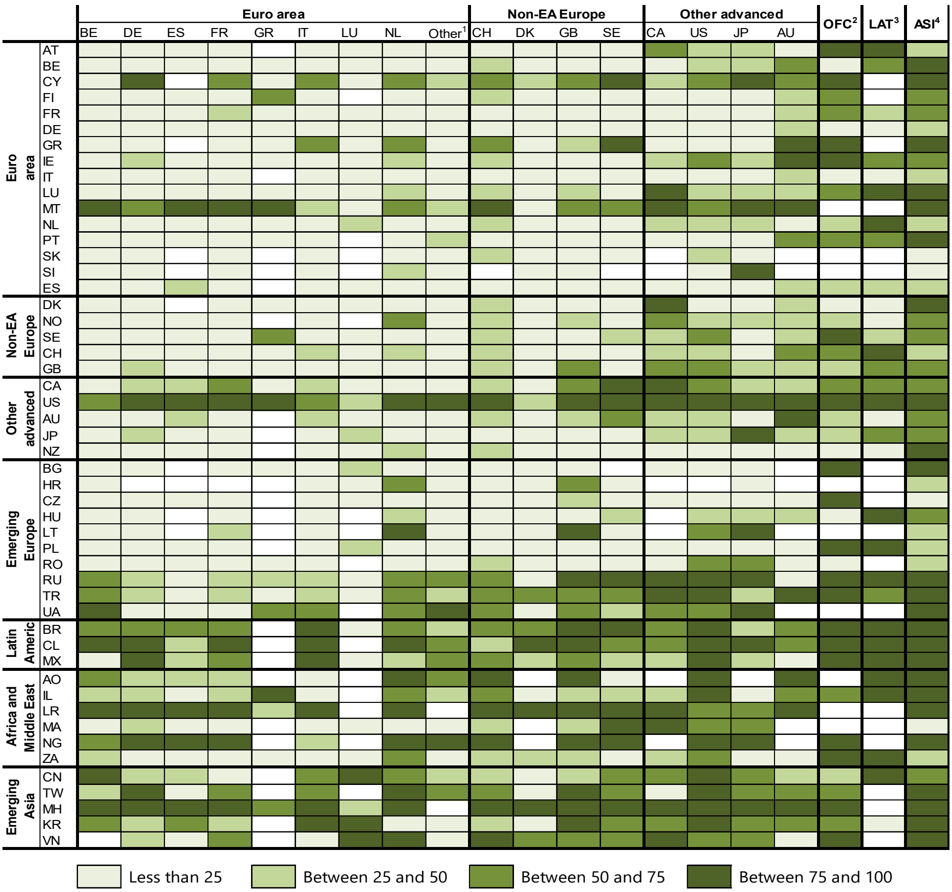
Table 1 Currency positions of cross-border bank lending at end-Q2 2018

In trillions of US dollars							
	Amounts outstanding				Percentage shares		
	All currencies	US dollar	Euro	Japanese yen	US dollar	Euro	Japanese yen
Counterparty sector							
All sectors	29.5	14.1	8.7	1.8	47.9	29.6	6.1
Banks, total	15.5	7.3	4.9	0.7	47.1	31.8	4.3
Non-bank, total	13.4	6.7	3.5	1.1	49.7	26.3	8.3
Counterparty countries							
Advanced economies	20.3	8.8	7.7	1.0	43.2	38.1	5.0
Euro area	7.9	1.6	5.6	0.1	20.1	70.4	1.9
Of which: intra euro area	4.0	0.4	3.5	0.0	9.4	87.2	0.3
United States	4.9	4.2	0.3	0.1	87.0	6.0	1.6
Japan	1.4	0.6	0.1	0.6	41.3	8.5	46.5
Other advanced	6.2	2.4	1.8	0.1	38.8	28.5	2.3
Offshore centres	4.7	2.9	0.3	0.7	61.1	6.9	14.8
Emerging markets	4.0	2.3	0.5	0.1	58.2	12.9	2.1
Emerging Europe	0.6	0.2	0.3	0.0	26.0	42.5	0.9
Latin America	0.6	0.4	0.0	0.0	73.8	6.3	1.2
Africa and Middle East	0.7	0.5	0.1	0.0	67.2	12.5	1.0
Emerging Asia	2.1	1.2	0.1	0.1	59.7	6.3	3.1

Source: BIS locational banking statistics.

The enhanced International Banking Statistics (IBS) data from Bank for International Settlements (BIS) allows to draw global "heat maps" following Avdjiev and Takáts (2018). As one would expect from the above discussion, most of the bilateral lender-borrower nodes in our global cross-border bank lending heat map tend to fall in the US dollar network (Graph 1).

Graph 1 US dollar share in cross-border bank lending in Q4 2014
By nationality of lending bank (columns) and residence of borrower (rows), in per cent



ASI = Emerging Asia; LAT = Latin America; OFC = Offshore centres.
AO = Angola; AT = Austria; AU = Australia; BE = Belgium; BG = Bulgaria; BR = Brazil; CA = Canada; CH = Switzerland; CL = Chile; CN = China; CY = Cyprus; CZ = Czech Republic; DE = Germany; DK = Denmark; ES = Spain; FI = Finland; FR = France; GB = United Kingdom; GR = Greece; HR = Croatia; HU = Hungary; IE = Ireland; IL = Israel; IT = Italy; JP = Japan; KR = Korea; LR = Liberia; LT = Lithuania; LU = Luxembourg; MA = Morocco; MH = Marshall Island; MT = Malta; MX = Mexico; NG = Nigeria; NL = the Netherlands; NO = Norway; NZ = New Zealand; PL = Poland; PT = Portugal; RO = Romania; RU = Russia; SE = Sweden; SI = Slovenia; SK = Slovakia; TR = Turkey; TW = Chinese Taipei; UA = Ukraine; US = United States; VN = Vietnam; ZA = South Africa.

[1] *Austria, Finland, Ireland and Portugal.*
[2] *Hong Kong, Singapore and Panama.*
[3] *Brazil, Chile and Mexico.*
[4] *Chinese Taipei, India and Korea.*
Source: BIS enhanced locational banking statistics by nationality. Avdjiev and Takáts (2018)

THE EURO NETWORK AND EMERGING EUROPE

Euro denominated cross-border bank lending amounts to around one-third of global total, not much below the one-half share of the US dollar (Table 1). Furthermore, it is also roughly similarly distributed across interbank and non-bank lending (upper panel).

However, in contrast to the global US dollar network, the euro is more of a regional currency for cross-border bank lending (Table 1). Euro area residents borrow most euro denominated cross-border bank lending, with the euro share hovering around three-fourth. As one would expect, euro denominated cross-border bank lending constitutes almost exclusively intra-euro area lending with shares around nine-tenth of the total. In other words, lending between euro area lending banking systems and euro area borrowers is almost exclusively done in euros. And Emerging Europe also stands out as a region with prominent euro denominated bank claims: with almost one-half of total lending the share of euro substantially exceeds the share of the dollar. The euro share is even higher for Central European and Southeastern European borrowers.

Using the enhanced BIS IBS data again we can draw the global "heat map" for the euro network (Graph 2). The map shows the euro share of bilateral cross-border bank lending relationships. For instance, lending from a German headquartered bank to borrowers resident in Poland is represented by the cell where the "DE" column and "PL" line meets. The coloring of the cell shows that the euro share in this bilateral lending relationship is between 50 and 75 percent of the total.

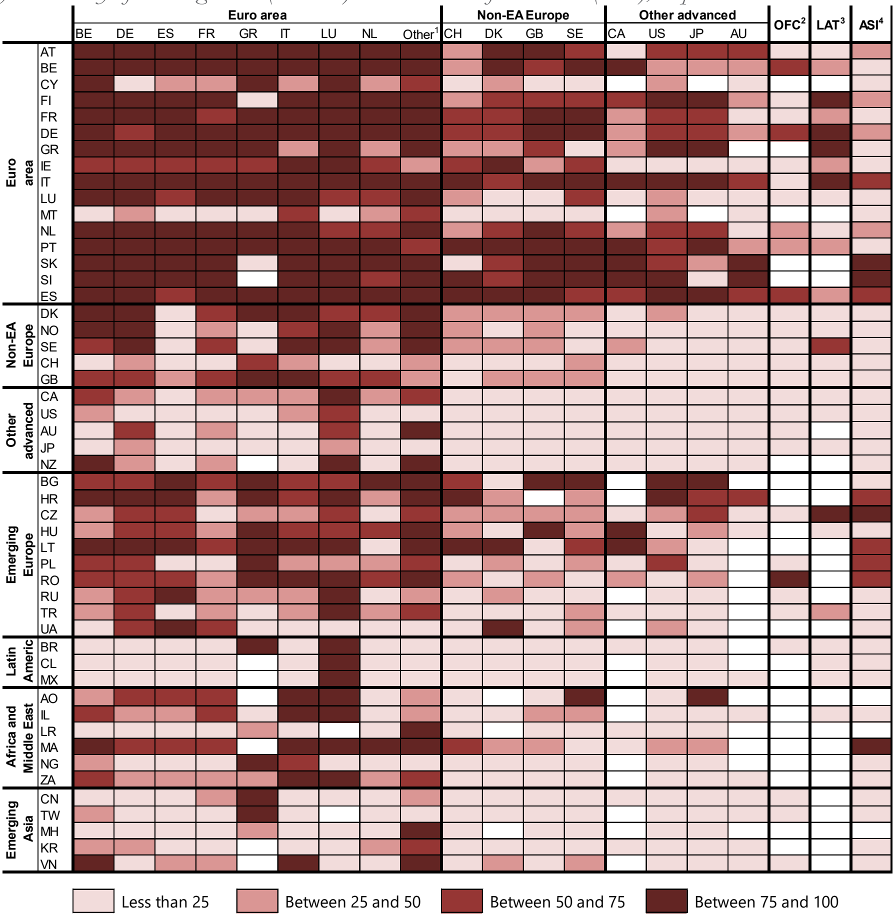
It is critical to see that the enhanced data links borrowers with lending banking systems, ie all banks headquartered in a country, not banks resident in a country. For instance, in our previous example of the "DE" and "PL" bilateral relationship, the "DE" notation entails all German headquartered banks, even say the UK resident subsidiaries of these German banks. This also explains how German banks can lend to German borrowers across the border, ie why the "DE" to "DE" cell is not empty. For instance, Deutsche Bank's London

(UK) subsidiary can lend back to a firm resident in Germany. As you can see, the share of the euro in this DE-to-DE lending relationship is between 50 and 75 per cent.

The euro heat map underlines the regional role of the euro (Graph 2). In advanced economies lending, the euro is most heavily used in intra euro lending (upper left-hand corner). It is also used, though to a somewhat lower degree, in lending to euro area resident borrowers from other lenders (upper right-hand corners) and by euro area banking systems lending outside the euro area (lower left-hand corner).

Among emerging markets, the share of the euro is typically low, with many cells signaling less than 25 percent share of euro lending. However, Emerging Europe stands out among emerging markets where residents tend to borrow in euros. This is more pronounced by euro area banks (left hand side), but also observable with other lending banking systems, say with lending by US or Japanese banks (right-hand panel).

Graph 2 Euro share in cross-border bank lending in Q4 2014
By nationality of lending bank (columns) and residence of borrower (rows), in per cent



ASI = Emerging Asia; LAT = Latin America; OFC = Offshore centres. AO = Angola; AT = Austria; AU = Australia; BE = Belgium; BG = Bulgaria; BR = Brazil; CA = Canada; CH = Switzerland; CL = Chile; CN = China; CY = Cyprus; CZ = Czech Republic; DE = Germany; DK = Denmark; ES = Spain; FI = Finland; FR = France; GB = United Kingdom; GR = Greece; HR = Croatia; HU = Hungary; IE = Ireland; IL = Israel; IT = Italy; JP = Japan; KR = Korea; LR = Liberia; LT = Lithuania; LU = Luxembourg; MA = Morocco; MH = Marshall Island; MT = Malta; MX = Mexico; NG = Nigeria; NL = the Netherlands; NO = Norway; NZ = New Zealand; PL = Poland; PT = Portugal; RO = Romania; RU = Russia; SE = Sweden; SI = Slovenia; SK = Slovakia; TR = Turkey; TW = Chinese Taipei; UA = Ukraine; US = United States; VN = Vietnam; ZA = South Africa.

[1] Austria, Finland, Ireland and Portugal.
[2] Hong Kong, Singapore and Panama.
[3] Brazil, Chile and Mexico.
[4] Chinese Taipei, India and Korea.
Source: BIS enhanced locational banking statistics by nationality, Avdjiev and Takáts (2018)

POLICY TAKEAWAYS

The currency network maps displayed in this article highlight the fact that Emerging Europe is special. Exceptionally in the emerging world, cross-border bank lending to Emerging Europe tends to be denominated more in euros than in dollars, whereas in most of the emerging world the dollar is clearly dominant.

It is a fact of policy interest. Much international spillover discussion is focused on the US dollar and therefore on US monetary policy. As the BIS IBS currency maps show, this is a useful approximation for most of the world. However, the fact that Emerging Europe is an exception is relevant for decision makers in the region. It highlights again the need to follow euro movements and the monetary policy of the European Central Bank closely for potential spillovers. These policy lessons might be particularly useful in the coming years as the monetary policy of the Federal Reserve and that of the European Central Bank might continue to diverge.

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THE EUROPEAN UNION: THE CORE AND THE GEOGRAPHIC PERIPHERY

*Charles Enoch**

I would like to thank the Governor of the Bank of Albania and the London School of Economics for inviting me to this event. I am very pleased to be here. I have been here a few times before. Of course I cannot compete with others who have a long history of being here. I have heard from the earlier speakers about the achievements of Albania. I join the enthusiasm, they are impressive and exemplary. Albania at some point moves from being a taker of advice to a country able and willing to give advice to help countries that are behind it in their drive for development.

Today I will be talking about the European Union and its periphery. By periphery I do not mean the crisis-hit countries in the south and west of the Eurozone. I mean the countries of the European Union that are not in the Eurozone. So, in that regard I am following Marek Belka, and looking at some of the same issues that he addressed. I mean these countries, the United Kingdom for as long it is still in the EU, most of the Scandinavian countries, and many of the new EU countries from Central, Eastern and South Eastern Europe. These are the countries which Albania is likely to join when it becomes a member of the EU.

* *Charles ENOCH, Director, Political Economy of Financial Markets (PEFM), St Antony's College, University of Oxford*

Most analytic work on the EU focuses on the ever closer union as a starting point.

That analysis goes back to the very earliest stage of the European Economic Community and rests on the premise that European economic and possibly political integration is progressive, irreversible and ultimately complete. The only issues remaining are sequencing and timing. We see this perspective clearly in Mr. Junker's plan of "Europe 2022", which came out a few months ago showing possible future routes for the development of the EU. The alternatives in the plan are all about whether the EU wants to be more or less bold in taking forward EU integration over the next 5 years. In line with other studies of the EU, once again this is looking at how the Union progresses with integration, not at who progresses within it and how.

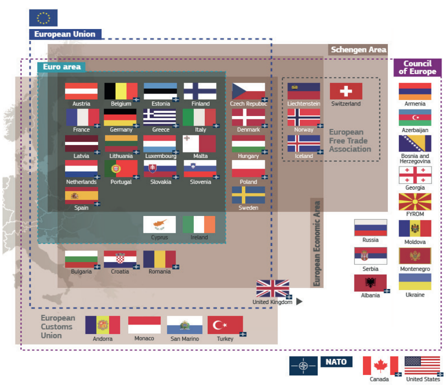
Figure 1

Good environment for regional alliances in a dangerous global world

I digress briefly to note in this connection that economic integration is not just related to Europe at the moment. Regional integration is advancing across the world, reflecting that it is a difficult time for global integration, and a dangerous global environment, on a number of fronts. On the trade front, for instance, the Doha round did not go anywhere, and was recently closed. So there are a number of regions, where regional integration has become the priority. One of them is the Pacific Alliance, where the presidents of Chile, Columbia, Mexico, Peru come together to integrate their economies. There are a number of reasons for this. Firstly, they recognize the economic benefits from integrating within the region. Secondly, there is likely to be a reaction against an overbearing neighbor, such as the US or Brazil in the case of the Pacific Alliance, or China in the case of the ASEAN. Thirdly, integration may be partly to be at the table when one comes to bodies such as the G20. Peru on its own may not be at the table, but the trend may be that in time the Pacific Alliance, the EU, ASEAN and other regional bodies are represented there, thus giving voice to their respective member countries. So there are a number of reasons why European integration and regional integration more generally is a big thing today, even though there may be difficulties in the multilateral system more widely.

Each of the regional alliances is different, similarly member states within the EU have different relationships with the EU. It is not one size fits all. This diversity of positions is reflected in the commission diagram.

Figure 2



One critical aspect of this is central in the Juncker plan. The diagram above, part of the exposition of his plan, shows the Euro area at the core, and the rest of the countries as the periphery. In fact, only 17 of the 48 countries of the European Council are members of the Eurozone and the Schengen area. Within the EU, the dominance of the Eurozone is greater, nevertheless there are 9 countries remaining outside the Eurozone.

The situation is not likely to change fundamentally very soon. We heard from Marek Belka how Poland is happy with its present position outside the zone. While progress to ever closer union may be a long-term goal, for the moment the substantial diversity as regards countries, positions, is a central element of the EU. This diversity is worth recognizing and analyzing.

Going back to the past, under the Maastricht Treaty, all countries formally have to join the Euro as soon as they are certificated to have met three specific criteria: the central bank's operational independence; inflation within a small range above that of the three best performing countries; and debt below 60% of GDP. Having been deemed to have satisfied these conditions, 17 of the 28 EU members are now accepted into the Euro zone.

Nevertheless there are a number of problems with Maastricht. Firstly, it differentiates between the old members of the EU that attended Maastricht at the time of the Treaty and those who joined the EU afterwards. The UK and Denmark have formal opt-outs from the provisions for joining the Euro. So, there is no pressure on them to do so. They can join the Euro, assuming they have met the conditions, if and when they wish to do so.

Secondly, there has been political pressure on some countries, and from some countries, to join, as it was considered politically desirable to join. The result was premature entry, such as for instance for Greece. The consequences of Greece joining the Euro arguably have been unhelpful for economic developments both for itself and the EU more widely, and the consequences remain now and for the future.

Thirdly, the monetary union is not fully designed and is incomplete. There is no fiscal union, and even on the monetary side the structure needs work: there is so far no Euro- wide lender of last resort facility, nor deposit insurance, and a number of other critical elements are missing, so that to actually be in the monetary union before these are in is a risk. There is substantial discretion as to how the ECB manages the system; Mr. Draghi's commitment to "do what it takes" to save the Eurozone marked a watershed that reflects the discretion available to the leadership that may or may not be maintained by his successor.

Fourthly, the economic benefits of membership in the Eurozone continue to be questioned. It was originally argued that Eurozone membership would of itself generate economic convergence. However, a number of studies have indicated limited intra-zone convergence since the establishment of the Eurozone. Italy is the clearest case, and has experienced very limited economic growth since joining the Euro as it struggles to remain competitive vis-à-vis its partner countries.

Fifthly, we see that the political benefits of being in the Eurozone do not compensate for the economic freedoms which countries such as Poland continue to have.

Conversely, if Maastricht conditions are not sufficient for membership, they are arguably also not necessary. The 60% maximum debt ratio as a requirement for entering the Eurozone looks obsolete at a time when many Eurozone countries have debt ratios substantially above this level.

Now I should briefly mention as counter-examples countries not in the EU that have unilaterally adopted the Euro: Bosnia-Herzegovina, Montenegro, and Kosovo are among these countries. The issues for these countries are rather different; they need to establish credibility in their economic policies and institutions. It reflects also recognition that their small size limited the scope for policy independence anyway. Similar considerations underlay Bulgaria's adoption of its currency board arrangement in the middle of its financial crises in the 1990s. Albania may be more in the Poland camp than in the Montenegro camp at this stage; in any case, choice of currency arrangement will be an important policy choice.

So, how can a country avoid being in the ever-closer union as represented by the adoption of the Euro? It is a quite distinct issue from that of exiting the Euro or the Union. Even in the worst time of the Greek crisis, the population did not wish to exit; that would have caused major disruption. That is not the same as the choice a country outside the Eurozone makes to actually join the Eurozone.
To avoid joining the Euro, clearly a formal derogation makes it easier. In the absence of formal derogation, it is possible to game the

conditions, or to avoid the rules. Even beyond this Euro membership is in name only, which could involve formally joining the union while maintaining de facto separateness, for instance in accounting rules and so on-which is not likely to be sustainable in the long run. But overall, unless a country commits to be in the currency union in spirit, in practice it is something to avoid.

Within the EU, the Banking Union is a formal recognition that one size may not fit all. For the first time entry conditions require that while those countries that have adopted the Euro have to join the Banking Union, for others is optional. The Banking Union was set up during the Euro crisis that followed the global financial crisis. The Single Supervisory Mechanism (SSM), the operational arm of the Banking Union, was located in the ECB because under the Maastricht Treaty, the ECB was potentially authorized to conduct such functions. However as German Finance Minister Schaeuble noted at the time, the EU was creating a "timber framed Banking Union" not a steel-plated Union. Only a future crisis will determine what strength shock this union can withstand.

It is worth noting that although non-Euro member states have the option of not joining the Banking Union, but choice may in some cases be more apparent and real. For many member states outside the zone, the financial systems are dominated by banks from inside the Zone. Joining the SSM means that at least they are at the table at the ECB when issues affecting substantial parts of their banking systems are being discussed. Also, banking regulations are set EU-wide by the European Banking Authority (EBA) so the possibility of deviations from EU standards is limited. On the other hand, countries may feel they retain the benefits of national supervisory authority and can make use of knowledge of local conditions if they remain outside the union.

Insofar as there are ins and outs, one needs for good governance to have protection for the outs. On the banking side, for instance, majorities amongst both the ins and the outs have been required to pass measures through the EBA . If the UK leaves the EU, the balance shifts and will be more difficult to maintain this balance.
What is integrated in the EU? Some areas indeed are integrated

beyond the provisions set out for members of the Eurozone, such as Scandinavia. Also, Britain would need to have complicated arrangements if it leaves the EU, with different parts of what is now the UK ending up in different arrangements.

I will briefly discuss EU macro prudential policies. These have a distinct governance structure. Decisions in the European Systemic Risk Board (ESRB), which is responsible in this area, fall to a very large committee. The ESRB includes the out countries as well as the in countries. Indeed, it even includes the EEA countries: Norway, Iceland, and Lichtenstein are able to attend and participate in everything except vote, so the ESRB is inclusive. And it is inclusive also as regards agencies within countries, including up to three agencies per country, the banking authority, the insurance authority, and the securities authority, because many problems in international for a are due to lack of intra-country inter-agency coordination.

CONCLUSIONS

The EU is not single sized. Countries have policy options regarding how they participate.

Governance arrangements need to be reflected in the EU to reflect the fact that the ever closer union is an over simplification.
Protection from decisions made by the "core" may be needed for the "non-core" countries such as double majority.

The option of joining the Euro in a short run, or of not joining the Euro, is available also for new entrants to the EU. Derogation is not just for those countries that obtained formal derogation at Maastricht. In practice, a number of countries have decided that they do not wish to join the Euro at this time, and in practice that may be a viable option.

Arguably, treaty changes are overdue for a number of changes, including to formalize this one, and would serve to address a number of other issues. However, treaty revision is not likely in the near future because there is concern that opening the treaty would risk opening a range of new issues. Progress nevertheless can still be achieved within the existing perimeters. A capital markets union for instance will be a useful concomitant to the Banking Union, and macro prudential management has been innovative.

Finally, I observe that the ever closer union is very much a work in progress, and recognizing member states' diversity will strengthen the EU now and in the future, both as regards the Union as a whole and for the present and future member states such as Albania.

THE CREDIBILITY OF BANKS: BALANCE SHEETS, GOVERNANCE AND LAW

*Lars Nyberg**

I shall talk today about European banks, and particularly about those in East and Southeast Europe. Given the limited time at my disposal, I will paint a broad picture - and I will use a correspondingly broad brush.

10 years have gone since the collapse of Lehman Brothers and the crisis that followed. What has happened since then in the world of banking? Certainly bank regulation has developed, hopefully for the good of society, but it has also become extraordinary cumbersome. Compliance is the quickest growing activity in most banks. And certainly bank supervision has improved, most obviously where the SSM has been involved. Whether all this is sufficient to avoid the next crisis is a different matter, which I am happy to avoid in my talk today.

I shall focus on three issues where, according to my experience from working with troubled banks since the crisis, things have not improved as quickly as hoped for. The first relates to banks´ balance sheets, the second to their legal environment, particularly the bankruptcy laws and the third to their governance, their boards and management.

* *Lars Nyberg, Former Deputy Governor of Sveriges Riksbank*

The balance sheets for a start. In many SEE countries bank balance sheets still contain a huge fraction of NPLs – 20, 30, 40 per cent or even more. We have become used to these high numbers, but recall that in a healthy bank even 5 per cent is unacceptable.

Why is a balance sheet full of NPLs so bad? It is not because the banks are hurt, but because the economy is suffering. Behind the big NPLs are most often corporates that for a long time have been more or less zombie-like with credits they cannot service. They need financial and often also operational restructuring before they can start developing their businesses. And their businesses must develop if the economy is to grow. That is why clean balance sheets in banks are required to make the economy recover. Countries that understood this and addressed the NPL issue with force got out of the crisis reasonably quick.

Banks are often accused of not lending enough to speed up recovery. But usually demand for loans is low since corporates where loans are not restructured do not invest and do not borrow. Working out NPLs is the key to increased lending and growing investments.

Then why are the banks' balance sheets not clean everywhere after 10 years? The reason is usually very simple. Selling NPLs creates a hole in the balance sheet, because the NPLs are not valued at prices at which they can be sold. Valuations reflect history or just wishful thinking. Selling NPLs will make the hole visible and the bank will become insolvent, or at least unable to fill the legal capital requirements. New equity is then needed, from the owners or from the state. But the owners are not able or willing and the state has not been permitted due to state aid regulation. As a result, the banks muddle through, solving the NPL issue slowly, piece by piece, at a pace they can afford. And domestic economic recovery is correspondingly delayed.

There are several ways to address the NPL issue in a forceful and comprehensive way. Best is to create an independent Asset Management Company (AMC) and transfer the NPLs there – the way it was done in Ireland, Spain, Slovenia and other countries. But this will show the hole in the bank's balance sheet and require new capital, private or public. Second best is to create an independent AMC department within the bank and employ necessary restructuring expertise. In this way the hole is not shown, but at least the workout procedure can be handled properly. Worst is to let the ordinary bank staff handle the bad assets which they once participated in creating. And this is the way it is usually done.

My second issue relates to law. In many countries, there are legal obstructions to a rational handling of NPLs – rational from the point of view of society as a whole. The root of this is usually political. When the balance between borrowers and lenders are excessively tilted to protect the borrowers, the cleaning of bank balance sheets will be slow and cumbersome. Of course, the laws reflect the public attitude towards banks. As one finance minister told me: "The main task of the central bank is to protect people from the banks". When such attitudes prevail, getting access to collateral and selling assets will be both difficult and time-consuming.

But even where banks are considered suspicious, things can be done to facilitate NPL workout. Some obvious questions to ask are: Can banks sell NPLs to non-banks domestically and to foreign buyers? In many countries, the sales process is unnecessary restricted. How long time does it take for a bank to get final access to collateral, one year or ten years? A system permitting a creditor to say to the bank: "See you in court in ten years" does not support a quick economic recovery in a country. Are there functioning out-of-court procedures for restructuring of debt and are there incentives to use them? Are there established proceedings for auctions that will give credibility to the pricing of assets? In most countries, legislators can contribute to economic recovery by adjusting the legal framework of banks, in the bankruptcy law and elsewhere, not all being controversial.

My third issue is bank governance. The boards of banks often reflect pre-crisis ways of governance, consisting of domestic networks (or government officials) rather than financial competence. If the banks' culture, the habit of giving credit to the wrong people for the wrong reasons, shall ever be changed, it must start from the top, from board and management. One may argue that this is for the owners to accomplish, but it is also in the interest of the public, so some incentives from legislators and supervisors may be required, as for instance in Greece and most recently in Ukraine.

What should be expected from a board of a professional systemic bank? Recognized financial competence rather than network affiliation is a first requirement. To create credibility there should be international board participation. There must be an established selection process to guarantee independence of board members. Conflicts of interest must be clearly recognized in the selection process. Boards must provide necessary ethical rules (a policy) and supervise that these rules penetrate the bank. And boards should choose an executive management strong and independent enough to drive the necessary internal reform program.

Getting a professional board may have very practical effects. In one bank that I worked with the board, once having understood the culture of the bank, 50 people in the top management changed.

Professional and independent boards are the key to reforming the financial landscape in any country. Any compromise here and necessary changes will fail.

To conclude, a question to ask may be the following: Have bank balance sheets, bank governance and the relevant legal structure improved sufficiently to make banks credible institutions during the next recession – which is not necessarily a crisis? From my experience we cannot be sure. In some countries yes, in others maybem and in others clearly no.

UKRAINE ON ITS WAY TO EU- RISKS AND OPPORTUNITIES FOR SMALL OPEN ECONOMY

*Valeria Gontareva**

Dear Colleagues,

I will start my speech from a short reflection on the first panel because it was a very important discussion.

First of all, I am very happy to be here in this amazing place. Moreover, I knew Mr Sejko from my time as the governor of the Central Bank of Ukraine, but I was very impressed by the team of the Bank of Albania. You have a very professional and dedicated team.

More than that, you are a lucky Central Bank, and I can tell you why. First of all you have supportive Prime Minister. Secondly, you have a prudent fiscal policy with 0.5% surplus. Of course as I mentioned, a very good team. And also it is very important, you have stable foreign banks in Albania. Of course, you can complain that there is a lack of new credit from them to boost further your economy due to the limited appetite for risk weighted assets of their mothers' banks and the ECB. But believe me, you are absolutely lucky to have sound and transparent foreign banks in your territory. So, you can provide here a prudent monetary policy and do real reforms for your financial sector.

* *Valeria Gontareva, Former Governor of the National Bank of Ukraine and Senior Policy Fellow, IGA – LSE*

I would also like to reflect on our discussion about dual mandate of central banks. I can reassure you that there are no disagreements or doubts among central bankers about prudential, macro prudential policy, financial stability and monetary policy. All of them are equally important, it's a dual mandate and all central banks follow that path after Global Financial Crisis of 2008.

It is better for us to discuss: What central banks will do during the next financial crisis. As you know, all the burdens of last financial crisis were put on the shoulders of Ministry of Finance through public debt and on central banks through the extension of their balance sheets. I do not agree with our colleague from Greece, that central bank with a large balance sheet is a good idea. I am absolutely not a supporter of ideas that central bank is a storage for bad and non-liquid assets. I think it is not a good place to store your bad assets.

Moreover, today our colleagues have discussed NPLs. And I would like to tell you again that Albania is a very lucky country, because you were able to decrease NPLs twice, from 24% to 12%. When I heard that, I immediately thought that Albania is a country where respect rule of law. In means you have justice and a good court system. Because in my mind there is a 100% correlation between rule of law in a country and NPLs resolution progress. So, my congratulations because this is a very good sign for your future development.

Now let's go back to my initial presentation.

My presentation is "Ukraine on its way to EU - Risks and opportunities for small and open economy".

Ukraine is still a small and open economy, even though our territory is as big as the territory of France and our population is 43 mln people.

Let's start from the very beginning, our today's discussion is about Eurozone and entries of banks, central banks and whole small open economies to EU.

I can tell you that European aspirations even provoked our revolution of dignity in Ukraine in the beginning of 2014. When we discussed Eurozone's "one size fits all" I can tell you, YES - one size fits all, because it's a rule of law. If you would like to be a member of European Union, I truly believe that you should follow the rule of European Union.

Ukraine signed an agreement with European Union and the association agreement entered into force on 1 September 2017, but we started our reform 3 years earlier. The agreement resembles the plan that Eastern European countries adopted entering EU. Ukraine was not reinventing Ukrainian bicycle, but started to implement European principles and standards.

The central bank proclaimed its vision to create an open, modern and independent central bank enjoying the public trust and integrated into the European community of national central banks.

Moreover, with my colleagues we discussed three years ago that in 10 years' time when Ukraine is a member of the Eurozone, the Central Bank of Ukraine will no longer be needed. Due to the fact that monetary policy is orchestrated by the ECB and proper supervision with automated processes could be easily transferred to the ECB the central banks in a territory of each particular small country will no longer be needed.

First of all, we developed our Comprehensive Program for financial sector 2020. The program was fully compliant with EU financial directives. All participants - Central Bank, Ministry of Finance, State Securities Commission, State Non-banking regulator, Deposit Guaranty Fund, Banking Associations, leaders of parliament fractions and civil society, - were instrumental parts of the Program. But central bank as a "white knight" started reforms first to preserve macro-financial stability of the country. Proper fulfilment of the central bank's functions to secure price and financial stability is a prerequisite for the development of financial system and economic growth in the country.

Only a few words about Perfect Storm in Ukraine:

Our economy had accumulated incredible imbalances till 2014 and after the Perfect Storm started. The storm was triggered by the annexation of Crimea, where we lost 3.6% of our GDP, 2 million of our population. After that, our Eastern part - Donbass - was occupied by Russia. So, we lost 20% of our GDP and 15% of our territory. In one day, in August 2014, we lost 30% of our export revenues. As central bankers you can imagine the implication for our balance payment and current account. Our balance of payments was "torn to pieces". And exchange rate, which is the mirror of the balance of payment, responded accordantly.

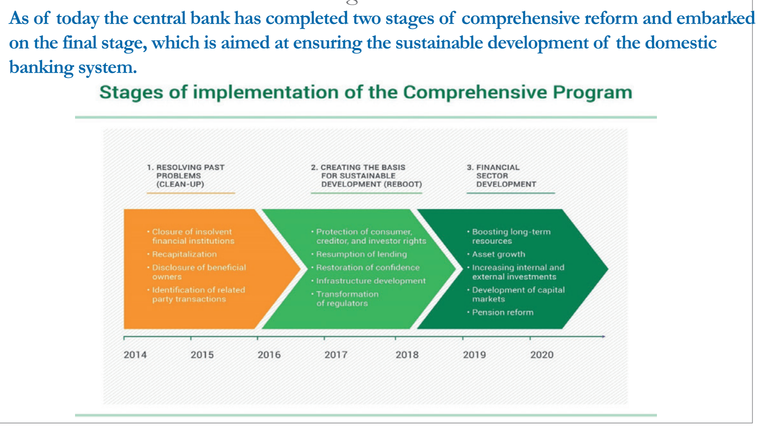
But, thanks to the international community IMF, WB, EBRD, European Union and US government, we survived. They supported us through different types of programs. They introduced $ 40 bln umbrella from different sources. They united all efforts to help Ukraine. That is why is very interesting discussion about Global Safety Nets versus Local Safety Nets.

How did the central bank achieve that? We started three pillars of our reform in parallel.
First of all we moved to a flexible exchange rate and implemented a new monetary policy of inflation targeting.

We have cleaned up the banking system from insolvent banks and enhanced their resilience. Not only did we close 90 banks, but we also nationalized the biggest Ukrainian bank called Private Bank, which belonged to a very aggressive Ukrainian oligarch. It was an incredible work, it was very difficult, but we succeeded.

Furthermore, we have completely transformed the central bank. We turned over the central bank from medieval time to modern independent central bank. We not only adopted the law about independence of CB, but we completely reorganized all internal procedures, structures and hierarchy. We changed completely decision making process, introduced fully functional supervisory, credit, financial stability, monetary policy and process management committees.

Figure 1



The National Bank of Ukraine has already completed two stages of reforms. The first stage was "Clean up" and the second stage was "The reboot" of banking sector. Now there is a third stage and we call it "Sustainable Development".

The strategic goals of the National Bank of Ukraine are the same as those for every central bank in our region:

- Low and steady inflation (price stability, inflation target 5%); stable, transparent and efficient banking system and up-to-date banking supervision; resumption of lending (handling of NPL, the increase of lending volumes that support economic growth while posing no risk to the financial stability).

- Free Flow of Capital (lifting anti-crisis FX restrictions with no threat to financial stability cleared the way for implementing free flow of capital). For Ukraine, this task is a very important one because we had introduced draconic foreign currency restrictions and we gradually eliminating them.

- Efficient Regulation of Financial Sector (non-banking and FinTech regulation, infrastructure development and capital market tools).
- Financial Inclusion (individuals are getting more involved in using financial services).

- Implementation of cashless economy concept. Today the former Deputy Governor of Riksbank is here and I would like to thank my guru Mr Ingves, Governor of the Riksbank, who helped me with implementation of cashless economy project in Ukraine. We really appreciate, it is a very important project for Ukraine.

If we do our homework properly, the financial sector of Ukraine will be completely compliant with the EU standards and fully operational in 2020.

Recent attempts to reverse globalization and to fall into protectionism alarm all central banks. Of course, we can create financial safety nets for each particular country, region and even town…But I think we already have our collective wisdom – it is the IMF. They are real professionals. I worked a lot with technical assistance (more than 50 projects) of other IFI. But my personal assessment that IMF is the best professional organization in the world. We shouldn't think how to destroy a globalization, I propose to unite our efforts.

After decades of setting rules, implementing banking prudential norms and supervision rules, we are moving to the opposite direction. You remember of US criticism of Basel III principles, which Ukraine has been implementing since 2015. We don't need to reinvent the bicycle again. Basel principles are good principles and it will be later on in my recommendations to all small economies.

After decades of international cooperation and open markets, we are moving to a confrontation at all fronts: endless Brexit consultations, new USD trade policy, Russian hybrid wars, nationalistic movements across Europe and populist attacks everywhere.

Moreover, we are not properly prepared for a new era of FinTech development, we have no decent regulations on a global level, which could be implemented locally. That's why we need to concentrate our collective wisdom to create the needed regulation.

And the main headache for central bankers is a risk of rising inflation. As we know, globalization contributed a lot to the low cost of production, through Global Value Chains. You can see that in Albania.

You have very stable FDIs and I am very happy about that. But we should consider what will big economies do, when protectionism starts to work, when prices of production will be skyrocketing? No doubt that the small open economies will immediately hurt after that.

What can small open economies do?

Being small open economies and yet survive in the global turmoil, we need to continue our independent monetary policy. I do not see any other alternative for small open economies, but flexible exchange rate and inflation targeting monetary regime.

Today, Marek Belka said absolutely the same about Poland. In comparison with Ukraine, Poland is already a developed market, integral part of EU. Of course for us, for small open economies, there is no other way than independent monetary policy with no fiscal dominance. Albania is lucky and does not have this problem, but for many countries fiscal rectitude is still a big problem.

We need to continue our internal preparation for EU integration and be in line with European financial directives as well as MiFID and Deposit guarantee schemes.

We have to fully implement Basel III principles to strengthen our supervisory regulation (minimal capital requirements, leverage ratios, liquidity requirements) and risk management as well as create a buffer capital for possible financial stress.

Today Marko Škreb spoke about the same principle, maybe because we work together in Ukraine and he helped us with the implementation of these principles.

We need to start an active cooperation in the area of banking supervision. We have to create an efficient framework with EU Banking Union, ECB and with Non-EU regulators.

More than that we need to strengthen bilateral cooperation, exchange of supervisory information and inspections.

We need to enhance cooperation in cyber security and AML/CFT fields.

We need to accelerate implementation of BEPS principles. BEPS means Base Erosion and Profit Shifting Act. At least, 5 of 15 principles should be immediately implemented.
We need to enhance cooperation in the area of innovation development and development of FinTech-conductive regulatory environment.

Also, as we discussed today, there are SWAP agreements. I can tell you that I was the governor who made one of the biggest swap agreements, it was a deal with Public Bank of China in Yuan for the equivalent of 2.6 bln USD. Our biggest friends from Riksbank also concluded the swap agreement with the Ukrainian central bank for the equivalent of 500 mln EUR. I would also like to thank Marek Belka, for his support. We concluded the swap deal between Polish central bank and National Bank of Ukraine in PLZ for equivalent of EUR 1 bln. The SWAP is a very efficient mechanism for central banks to support bilaterally each other.

We could also use SWAP agreements for trade-finance acceleration. Our region continues to be highly sensitive to both regional and global shocks. The 2008 crisis already showed us everything, the world is Global. In spite of anti-globalization movements, the world is global. Therefore, small open economies need to pay close attention to global and regional economic developments in their policy planning.

So, prudent independent monetary policy, proper macro-prudential regulation, creation of adequate buffers in FCY reserves and banking sector's capital have to be our response to serious challenges that lie ahead.

Thank you very much!

THIRD SESSION:

FINANCIAL INNOVATION AND IMPLICATIONS FOR MONETARY POLICY AND FINANCIAL RESILIENCE

This panel discusses the effectiveness of post-crisis regulations and the transformative impact of fintech on the financial system, the economy in general and financial inclusion, and how regulatory and monetary policy frameworks can be prepared for this new world.

Chair: Erik BERGLOF, Director, LSE Institute of Global Affairs

THE KING KONG MISTAKE AND HOW TO AVOID IT: IMPROVING THE REGULATORY RESPONSE TO 2008 GFC

*Kevin R. James**

What is the King Kong mistake and why is it something that central banks and financial regulators should worry about?

Suppose a bunch of apes form a committee to design a super ape. Apes are big, strong and hairy. So the super ape committee will naturally think that the super ape is: BIGGER! STRONGER! HAIRER! In other words the super ape is King Kong.

But we know that this strategy ends badly—we have all seen the movie.

In reality, we are the super-apes…and it is not because we are bigger, stronger, and hairier than regular apes, as the picture of Adam and Eve nicely illustrates. Instead, we became the super-apes because we ate the apple of knowledge and developed our intelligence—which is not the most obvious of an ape's advantages.

So the King Kong Mistake is to fall into the trap of thinking that the best way of dealing with a major challenge to your current approach is to just do a lot more of whatever it is that you are doing now.
Now, let's think about Basel.

* *Kevin R. James, Co-Investigator, Systemic Risk Centre, LSE*

Designing Super-Basel in Response to the GFC

The Basel II approach to financial regulation was built upon capital, supervision and liquidity requirements. In response to the epic, spectacular failure of Basel II in 2008, a committee of central bankers got together to design Super Basel (many of you may have been involved). Unsurprisingly, Super Basel is: MORE CAPITAL!, MORE INTENSE SUPERVISION! MORE LIQUIDITY! MORE MACRO-PRU!

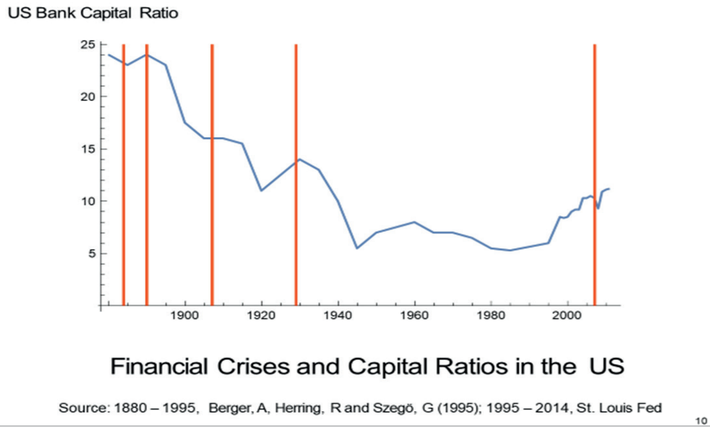
So is Super Basel actually going to work? What is the evidence in favor of Super Basel?
Let's talk about capital and liquidity first. The historical evidence shows that higher capital requirements do not reduce the probability of a financial crisis. There is a very nice paper by Jorda, Richer, Schularick and Taylor where they look at the long-run time series evidence for 8-12 developed countries and they find that capital and liquidity have nothing to do with the probability of a crisis.

They do find that higher capital requirements maybe reduce the impact of the crisis - so not the probability but the impact - but that may only be because in the past, a lender of last resort policy was not so well developed. So you had the crises and the crises got out of control because central banks did not act properly, did not use the lender of last resort power properly and that explains the impact variable. Now that we have sorted out our thinking about the lender of last resort, capital requirements probably will not do much to reduce the impact of a crisis either (see Reinhart and Reinhart's excellent discussion of the developments in LOLR policy in their paper "The Crisis Nest Time: What we should have learned from 2008").

Basically, there is very little evidence that capital regulation is going to do much to reduce either the probability or the impact of a financial crisis.

To illustrate my point, here is the data for the US going back to 1870. The orange lines are the financial crises and the blue line is the capital ratio of the US banking system. We see that basically there is no relationship (if anything the relationship is negative). It is not like higher capital means fewer crises, it just does not work that way. This idea that we can protect the banks or reduce the probability of a crises by forcing them to have higher capital, is not well founded on evidence. The idea that this process is going to work and reduce the probability of a crises does not have a strong support.

Chart 1



Now let's talk about supervision. Paul Tucker gave a speech - he was the Deputy Governor of the Bank of England - on what supervision was all about and this is what he said:

"Supervisors will need to focus on the big issues. Analysing bank balance sheets and businesses. Applying judgment. To my mind a great bank supervisor is forensic; is capable of substituting their judgment for those of management; but is wise enough to do so only when necessary; and has the personality to conduct the regulatory relationship without unnecessary conflict."

Now I ask you, what is the next sentence? I think that the next sentence should be: "Therefore, banking supervision is an impossible task." That is not the direction in which Tucker took his speech.

There is just no way any human being can actually do what Paul Tucker asks of a banking supervisor in the real world. Indeed, Oliver Williamson won his Nobel Prize in economics in 2009 by stating there is no way you can do that—that was the main theme of Williamson's research. It is delusional to think that supervisors can accomplish that task.

If you look at empirical evidence there are very few empirical studies on supervision itself. But basically the point of supervision is to turn the financial sector into a giant conglomerate like General Electric or ITT, where the central bank/regulator is the Head Office and the banks are all operating companies. And there is a long history of studying conglomerates.

In essence, then, the idea of supervision is that we as the head office interfere and say "stop doing that" if the bank operating companies are doing something crazy. You would think that this can only be good, because if you only interfere when somebody does something bad, then how can supervision ever not be beneficial? The problem is that it is impossible to interfere only when somebody is doing something bad. You inevitably create a dynamic where your interference affects the incentives of the people working in the banks. If you look at conglomerates, conglomerates trade at a lower market value than the companies would if they were managed separately—in finance we call it the conglomerate discount. The conglomerate discount means that the head office–operating company relationship destroys value. And there is overwhelming empirical evidence that that is true. There is no reason to expect that the same relationship does not hold for banking supervision.

If you look studies of supervision Barth, Caprio and Levine have a book called "Till Angels Govern". Using World Bank data, they look at the relationship between the power of bank supervisors and banking system performance. They find that the more powerful the supervisors, the more messed up the banking system.

The very best paper I could find making the pro-supervision case was a recent NBER working paper by Eisenbach, Lucca and Townsend. They find that it may look like supervision may not work, but it's hard to tell because of endogeneity problems. So if you have a lot of supervision and banks perform poorly, that may be because either supervision does not work or because you see a lot of supervisory activity when the banks are fundamentally in trouble. It may be hard to disentangle what effect supervision is actually having. Maybe this is true, but if the strongest evidence we have in favor of supervision is that it may (or may not) be more effective that it looks, I am not sure if we should really make supervision a pillar of our new regulatory regime.

It looks to me like Basel III is a classic of the King Kong mistake. We took Basel I, which didn't work, and turned it into Basel II, which did not work, and now we are turning Basel II into Basel III, which is not going to work either. So it is very hard to be optimistic that Basel III is going to triumph when we turn it loose on the streets of Lower Manhattan—or the City of London.

What can we do instead? In the United States, and I am sure in Albania, there is a long tradition of city slicker and farmer jokes. The most famous one is the one where a lost City Slicker is talking to a farmer arcoss a barbed-wire fence and the City Slicker asks "Farmer, how do I get to Little Rock?" and the farmer responds "Stranger, you can't get there from here". This is basically what I think about financial stability and Basel. We can't get there from here. So we should start from somewhere else.

MacroConduct Policy as opposed to MacroPrudential Policy

Let me continue with what might seem like a counter-intuitive observation: market discipline saved the world in 2008. When you look at the crises of 2008, we found that the Global Financial Crisis or GFC pushed the regulatory system to the limit. When I was working for the Bank of England and talking to people I know at the Fed, people were pretty nervous in September 2008 about whether regulators would be able to keep the financial system functioning and avoid absolute disaster.

The crises happened in September 2008 because the market said "we are not giving Lehman more money". So people were shorting Lehman stock, hedge funds were shorting Lehman stock, other banks were not extending loans, and that is why the crises happened. It was not because Lehman's regulator the Securities and Exchange Commission (SEC) shut down Lehman or because the Federal

Reserve shut down Citibank. It was market participants who said "no more cash for you guys, because you are insane". That is what started the crises, and saved the world.

If the bubble had gone on for another two years in the United States and the crises happened in 2010 instead of 2008, it is unclear whether we would have had the resources to save the financial system without a far more severe crises than what we experienced. So we avoided this disaster because of market discipline.

Maybe, instead of going down this whole Basel path we should take what worked, which is market discipline, and try to make it work better. With better market discipline, perhaps we could have had a much smaller crises in 2004 instead of the GFC in 2008--let alone an even more catastrophic crisis in 2010.

How can we, then, take what actually worked and use that as the foundation for our post-crises regulatory reforms?

This is what I call Macro-conduct policy: Strategically regulating financial markets so as to get them to work well. If you go down this path you can both improve the immediate risk to financial stability, which is a financial crisis, and also the longer term risk to financial stability, which is low growth.

Even if we survive the next financial crises, if growth rates stay low, as low as they are in the US and Europe now, in five or ten years from now, there is going to be a total economic and social catastrophe. We need higher growth rates and no financial crises. If we get the financial system to work well, we can get both of those things.

Now is there any evidence that this approach could work?

This is all preliminary work I am doing with Dimitri Tsomocos (Oxford) and Akshay Kotak (LSE), based on US evidence.

Chart 2

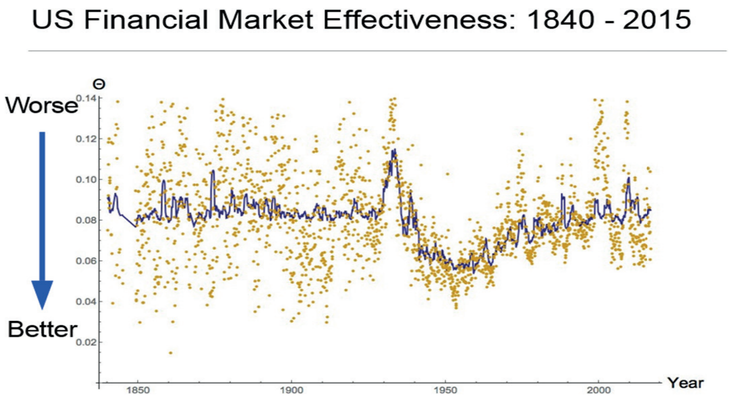
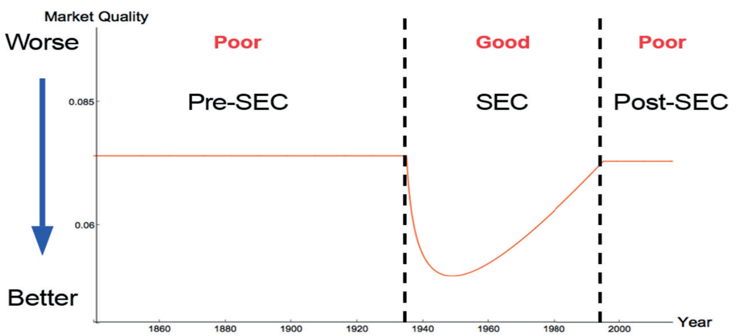


Chart 2 shows the US Financial Market Effectiveness from 1840 to 2015. In this Chart, the blue line is the fitted value and the yellow dots are the monthly observations. You see that there is a big drop around 1930. That is when the SEC was created. The goal of the SEC was to improve US financial market performance and they did that basically by improving accounting standards and by enforcing security rules. And it worked (according to our measure, anyway). Those are the things that seem to matter. They had an immediate effect on the financial market effectiveness in the United States.

Over time, the blue line has shifted back up, because (we think) people have found their way around the rules. So the rules are still there, but they are just not as effective as they used to be because people have found loopholes. One problem with the studying the effectiveness of regulation is that when people look at "do the rules work?", they say "do people still fill in the forms?" – which they still do – but they don't ask "do the forms still do what they are supposed to do" - and the answer to that question is "no". In the US and elsewhere we should keep better track of how effective regulations actually are, but that is a side point.

Chart 3

Fundamental Opacity (Subtracting Out Market and Time Series Effects)

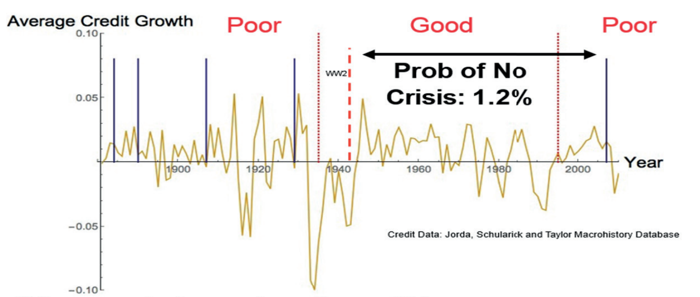


What you see in this Chart is this big immediate effect and then this gradual drift back up to pre-SCC levels of market quality. Basically you have financial markets that worked badly from 1840 to 1935, followed by a period of effective financial markets from 1935 to around 1995, which is followed by another period of poorly financial markets from 1995 till now.

In Chart 4, the vertical blue lines are the financial crises the yellow line is credit booms and the red letters break the world up in to the main periods.

Chart 4

Credit booms, market quality, and crises: Non-Parametric Test



When markets work well, credit booms do not cause crises

21

You can see that there is some relationship between credit booms and financial crises. The blue line follows a spike in the yellow line.

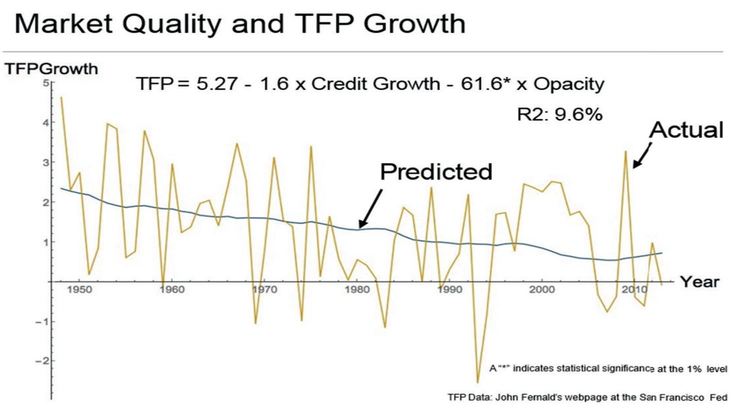
That is, according to the Schularick, Taylor and Jorda, "credit booms create a financial crises risk" relationship.

What is striking from this plot is that the Credit Boom/Financial Crisis Risk relationship is strong when the financial market performs poorly (according to our measure) and weak when the financial market performs well. That is, even though there are many credit booms in the US between 1940 and 2008, there are no financial crises.

To examine this relationship more rigorously, we first estimate the Schularick, Taylor and Jorda relationship regression with data from only the period of poor market effectiveness and we then ask: given that relationship, what is the probability of getting from 1948 to 2008 without a crisis? We find that this probability is about 1.2%. This suggests that that there is a structural break in the Credit Growth/ Financial Crisis relationship in the US during the "effective financial market" period. Obviously, this evidence is extremely preliminary, but it does suggest there may be a connection between financial market quality and a probability of a financial crises.

According to our model, the US should be back in the high crises probability regime after 1995. In this regime, the US experiences a crisis about once every 13 years on average. The 2008 arrived "right on schedule". Our analysis suggests that the recent reforms have not done much to improve financial market quality, so we may still be in the high crisis probability regime.

Chart 5



Obviously, this analysis is highly preliminary and speculative; this is not definitive evidence and I am not saying that it is. But this evidence does suggest that the financial market quality/financial crisis probability relationship is worth exploring further.

Now let me briefly turn to financial market quality and Total Factor Productivity (TFP) Growth. Here is my estimate of this relationship. One major economic puzzle is "Why has US productivity growth fallen over the postwar period?" The standard story is the Robert Gordon hypothesis that we run out of ideas (Gordon is a professor at Northwestern University). We had massive innovations such as the industrial revolution, electricity, up until 1930. But, since 1930 we just have been running on the momentum produced by these innovations. So, ever so gradually, TFP growth has fallen.

Our theory is that poor quality financial markets make it harder to organize innovative activity. The decline of the financial market quality is what explains the decline in TFP Growth. We have a strong relationship there. That is basically what the plot is showing you. The blue line is our fitted value for TFP Growth as a function of market quality, and our market quality measure can explain a fair chunk of the drop. Again, this evidence is speculative and preliminary and is in no way definitive. But it does suggest that relationship between market quality and TFP Growth is worth exploring further.

Improving the Regulatory Response to the GFC

So, in brief my conclusion is:

We as regulators and economists make fun of people in financial markets when they say "this time is different". Indeed, two of our most famous economist regulators — Carmen M. Reinhart & Kenneth S. Rogoff — wrote a book called "This Time Is Different-Eight Centuries of Financial Folly" where they make fun of all the people in the financial markets who say "this time is different" right before a financial crises.

But let's take a step back and look in the mirror: what do we say? We say "next time will be different". Basel I did not work, but next time it will be different. It turns out that Basel II didn't work either, but wait till Basel III!.

Is Basel III really going to be different? I don't think so. I could be wrong. Maybe Basel III will actually work out as well as you think it will. But what I really want you to ask yourself is "are you 100 percent sure that Basel III is going to work?". Because if you are not, the stakes here are really high.

If there is another financial crises in the near future, it is going to be an economic, political and social catastrophe for the liberal democracies of the world. The stakes here are enormously high and we have to be pretty sure we are doing everything that we can to limit that risk.

Since we cannot (in my opinion) be sure that our current policy is going to work, it might make sense to take 10 or 15 percent of the resources you now devote to Basel III and spend it on making financial markets work better. Think of it as hedging your Basel III risk. Because if we fail in this case, we are basically getting the situation in the next picture.

We really are very close to that. If there is another crises two years from now, it is going to be really horrible and we should do everything we can to try and stop that from happening.

Given the risks and what we actually know about what works, it has to be wise to avoid putting all of our eggs in the Basel III basket.

Thank you!

FINANCIAL INNOVATIONS, INDEBTEDNESS AND COORDINATION OF MONETARY AND MACRO PRUDENTIAL POLICIES

*Jan Frait**

ABSTRACT

This article builds upon the experience of the Czech National Bank with the coordination of monetary and macroprudential policies at different stages of the financial and business cycle that is based on identified channels of transmission of the two policies and potential feedback between them. It is admitted that in some situations monetary policy and macroprudential policy can come into conflict in the pursuit of their objectives. It is therefore crucial to coordinate them and seek an optimal policy mix based on a detailed assessment of the economic outlook.

Keywords: monetary policy, macroprudential policy, economic cycle, financial cycle

1. INTRODUCTION

I would like to thank you for inviting me for this conference. This is the first time for me in Tirana and I am honored for the opportunity to tell a few words on the Czech National Bank's approach to its

* *Jan Frait, Executive Director, Financial Stability Department, Czech National Bank*

monetary policy and its coordination with its macroprudential policy, or potentially with other policies.

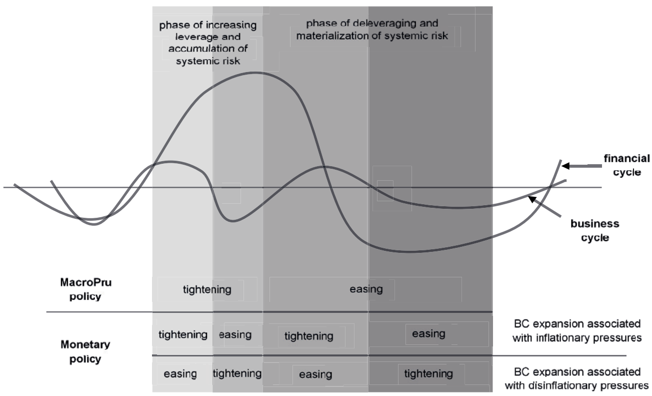
Let us start with financial innovations that are at the focus of this panel. There surely are some good innovations even in the financial sector. Nevertheless, we can also find plenty of bad innovations in the financial industry in this century and one particular area is mortgage financing. We could see things like interest only schemes, different payment of interest and principle, extensive stretching of maturities and even not amortized mortgages. Their final outcome was that people that were buying houses and flats were taking much higher loans, those who were selling got higher prices and people in financial intermediation and real estate sector earned quite a lot. Nevertheless, altogether it created systemic risk with dire consequences in some countries. We can also see that high indebtedness of private sector, especially households, may create a very problematic environment for monetary policy or other policies, or these policies even could be trapped. This is what I'm going to talk about.

2. MONETARY AND MACROPRUDENTIAL POLICIES NEXUS

Central banks have price stability and financial stability objectives. For meeting them they have monetary policy and macro prudential policy tools at their disposal. A number of people in central banking community and even more in academia think that each policy should be used separately to meet its specific objective. I don't subscribe to this view. Once we start to think about transmission mechanisms of these policies, we will have to conclude that these policies are not independent, they are interlinked. Anything that affects the availability and price of credit (or assets in general) also affects the growth rate of these assets, their quality and profitability. Changes to both monetary policy tools and macroprudential tools act via channels working through credit supply and demand, the risk-taking of economic agents, the asset prices, the perceived actual and expected bank credit risk or the banks' profitability. Being aware of it the Czech National Bank decided to set a framework for the coordination of these policies (Frait et al., 2014).

In some situations the two policies can come into conflict because of a need for them to work in opposite directions, while in other situations it may be desirable for them to act in the same direction. The right policy mix then depends on the intersection of two different cycles – the business cycle and the financial cycle – which makes it necessary to analyse the interaction of the two at different stages of both cycles and to coordinate them where appropriate (Malovaná and Frait, 2017). So, we created something like a matrix, for various situations in terms of economic and financial credit cycle.

Chart 1 Interaction of policies at different stages of the financial and business cycle



Note: The shape of both cycles reflects the composite measures constructed by Drehmann et al. (2012) for the United States (see Chart 3, p. 19). For a detailed description of the evolution of systemic risk and conduct of macroprudential policy over the financial cycle see Frait and Komárková (2012). Some combinations of policies are more likely than others, and some are very unlikely.

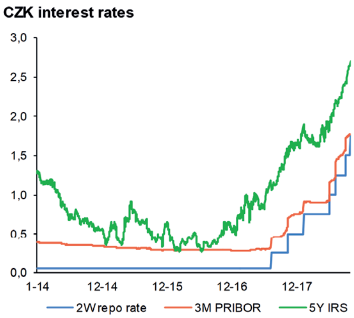
Chart 1 shows a stylized representation of the financial and business cycle and describes suitable combinations of responses of the two policies in different phases of both cycles. Some cases are quiet clear. So, for example, if we have a financial crisis and recession like in 2009, we know that monetary policy should accommodate low interest rates and macro prudential policy should be loosened. The latter means that banks should be allowed to use the previously accumulated buffers. If the economy is starting to climb out of recession and emerge from a banking crisis, easing both policies works in a single, common direction, since inflation pressures and risk-taking are both at a low level. The easy monetary policy does not compress risk premia and does not encourage excessive risk-taking.

All of us understand that these are obvious cases. But, there are some other situations in which it is not that easy to coordinate and even find a proper mix, because the mix depends on the properties of two cycles, the financial cycle and business cycle and these cycles are quite different, sometimes is very difficult to tell what is the best or least problematic approach. If the economy is in a phase where credit growth is accelerating and financial imbalances are starting to form, maintaining easy monetary policy may initially help further improve the current financial risk indicators (primarily by reducing the default rate), but may simultaneously generate latent risks that could later manifest as a sharp deterioration in loan portfolio quality. Both policies should be kept neutral, or one of them – macroprudential policy – should be tightened.

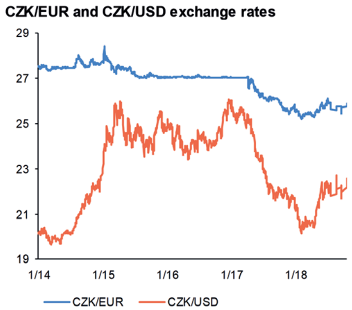
The typical situation of this sort is right now in Europe. Currently we can see credit or financial boom in a number of European economies. At the same time, because of low level of inflation or less fear of low inflation, most central banks keep policy rates at zero level or sometimes even negative. Of course, everyone agrees that in this situation it is necessary to tighten macroprudential policy. But still we should get back and talk how about monetary policy, should it really be that loose or should we pre-emptively tighten the monetary conditions too? There is no agreement in the community on this.

As I said, I am paid for being pessimistic and I think it's sometimes very difficult to coordinate these policies properly for one simple reason. People that decide on monetary policy work with their fancy DSGE models and they believe that they present the best available estimates of economic developments in the short term. While those who work in the financial stability area just talk about potential risks. We are not sure about the horizon of the risks and we don't have a single measure of it. Therefore, policy makers will naturally give preference to price stability objective and agree that financial stability concerns are less pressing in the short term. We have to learn how to live with that. What is then surprising is that everyone in Europe now expects that macroprudential policy is here to save the day. There is a general view in the central banking community that we have loose monetary policies because we simply need them. And if they produce risks, the macroprudential policy tools should do the job, prevent excessive credit growth, constrain asset prices misalignments and so on. I think this is a bit of a schizophrenic approach. I fully agree with the BIS economists that we need a more holistic approach. This simple division of labor between monetary policy and macroprudential policy may not work.

Chart 2



Source: CNB, Bloomberg



Source: CNB

3. CZECH NATIONAL BANK APPROACH

The Czech National Bank approach is a more complex one. If you look at our website, it says that we have two major objectives, price stability and financial stability. These two objectives have roughly the same weight. We also talk about the coordination of monetary and macroprudential policies, about maintaining confidence in the value of the Czech koruna and safeguarding the stability of the macroeconomic environment through the joint actions of monetary and macroprudential policy. And we are really taking actions. We use monetary policy as a truly procyclical policy. We used it to take out the economy from recession in 2009-2012, by cutting interest rates and by exchange rate commitment (Brůha and Tonner, 2017). Once the economy recovered and inflation got back to target, we terminated this currency commitment, allowed some currency appreciation (Figure 3) and in the last years from last August, we made couple of policy rate hikes, the last one right today (Figure 2). So, we are now at 1.75 % with our main policy rate and still we provide a kind of forward guidance saying that probably there are some further hikes in the pipeline. This means that monetary conditions are getting tougher.

As to the macro prudential policy, we increased discount of countercyclical buffers a couple of times, and we set LTV, DTI and DSTI limits for mortgages. And the reason is that we are really concerned about potential high indebtedness in the economy because we understand that it may constrain the use of policy interest rates as a countercyclical macroeconomic policy tool. You can see some countries, I will not name them, but you can imagine the names, they have very low interest rates and sometimes even negative, despite normal inflation and despite overrated economy. Why? Because only low interest rates in these economies with large level of debt keep servicing cost sufficiently low. Even a relatively small increas in the level of lending rates could lead to much higher default rates, decline of consumer lending and disinflationary pressures. This also means that protracted period of low interest rates could be self-enforcing. Once you have it and enable emergence of high debt, you have to keep policy rates low, because otherwise you would find yourself at a risk.

In economies with high level of debts, macroprudential policy could become unwittingly a substitute for monetary policy. And if the central bank is not the macroprudential authority, like in some Scandinavian countries, and if it is constrained by political considerations, a trap may emerge. So as a central bank you don't have true monetary policy owing to debt concerns, you don't have macro prudential policy since it's done by someone else, so you may have nothing available to cope with cycles. Hopefully, it's not our case. We try to do our best to preempt such a situation. We have active monetary and macroprudential policies and these policies work in tandem. Soon we will celebrate 100 anniversary of our Koruna. I am sure that these were successful 100 years and I hope that in 100 years, we will celebrate 200 years of successful Koruna.

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FINTECH AND BANKING: IMPLICATIONS FOR BUSINESS MODELS AND REGULATION

*Emidio Cocozza**

First of all I would like to thank the Bank of Albania and all those who have been involved in the organization of this really interesting conference. It's the fourth time that I am here in Tirana and, as ever, I am positively impressed by the transformation that is going on in Albania.

My intervention will be focused on the potential impact of financial innovation in the banking industry. I will try to give some hints on which are the main problems and issues for regulators and supervisors.

Financial innovation enabled by new technologies and the digital transformation (Fintech) is introducing in the financial landscape new products, new players and new business models. In this context, the main question is whether and how far Fintech firms will replace banks and whether, in doing so, they will induce a healthy competitive process or rather cause disruption and financial instability. The whole debate on how to regulate Fintech reflects this tension between stability and competition.

* *Emidio Cocozza, Deputy Head of the International Technical Cooperation and EU Neighbouring Economies Division, Bank of Italy*

In most cases, Fintech firms provide the same services as banks, but in a different and unbundled way. Just take the case of Fintech credit, which encompasses any credit activity enabled by online platforms whereby borrowers and lenders are directly matched.

Like banks, Fintech credit firms transform savings in investments. In facilitating the matching of borrowers and lenders they may also process information, either by screening potential borrowers *ex-ante* or monitoring their behavior *ex-post*. One distinction regarding Fintech credit firms is that they typically process hard information and use large databases of external and standardized data to evaluate credit risk, while banks most of the time work on soft and relationship based information. Another important distinction is that most Fintech credit firms do not carry out maturity transformation and do not assume in their books any credit or other risk.

So, in the case of Fintech credit firms there is clearly disintermediation, but pure Fintech credit firms have a limited scope and do not replace banks in most of their key functions. Indeed, the economics of banking has a strong rational in the ability to bundle different activities and services, like deposits, payments and landing, and bundling provides powerful economies of scope. If Fintech firms wish to expand their range of activities, they would have to bundle different services. But in that case, their business model would gradually converge towards that of banks and, if this happens, it is no longer clear that Fintech firms would have a neat competitive advantage compared to banks.

Moreover, as Fintech credit firms expand the range of their activities, the scope for regulatory arbitrage declines. Take for example a credit platform that starts collecting deposits and granting loans outside the peer-to-peer framework. In that case the credit platform would operate by definition as a bank and in that case obviously the banking regulation should be applied.

Once regulatory arbitrage is ruled out, and the same regulatory framework is applied on all institution on the basis of the functions they perform, the playing field is levelled. Then the only competitive advantage is the one granted by technology and the organization of activities.

Alternatively, Fintech firms may continue operating in single and almost unregulated segments of the industry, trying to stay at latitude from the costs and burdens of banking regulation and compliance. In this scenario, the main risk for traditional banks is that a number of nimble Fintech firms, each focusing on a small part of the banking business model, catch the most profitable costumers and segments, leaving to banks the low value added parts.

To cope with the potential threat posed by Fintech, banks may follow different strategies. One is to internalize the Fintech model in their value chain for example by creating their own online lending platform or buying an existing one. Alternatively, banks can partner with new entrants, externalizing part of the production process to take advantage of the higher efficiency of Fintech firms.

In any case, it's very hard at the moment to predict what will be the ultimate impact of Fintech on the banking industry. The crucial question is what the future relationship between Fintech firms and banks will be and what this relationship will imply for the supply of banking services and for banks' profitability and market power.

Technology allows banks to reduce costs and to improve the quality of the services provided. At the same time, new technologies break down existing barriers to entry in the credit industry, thus fostering competition. One point is sure, that banks will have to invest heavily in new technologies and use them much more efficiently than in the past, to compete not only with one another but especially with new entrants.

The regulation of Fintech activities is still in its infancy. Obviously, the transformation that Fintech is introducing in the financial landscape has the potential to bring about sizable efficiency gains, to increase accessibility to financial services and slash enduser costs. But great opportunities may come with greater risks. The challenge for regulators is to strike the right balance between the need to promote innovation and competition, while at the same time preserving the integrity of financial markets and guaranteeing consumer protection. Different frameworks can be applied to deal with Fintech, ranging from traditional approaches, applying the existing rules to new entrants, to bespoke ones, consisting in the adoption of specific new rules or fullyfledged regimes for these activities.

Each approach has its pros and cons that should be carefully weighed up. Existing rules have been designed to deal with traditional activities and intermediaries and, given the rapid change induced by Fintech in the financial landscape, it is often difficult to understand when, how and to which agents and activities these rules can be applied. The other alternative, a new regime tailored on the specificities of Fintech, has also its drawbacks, considered that Fintech firms provide a broad and rapidly evolving range of activities.

Regulators should refrain from the natural tendency to overregulate, minimizing risks at the expense of innovation. They should ensure a level playing field, in order to avoid regulatory arbitrage and distortions, remaining at the same time tech-neutral, focusing on the products offered and not on the technology or the business model used to provide them.

In this spirit, different frameworks have been adopted in order to avoid that regulation stifle innovation and market entry. These involve different tools, such as: “regulatory sandboxes”, where new technologies are tested in a controlled environment; “incubators”, where regulators cooperate with Fintech firms to develop new services; “innovation hubs”, where authorities start interacting at an early stage with Fintech firms in order to help them navigate the existing regulation. These approaches allow for innovation, experimentation and information exchange, while permitting an assessment of how to better manage the risks associated to new activities.

At the Bank of Italy, for example, we have launched an innovation hub in November 2017 in order to adopt a business friendly approach toward those who want to establish new initiatives and new business lines. We strive to provide rapid feedback to enterprises in order to reduce regulatory uncertainty, which is a major obstacle to innovation.

Let me to conclude by highlighting that, in this rapidly changing environment, regulators and supervisors need to invest resources and build skills also to understand how technologies may be used to pursue their own goals, investigating and exploring the potential to improve methods and processes.

Thank you!

THE BALI FINTECH AGENDA AND WHAT IT COULD MEAN FOR ALBANIA

*Jan Kees Martijn**

This presentation reflects work by IMF staff. The views expressed in this presentation are those of the author and do not necessarily represent those of the IMF, its Executive Board, or its management. I would like to start by thanking the Bank of Albania and the LSE for organizing this event and for inviting me.

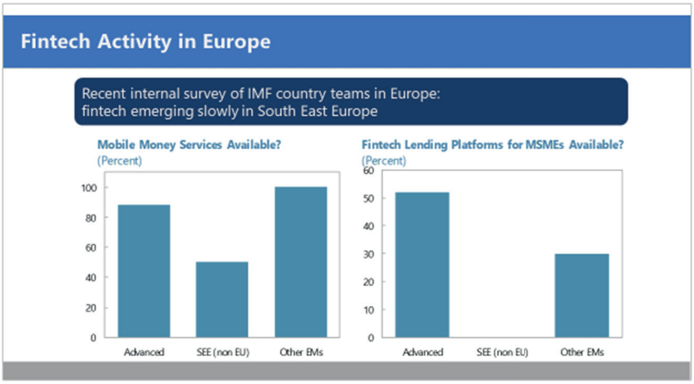
The topic of my presentation is: "The Bali FinTech Agenda and what it could mean for Albania". During the Annual Meetings in Bali in October 2018, the International Monetary Fund (IMF) and the World Bank presented the Bali FinTech agenda.[1] It offers 12 broad considerations for policymakers to inform their work regarding FinTech. In this brief presentation I will summarize this agenda and illustrate it with some broad preliminary ideas of what this agenda could mean for a country like Albania, where fintech has thus far not developed to a great extent.

First, to set the scene, it may be useful to examine some data about the advance of FinTech in Europe. This information is based on a recent survey among IMF country teams. They were asked to what extent FinTech activity was moving forward in the countries they

* *Jan Kees Martijn, IMF Mission Chief for Albania*

[1] *See International Monetary Fund (2018). "The Bali Fintech Agenda." October, available at https://www.imf.org/en/Publications/Policy-Papers/Issues/2018/10/11/pp101118-bali-fintechagenda.*

Figure 1



were working on. In the first slide we see that both digital wallets and peer-to-peer lending platforms play a role in many or most advanced countries and emerging market countries. But the table also shows that in South Eastern European (SEE) countries, this development has not moved forward as far yet, especially for peer-to-peer lending.

In the next slide we see a similar pattern regarding the use of blockchain applications and plans that may exist for central bank digital currencies. These two innovations have advanced more in other parts of Europe than in the South Eastern region, which suggest that countries in South Eastern Europe have somewhat more time to think through the issues of the Bali FinTech agenda.

Figure 2

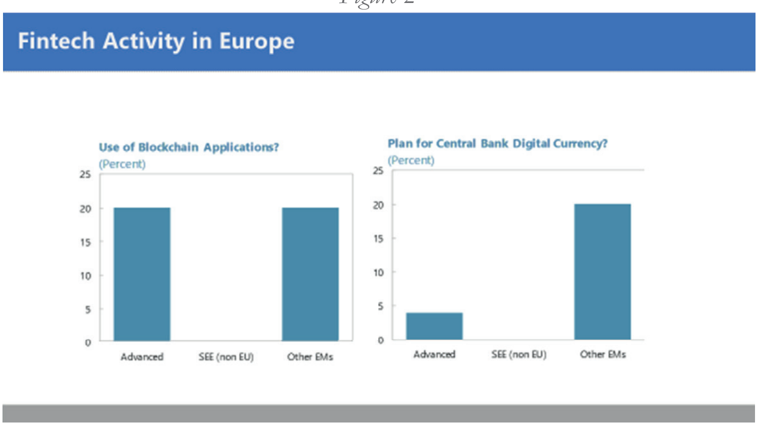
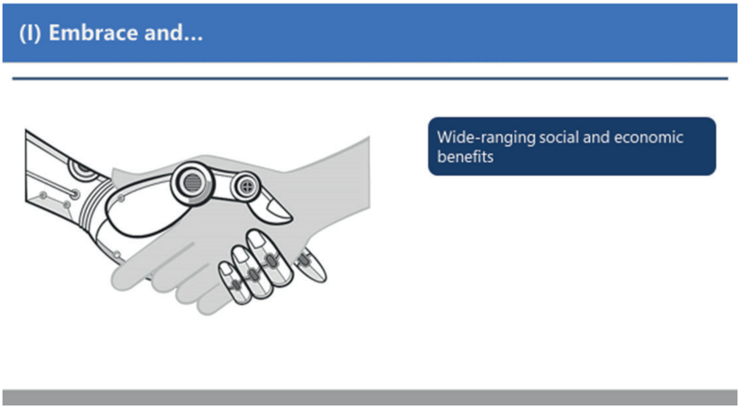


Figure 3

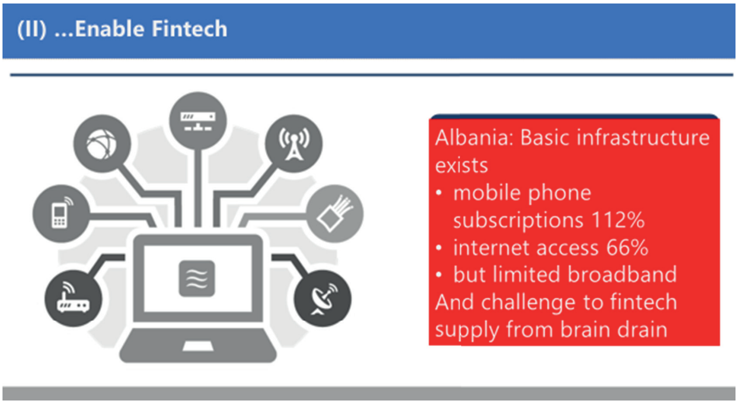
The main topic of this presentation is the Bali Fintech Agenda. The Bali-Fintech Agenda offers is 12 high-level considerations on how to use FinTech to promote growth and financial inclusion in a manner that mitigates risks. The Agenda does not offer specific policy advice. In line with this, I am also not offering concrete policy recommendations. Instead I will briefly present the 12 considerations and add some more specific comments related to Albania.

Figure 4



As a starting point, Fintech, which involves the introduction of new business models, new products, new companies, and service providers should be welcomed. It offers opportunities for greater efficiency as well as for quality gains.

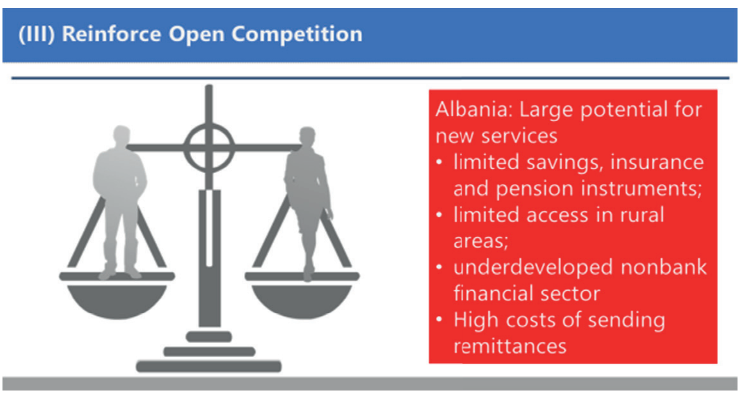
Figure 5



It is important to realize that FinTech relies on the existence of a supporting infrastructure. A range of actions could be considered by policymakers to help develop an open and affordable digital and financial infrastructure that could promote FinTech. Policy options include to facilitate telecommunications and mobile data services, including in rural areas, and to promote digitalization across government services and the broader economy.

Looking at Albania, several indicators offer a snapshot of the existing infrastructure: mobile phone subscriptions are high, and internet use is reasonably high. Albania has also developed digital ID mechanisms to authenticate costumers, which is an important element of the infrastructure. On the other side, the outward migration of many

Figure 6



young Albanians, and especially those with higher skills, could create a bottle neck for innovation in the country.

The third point of the Bali Fintech Agenda concerns the importance of open competition. Fintech can promote competition, and it can increase consumer choice, often based on the unbundling of services. To make that happen, it is important to create a level playing field for both existing financial service providers and new providers. And, in that context, policymakers may want to think about how to reduce barriers to entry in terms of laws and regulations and how to foster standardization and interoperability.

In this context Albania has a large potential for exploiting financial sector innovation, given that the existing supply of financial services has some large gaps. There is a very limited supply, for example, of savings instruments including for pensions or insurance instruments. Large parts of the rural areas are typically unbanked. This points to the potential need for new services. Furthermore, remittances, which are very important for Albania, often come with very high costs--about 8%-10% on average--which also points to the room for innovation.

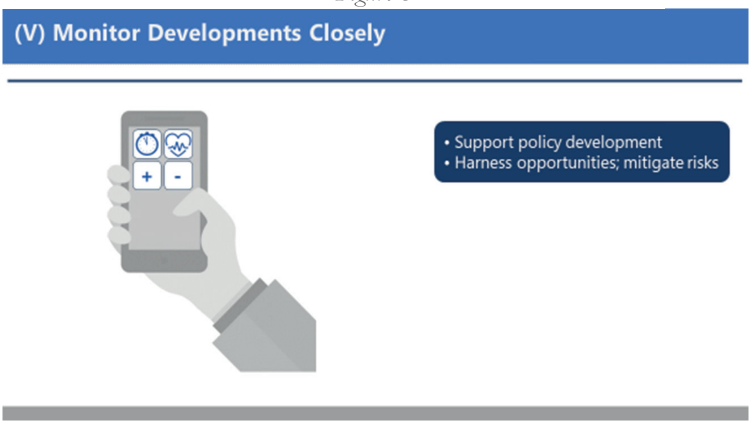
Figure 7

As an extension of these ideas, we can also think about the scope for enhancing financial inclusion. Fintech can promote financial inclusion by reaching previously unbanked groups through digital channels, and offer low-cost options for payments, credit, invest,ent, and insurance. This can also help micro and small enterprises.

In many parts of the world FinTech has reached costumers that were previously not covered by the financial system. Many people got access to financial services through their mobile phones. Many developing countries have found ways to essentially leapfrog ahead in terms of financial inclusion. Policy actions that can help in that context would be to promote financial literacy, including financial literacy related to FinTech instruments and also moving to more digitized government services.

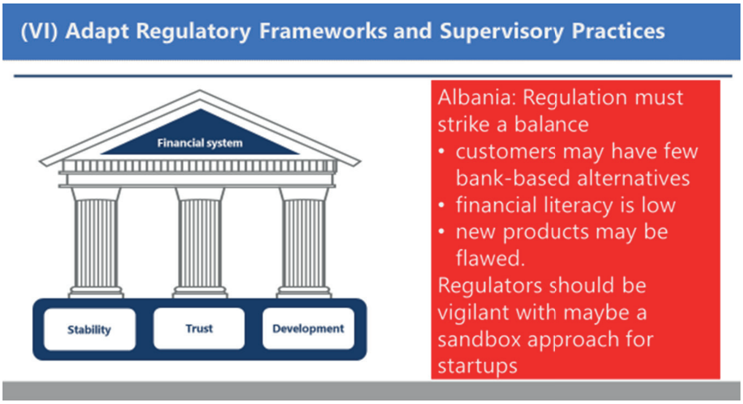
Looking at Albania again, financial inclusion is relatively low; about 60% of the population does not have a bank account, and cash is dominant in the economy. About 95 percent of transactions are executed with cash. At the same time there is an emerging FinTech sector; there are companies offering digital wallets, although their impact so far is relatively small.

Figure 8



The next point of the Bali FinTech Agenda concerns the need to monitor developments closely. FinTech changes rapidly, and current frameworks that central banks and other authorities may use for monitoring developments in financial markets might not be sufficient. They may not collect information on all the new activities or new products. Accordingly, active engagements with participants in the financial markets might be helpful to create a forum for dialogue and for exchanging information with new companies.

Figure 9



Point 6 of the Bali FinTech Agenda calls for adapting regulatory frameworks and supervisory practices. Stepping back, trust is at the heart of financial systems. And regulatory frameworks provide or help provide trust. Costumers often trust financial service providers because they know these are regulated and supervised. It also follows that the regulatory framework is important to support the safe entry of new products and new activities or business models.

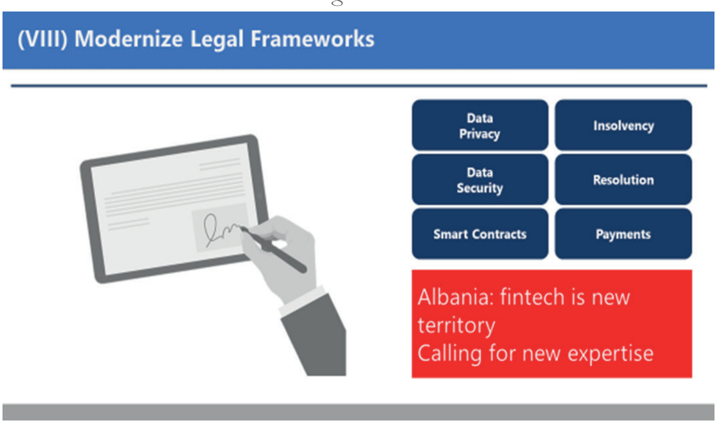
Turning to Albania, consumer protection must be a key concern. Non-banked households may feel they have few options but to use a new product that becomes available to them. At the same time, financial literacy is relatively low and new providers might not always offer safe products. That puts the burden on financial supervisors to protect consumers--as the authorities are indeed doing. For example, the Albanian authorities have issued an advisory cautioning investors about the risks of investing in new products such as Bitcoin. At the same time, there is a tradeoff, given the need to promote innovation. Hence, some countries are considering or implementing regulatory sandboxes and other approaches to foster advances in a safe manner.

Figure 10

Safeguarding financial integrity is the next element of the agenda. Some FinTech applications, especially crypto-currencies, pose risks in terms of opportunities for money laundering and for terrorist financing.

This is a concern for Albania as it is for other countries. At the same time, FinTech can also be applied to help reduce some of these risks, for example by reducing the use of cash.

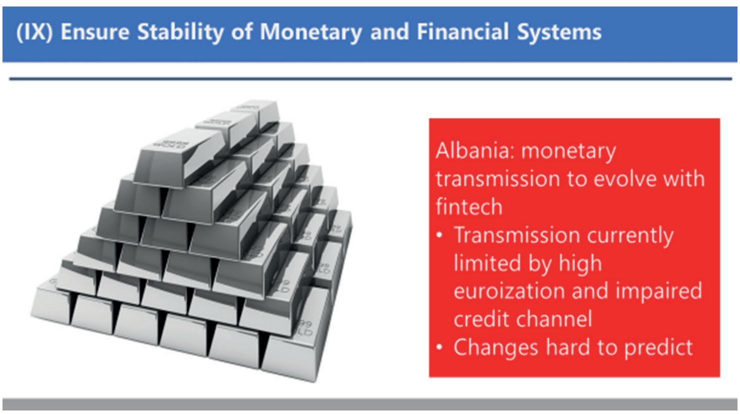
Figure 11



Point 8 is about the importance of modernizing legal frameworks. Legal Frameworks provide an enabling landscape for many activities, including FinTech. The legal framework need to offer the necessary clarity of what is legal. However, what the existing laws say or mean is not always clear when new products and activities emerge. For example, there may not be full clarity about the validity or the enforcement of contracts that are executed through electronic means, or that result from automated smart contracts. Insolvency frameworks might not always be clear with respect to how they treat funds that are moved in peer-to-peer transactions. There much to be done in that area.

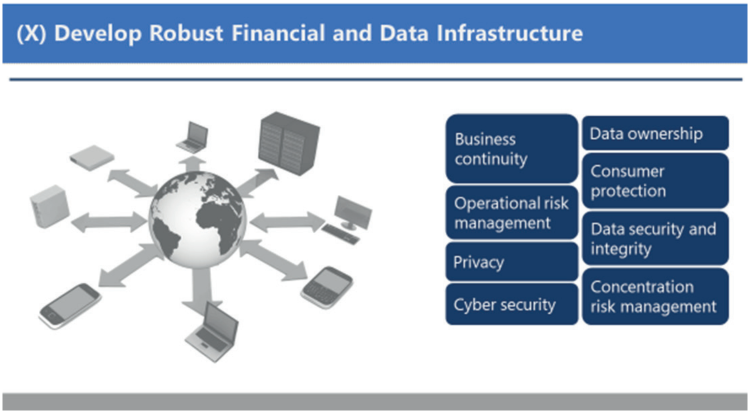
For Albania this is a new territory. As in other countries, acquiring the necessary expertise on these issues is a key requirement for policymakers.

Figure 12



The ninth principle covers the need for ensuring the stability of monetary and financial systems. It's a rather different consideration compared with the previous ones. But FinTech, by blurring the distinctions between intermediaries and markets, and changing the role of banks, can change essentially every segment of monetary transmission, and thereby the effectiveness of monetary policy. This is a big and complex topic that goes well beyond this presentation. But, it raises important questions for monetary authorities. Should they adapt their operational framework? Would it be helpful to issue digital central bank currencies? And how to maintain a safety net for safeguarding the stability of the system, when non-banks and providers of information technology infrastructure are critical players? These may not all be immediate considerations for Albania, but still offer food for thought.

Figure 13



Point 10 concerns the robustness of the digital infrastructure. Making sure that the systems used by Fintech are resilient to disruption, and protect the integrity of data and of financial services has many angles. Cyber security is a paramount concern. The protection of individual and institutional data, with respect to confidentiality and privacy, is another.

Figure 14

Other Bali Elements

XI. Encourage International Cooperation and Information-Sharing

XII. Enhance Collective Surveillance of the International Monetary and Financial System

For Further information, see
https://www.imf.org/en/Publications/Policy-Papers/Issues/2018/10/11/pp101118-bali-fintech-agenda

The final two elements of the Bali Fintech Agenda are encouraging international cooperation, and, collective surveillance of the evolving international monetary and financial system. Developments in fintech raise important questions that are not only national but also global in scale. To ensure that effective regulatory frameworks are developed to address the challenges posed by fintech, international cooperation will be essential. These are two areas where organizations like the IMF can play a useful role.

To conclude, Fintech may spur efficiency gains in the financial sector, offer better and more targeted products and services, and deepen financial inclusion. However, it may also pose risks, for example, if its application undermines competition, trust, monetary policy transmission, or financial stability, or offers new avenues for money laundering. The Bali Fintech agenda brings together key issues for policymakers and the international community to consider as countries formulate their policy approaches. The agenda is of relevance for countries at different stages of Fintech development, including those, such as Albania, where many applications are still at an early stage.

FINANCIAL INNOVATION: RELEVANCE, DRIVERS AND IMPLICATIONS FOR MACEDONIAN ECONOMY

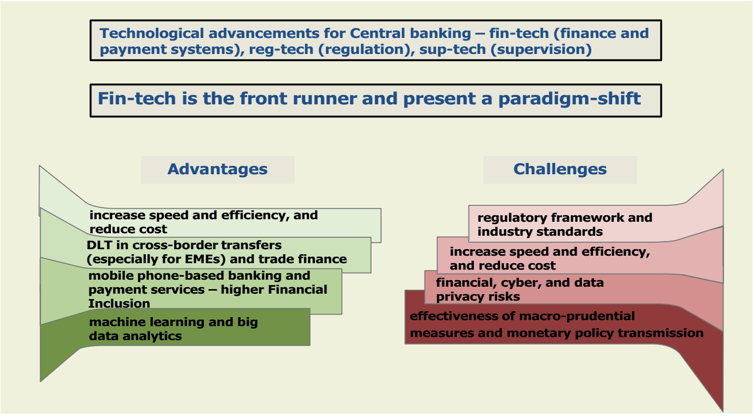
*Emilija Nacevska**

Before I start with my presentation, I would like to thank Governor Sejko, the Bank of Albania and the LSE for this invitation. This is my second time to attend this conference. My first time was in 2005, when I attended four international conferences, organized by Bank of Albania. I was surprised at that time, four in 2005. It has been a long time and big improvements can be easily seen. Let me use this opportunity to congratulate for this big improvement, because this conference, nowadays is very well recognized not only in the region but also beyond it for the very important and interesting topics that are discussed by the esteemed presenters.

My presentation will focuse on financial innovation and its relevant drivers and implications for the Macedonian economy.

* *Emilija Nacevska, Vice Governor, National Bank of the Republic of [North] Macedonia*

Chart 1 Innovation in Finance and Payment Services



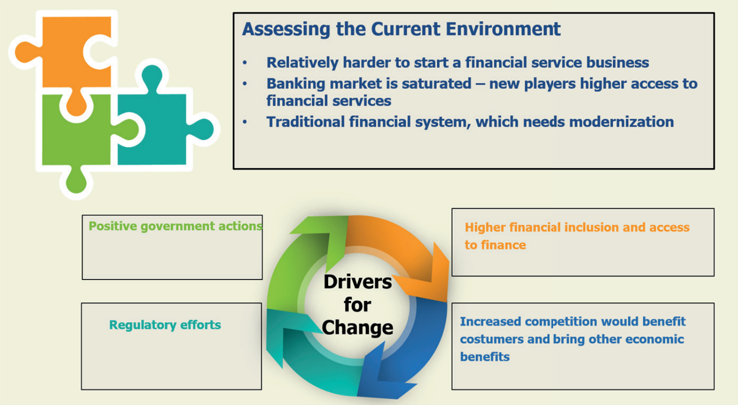
Technological advancements for central banking come in 3 areas: in finance and payment services (FinTech), in financial supervision (Sup-tech), and in regulation (Reg-tech). First, the technology paved the way to FinTech. The same technology fueling FinTech presents gigantic potential to improve compliance, risk management, supervision, regulatory processes and policy making. FinTech has revolutionized the financial industry from digital banking and mobile trading hubs, to crypto-currencies and blockchain. FinTech has changed the way we manage our money and investments, and the ways in which financial services companies, reach and interact with their customers.

Chart 2 Innovation in Finance and Payment Services Embraced Globally

FinTech brings a lot of advantages, but also posed new challenges for regulators and supervisors. Since it could affect the effectiveness of macro-prudential measures and monetary policy transmissions, it inquires development of regulatory framework of industry standards and also it could pose risk to consumer and investor protection, as well as to financial stability, more broadly and brings financial cyber and data privacy risks.

These rapid advances in financial technology are embraced globally. As we heard in the previous presentation, two of the main international financial institutions in the world, the IMF and the World Bank, have positive view on this phenomenon and have constructed framework to support awareness due to its important role in finance. The key considerations from this agenda, provide a useful framework for countries to assess their policy options and adapt them to their own circumstances and priorities.

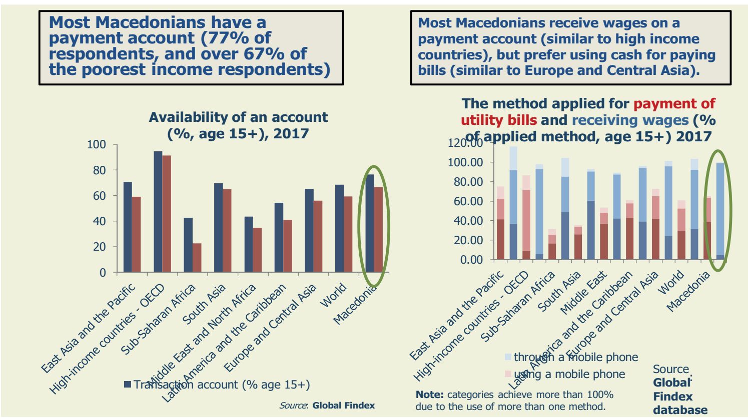
Chart 3 Fintech Situation in Macedonia



What is the current environment of FinTech situation in Macedonia? The Macedonian financial services system is traditional. Financial products have seen little change all these years. There is a limited access in rural areas. Non-bank financial sectors are underdeveloped, and payment services, especially the remittances, are very expensive. So there is a big room for modernization and improvement.

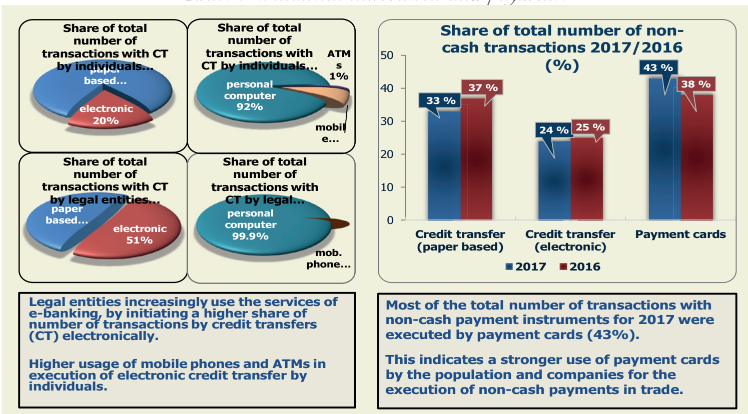
What are the activities taken so far? The government initiated exploring how Macedonia can benefit from technology and innovation. It has launched a fund to extend grants for technological developments, especially to micro and small businesses that are unable to access finance from banks. There is growing awareness for the need of digitalization in all fields of public and business life. What is very important: Macedonia is preparing for the adoption of PSD2 directive within the national legislation and good progress has been made so far. This will bring payments services and system in a form that will force banks to open them so to license non-bank payment providers. This will create greater competition in the payments space and consequently, mainly to wider competition to banking and financial services sector.

Chart 4 Financial innovation and inclusion



Going to some figures to present the situation in Macedonia, I compared some indicators of financial inclusion. Country comparison was made using global FinTech database. And you can see from the first graph that in Macedonia, 77% of the households have access to a bank account. However the services are limited. From second graph you can see that most Macedonian, receive wages on payment account, similar to high income countries, but prefer using cash for paying bills. This happens because we introduced some administrative measures in the past and according to this legislation, the companies are not allowed to pay wages on their employees in cash, there must be their wages on payments accounts. And that increased the percentage of households that have access to bank account but at the same time, they mostly prefer to withdraw their money in cash and pay the bills.

Chart 5 Financial innovation and payments



On the other hand, nowadays, legal entities increasingly use the services of e-banking in comparison to individuals. Legal entities initiate 51% of the number of credit transfers electronically. Mostly from the personal computer. While individuals initiate only 20% electronically. However individuals also have a moderate use of mobile phones and ATMs when initiating electronic transfers. This situation can be an indication of a gradual change in the payment behavior of individuals, in favor of using the benefits of new technical solution in the execution of electronic payments.

Chart 6 Fintech Situation in Macedonia

The National Bank of Republic of Macedonia on June of 2018 held a full day workshop about Fintech in Macedonia, which was attended by the higher management and representatives from all departments

Response Strategy with three key principles

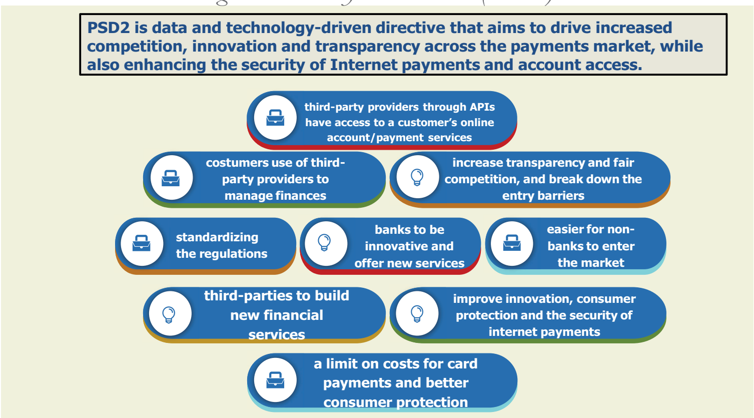
- Change, Coordination, and Capacity Building

Immediate Action Plans

- Establish a Fintech Working Group
- Education and Raising Awareness
- Coordination with all Relevant Stakeholders
- Domestic and Regional Assessment of Fintech Developments
- Capacity Building within NBRM Supervisory Department
- Examine Risk of Fintech
- Engage with Banking Association and Regulators in the Region
- Review of Current Regulatory Framework to Assess Suitability for Fintech
- Standardization of API's to facilitate Open Banking

As a central bank, the National Bank of Macedonia, aware of these issues, at the beginning of this year, started the activity to prepare the FinTech strategy. The overall response strategy includes 3 key principles that should be implemented for more positive outlook of technology call advancements in finance and FinTech. It includes change through regulatory framework, to facilitate the implementation of FinTech strategy. Coordination between different regulatory bodies as well as government and ministries, and capacity building by creating awareness and understanding of FinTech, and develop human and technical resources to encourage technology late innovation in financial services. As well as develop new capacity to be able to supervise FinTech base players.

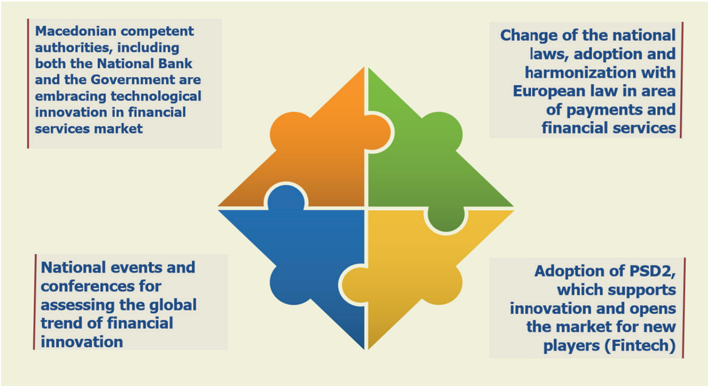
Chart 7 New Regulation on Payment Services (PSD2) in Macedonia



The most important activity in my country, in this area, which will be the most influential step for a friendly environment for FinTech and technological innovation, is the implementation of the PSD2 into the national regulation. The new draft law on payment services is jointly drafted by the Ministry of Finance and the Central Bank, and it was supported by the IPA technical assistance. We expect that this law will be adopted by the government at the end of the year and after that submitted to the parliament. We are, in the phase of preparation of the by-laws, thinking more about the supervision activities.

We expect that this new regulation will bring the requirements for banks to grant 3rd party providers access to costumers only in account, payment services in a regulated and secure way. Banks will be obliged to provide these 3rd party providers access to their costumers account, through an open application program interface. Also bank costumers, both consumers and businesses, will be able to use 3rd party providers to manage their finances. This will increase transparency and fair competition, and break down the entry barriers for new payment services with benefits for the costumers. Standard designing of the regulations for the banks and for the new payment service providers, will also provide banks to be innovative for new services. It will be easier for non-banks to enter the market with financial services solutions and 3rd party providers, and we expect that 3rd parties will build new financial services on top of banks data and infrastructure, to improve innovation, reinforce costumer protection and improve the security of internet payments.

Chart 8 Closing remarks



To conclude:

Macedonian competent authorities including both the National Bank and the Government are trying to find out how Macedonia can benefit from technology and innovation, and it is looking to develop a wider digital strategy. Government has launched a fund to extend grants to technological developments especially to micro and small business that are unable to access finance from bank. Also the Ministry of Information Technology and Administration has for the first time hosted the Western Balkans Digital Strategy in April 2018.

The National Bank is also hosting a conference in association with the Central Bank of Netherlands, to examine the Global Processes of moving to digital businesses and payments. There is a growing awareness for the need of digitalization in all fields of public and business life, and of course the most important is that we are at the final phase of the implementation of PCD2 in the national legislation within the new draft law for payment services, which we expect that will bring new financial services and support innovation and open the markets for new FinTech players.

Thank you!

CRYPTO-INSTRUMENTS, CLASSIFICATION AND FINANCIAL REGULATION

*Ousmène Jacques MANDENG**

I would like to thank the Bank of Albania for inviting my. In my presentation, I will focus on the regulation side. Several references have been made. Some of them to financial services and some to the crypto-instruments themselves, and I would like to focus on the crypto-instruments, not all related to financial services actually. Just to start off, I would like to speak about crypto-instruments, rather than talking about crypto-currencies or crypto-assets. I think crypto-instruments is the more correct denomination, because many crypto-instruments are not currencies, and many crypto-instruments are not assets. Because an asset normally attracts a financial liability and many or most of crypto-instruments actually do not.

The urge for regulation very much came from the proliferation of crypto-currencies. The most famous is Bitcoin, which is indeed a currency. It's now exactly 10 years, since the first Bitcoin transaction took place, so it's quite some time ago. There are more than 2000 crypto-instruments now in circulation, so there has been a tremendous sort of boom obviously. There is concern that this can disrupt financial stability as we know it.

What to do about it? I have to say that also in terms of disclosure, I'm a Senior Advisor with Accenture working on the introduction

* *Ousmène Jacques MANDENG, LSE Visiting Fellow*

of digital currencies for central banks. So this is very close to the sort of activities that I'm looking at. And only last week in London, I went to two presentations, where they were introducing new coins. Basically they want to be regulated. They fear that the lack of regulation causes huge uncertainty and is actually a problem for what could be a more orderly introduction of these instruments into existing financial institutions and market.

There is a demand for regulating them. Most crypto-instruments would normally not attract any regulation. Most crypto-instruments are what we typically call a voucher or like a shop voucher. Something which is a claim on a future service of the underlying blockchain that the coin is attached to. And typically you would not want to regulate them, so please do keep that "regulated" in the back of your mind, when thinking about regulation more generally.

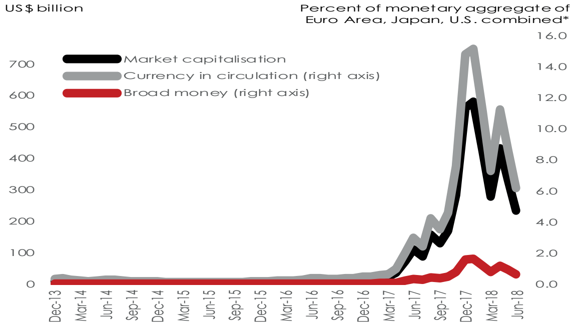
Then there is obviously the problem of the quick proliferation that came with the price increases of Bitcoin in particular. And that has suddenly brought them into the public's fear and obviously concerns about what to if this continuous to develop at that pace.

The Bali FinTech agenda was already mentioned. I was in Bali two weeks ago and I thought it was rather important and interesting. My key message out of that was the IMF and the World Bank basically said let's be very prudent here with how to regulate them. We should take advantage of the huge benefits that they could provide in particular for developing and emerging markets. And that was my main message from the Bali FinTech agenda.

The Chart that you have seen many times, the increase of prices of Bitcoins have caused a huge increase in market capitalization of these instruments. In December of last year, when Bitcoin prices peaked at around 90.500, it's now at around 6.000, suddenly they were indeed very important representing more than $ 600 billion in market capitalization.

Chart 1

CRYPTO-INSTRUMENTS MARKET CAPITALISATION



Source: Bank of Japan, Coinmarketcap.com, ECB, Federal Reserve, IMF. Currency in circulation seasonally adjusted for Euro Area and Japan; weekly averages for U.S. Broad money (M2) seasonally adjusted.

Chart 2

CRYPTO-INSTRUMENT TYPES

Rank 22 July 2018	Issuer	Token	Classification	Market capitalisation (US$ billion)	Circulation (number of coins)	Maximum supply (number of coins)	Description
				22-Jul-18	22-Jul-18		
1	Bitcoin	BTC	Currency	126.9	17,164,575	21,000,000	Electronic cash. Original crypto-instrument based on a blockchain-based application
2	Ether	ETH	Voucher	46.2	100,856,390	Unlimited	Token to be used on Ethereum's decentralised platform for blockchain applications running smart contracts on a customised built blockchain. Offers possibility to issue own crypto-currencies.
3	Ripple	XRP	Voucher	17.7	39,315,683,476	100,000,000,000	Token for processing and sending payments used by banks and other payment providers including for cross-border transactions
4	Bitcoin Cash	BCH	Currency	13.6	17,251,625	21,000,000	Electronic cash. Hard fork of Bitcoin (all Bitcoin holders as of block 478558 are also owner of Bitcoin Cash)
5	EOS	EOS	Security	7.1	896,149,492	1,000,000,000	Token for blockchain technology focused on scalability and smart contracts based on a propriatary blockchain
6	Stellar	XLM	Voucher	5.3	18,766,734,471	104,125,061,584	Token for cross-border payments with focus on low-cost money transfers using the Stellar network
7	Litecoin	LTC	Currency	4.8	57,520,357	84,000,000	Electronic cash. Based on the Bitcoin blockchain
8	Cardano	ADA	Voucher	4.4	25,927,070,538	45,000,000,000	Token for smart contract blockchain platform
9	IOTA	MIOTA	Voucher	2.7	2,779,530,283	2,779,530,283	Token for distributed ledger applications based on Tangle to build internet-of-things (connecting internet enabled devices)
10	Tether	USDT	Collective investment scheme	2.7	2,657,140,346	3,080,109,502	Electronic cash based and backed by national currencies

Source: Conmarketcap.com; token websites, 22 July 2018.

Many crypto-instruments are not currencies. I think this is important to mention, because a regulatory gap really seems to exist only for those instruments that have currency type features. And from the list above, you can see that many are vouchers, some may be securities. Some would argue that those that are securities should be regulated as securities, those that are currencies we would have to think about it (this is where I see the regulatory gap), and those that represent collective investments schemes should also be regulated as such. I think this is what the industry is actually asking for as well.

On regulatory history, I would like to tell just one anecdote which I think is interesting. The proliferation of crypto-currencies is a good remind of what happened in the XIXth century, when paper money was introduced. It was a big innovation, and very similar concerns have been voiced at the time to those vis-à-vis crypto-instruments. What happened was that regulation was adopted, new institutions were created, and central banks in Continental Europe were established mostly to regulate paper money. We have already seen this wave of monetary innovation. And I think this provides a good example of how an integration to the older system actually works.

On the regulatory principles, I'm adopting a very conservative approach. It should be about consumer protection and all the other safeguards normally provided. There is nothing there that would surprise you. The key problem is the classification of the instruments we are talking about.

That is a big problem, because we don't exactly know what features they have and that I believe is the fundamental problem for a constructive regulatory framework for them.

A very simple proposal is that we need a clear classification of crypto-instruments to be able to regulate them. These could be self-declared and should be based on a code of conduct, or on some criteria that are transparent and verifiable, and that need to be advertised and made available to the public. There are existing examples, the London Bullion Market Association has something like that, the BIS when it comes to foreign exchange. So I think we should move in that direction, namely to identify first of all what they are, with transparent and clear criteria and then I think we have the needed bases to actually start regulating them in an old-fashioned way.

Thank you!

CLOSING PANEL WITH THE GOVERNORS' ROUNDTABLE:

WHAT ARE THE MAIN CHALLENGES FOR SMALL ECONOMIES IN THIS "NEW NORMAL"?

Moderator: Ricardo REIS, A.W. Phillips Professor of Economics, LSE

Panellists in alphabetical order:
Már GUÐMUNDSSON, Governor, Central Bank of Iceland
Sokol HAVOLLI, Deputy Governor, Central Bank of the Republic of Kosovo
Gent SEJKO, Governor, Bank of Albania
Senad SOFTIĆ, Governor, Central Bank of Bosnia and Herzegovina
Sandra ŠVALJEK, Deputy Governor, Croatian National Bank

GOVERNORS' PANEL

Moderator: With everyone in his place, let us get started with next session, the closing panel with the Governors' roundtable.

It is a real pleasure for me to be chairing this panel and sit together with such a distinguished panel. Many topics have been discussed throughout the day, all of them touching on the experiences of different countries in many ways. Now we have the pleasure – the privilege - of having the senior central bankers who have been dealing with these issues in different ways sharing their experiences, their lessons learned, and what they perceive are their challenges. I think this is just a brilliant way for us to finish a day.

We will organize the panel, according to the order in the programme, as each governor speaks for approximately ten minutes and once they are done then I will pose a couple of questions and then go around for a second round, and maybe a third one, time permitting.

So, without further ado, it is my pleasure to give the floor to the Governor of the Bank of Albania, Mr Gent Sejko.

Governor Sejko*:* Thank you, Professor Reis. It has been a very long day today, and we hope to be concise and distil, and summarise all our thoughts in the most efficient way.

I will talk briefly about monetary policy, the experience of Albania and some similarities with the region. Then I will speak on how we see the new normal and the new developments, and conclude with a description of the financial stability situation.

Albania has been going through difficult times, especially in the post-crisis period. In the beginning, we did not face very harsh consequences from the crisis of 2008 and we thought that we were immune to it, because we are relatively less integrated with global markets. But, as a matter of fact, by the year 2011, we started to feel the consequences of the global financial and economic crisis.

The most substantial effect of the crisis on the financial sector was the increase of the non-performing loans (NPLs) at a concerning level, reaching as high as 25% of the total credit stock in the third quarter of 2014.

The adverse effects of the global financial crisis became clear in the beginning of 2009, when economic growth started to slowdown and we faced a rapid depreciation of the local currency against the euro. For years before the crisis, GDP was growing at satisfactory rates, it even registered a 7.5 percent growth in 2008. But, in the subsequent years, growth rates were halved due to weakening consumption and investments, and the gloomy prospects on the regional economies.

Since January 2009, the Bank of Albania has implemented an accommodative monetary policy stance, lowering its policy rate 20 times. It now stands at the lowest historical level of 1 percent, from 6.25 per cent in 2008.

The main reason behind the reduction in policy rate has been to incentivise bank lending and boost domestic consumption. We may say today that it sort of worked; we had a relatively good transmission of our monetary policy, especially if one looks at bank lending in the local currency. On the other hand, it should be noted that the full transmission to credit and monetary expansion remained somewhat limited as a result of private sector balance-sheet effects and the high level of euroization in the Albanian economy.

Euroization is present both in the real economy and in the financial sector. Although the euroization level in the financial sector has fallen considerably over the years, it still remains a concern. Up to 2008, for example, foreign-currency-denominated loans accounted for more than 70 percent of outstanding bank credit. Though the current ratio has dropped to around 50 percent, monetary policy actions have to struggle to pass through the desired effects.

Nevertheless, our accommodative monetary policy has had a positive effect, bringing market interest rates down and increasing the stock of outstanding loans denominated in the local currency. Besides that, the Bank of Albania has simultaneously introduced and implemented a set of macro-prudential measures that aimed to promote bank lending. These measures targeted the level of capital requirements aiming to provide temporary regulatory capital relief for all the banks that extended loans within the desired interval as defined by the Bank of Albania. Although commercial banks were somewhat reluctant when we introduced the new measures, the introduction and enforcement of these macro-prudential policies have yielded positive results. Banks' lending activity increased somewhat and, more importantly, this increase was due to bank lending in domestic currency in spite of the considerable level of euroization in both assets and liabilities.

Additional macro-prudential tools were introduced to increase the efficiency of banking supervision as well as to expand the base of insured deposits. Most recently, changes in liquidity and mandatory reserve requirements, as well as in bank-client transparency, were implemented to address potential risks stemming from high level of euroization in the financial sector and in the real economy.

Recently, we have been facing a rapid appreciation of the local currency, which can be attributable to a number of factors. As you heard already during the morning sessions, Albania is experiencing a very positive momentum of economic growth. Between 2012 and 2015, gross domestic product was growing 1 or 2 per cent annually. In 2018, we expect it to exceed 4%. Our analysis indicates that such strong growth can be attributed to higher levels of investments, foreign direct investments, domestic consumption, improved remittances, and a significant progress in the tourism sector. All these factors have contributed to growth but have simultaneously generated considerable foreign currency inflows, particularly in euros, since the euro area is the main trading partner of our economy. As a result, these developments are putting substantial pressure in the foreign exchange market, which makes Albanian lek appreciate towards its best historical levels. This strong appreciation might pose considerable risks to our inflation target and can potentially have negative influence on the economic and financial stability in the future; therefore, we are carefully monitoring this situation.

In this respect, the Bank of Albania is trying to maintain an accommodative monetary policy near the lower bound. Despite challenges from the high level of euroization, the current monetary transmission to the economy is perceived as adequate for achieving our policy objectives and inflation aim. We estimate that the current state of monetary and other macro-prudential interventions are sufficient to close the negative output gap and hitting the three-percent inflation target by year 2020. Probably not in the distant future, we might go towards the normalization of our monetary policy stance, i.e. starting to increase the rates, given our current understanding of economic activity and the latest economic prognosis.

The results have been quite satisfactory with regard to financial stability as well. The financial market is calm and the whole system, which is dominated by banks (more than 90%), is currently well capitalized and has ample liquidity. All NPLs are sufficiently provisioned. Banks may have suffered a few years ago in terms of profitability, but they have absorbed the losses and now have a good capital and profitability level. Banking system went through a difficult phase in the aftermath of the crisis but eventually managed to steer itself safely and successfully through all the headwinds.

Now, we are facing another issue, which we are apparently also overcoming. Most commercial banks operating in Albania are headquartered mainly in euro area countries. Some of these banks - Societe Generale, Credit Agricole, and two Greek banks - have left the country. Faced with new regulatory requirements by EBA and as a result of the ECB's measures, they find that their business model is no longer viable in region. They are leaning towards deleveraging and are indeed withdrawing from the entire region, not only from Albania. This development has created a bit of distortion in the financial market by hindering credit growth, which has already been striving to recover from a period of sluggish growth due to a weak aggregate demand. This development adds another question mark, another big issue for the central bank: Who is going to replace them? Who will be the new shareholders? We need shareholders with banking experience.

Yet, in this regard, we enforced banking supervision by adopting prudential measures and due diligence, and increased the regulatory requirements in order to have better shareholders.

To summarize, our focus is to retain the accommodative monetary policy stance until probably the year 2020, with the main aim to achieve the inflation target and to stimulate economic growth. In the meantime, our macroprudential and supervisory framework is aiming to improve our monetary policy pass-through, and to reduce the level of euroization in the financial sector. We need to use instruments more effectively, to safeguard price and financial stability, and enhance the credibility of our economy and of the banking sector. This is very important as it is the main financing source in the economy.

Concerning the fiscal perspective, while this is the job of the Ministry of Finance, I wanted to point out that the fiscal policy's focus is towards budget consolidation. Gross public debt amounted to nearly 74% of GDP in 2015, and it has been decreasing by several percentage points. Last year, the Parliament approved a fiscal rule that aims to decrease the debt level, such that in the medium term it is to be contained at below 60% of GDP. That is a very ambitious target for the government, for decreasing the debt level, which of course will help the monetary policy effect. It is a known fact that the lower the debt, the more effective the monetary policy transmission.

This concludes my overview on the situation in Albania.

Thank you!

Moderator: That was an excellent description, thank you very much. We will hear next from Governor Guðmundsson of Iceland.

Governor Guðmundsson: Thank you Professor Reis. Let me also thank Governor Sejko and the LSE team, many of whom are old friends and some others new friends, for the invitation. Let me confess that this is my second visit to Albania. I was here in the middle of the 2000s when I was still working for the BIS. Albania was thinking of introducing an inflation target and I made a presentation in a conference on the topic. Marko Škreb was one of the organisers. As I hear now Albania did that with great success. It is not clear what you will need to change after this Conference. I cannot think of anything in particular except to continue in a multifaceted way the good job you are doing.

I am going to briefly reflect on two interrelated issues that have to do with the global environment faced by small open economies that strive to be financially integrated.

I am not going to expand too much on this as many other distinguished speakers here before me today described it very well. The more financially integrated with the rest of the world a small open economy becomes, the less control it has over its long-term interest rates. It can determine its short-term interest rates, and hit over the medium term whatever inflation target it wants, but the transmission mechanism works mostly through the exchange rate channel.

That would be fine if currency exchange rates behaved well. But, we know that is not always the case. They have excess volatility and can be influenced by large and volatile capital flows that are driven by push factors. Therefore, movements in the exchange rate can be unrelated with fundamentals and have destabilising effects on the economy. It used to be said that a flexible exchange rate was a sufficient condition for independent monetary policy. In current conditions, I think this is no longer the case, especially if you factor in the financial stability aspects. The problem will be compounded if exchange rate fluctuations interact badly with financial sector vulnerabilities such as currency mismatches, and underdeveloped domestic capital markets.

There are two sides to financial integration, legal and economic. We can lift legal restrictions on capital movements from one day to the next. But, getting to the stage of perfect financial integration in the economic sense is partly a market-driven process that takes time. What we saw before the Great Financial Crisis was that many countries were getting closer to that stage. At the same time the international monetary and financial system has been very much lacking, because it reflects the global economy as it was, when cross-border capital flows were much smaller and current account imbalances were the issue. Now, capital account imbalances are more the issue.

Reforms to the international monetary and financial system would of course help in this regard. That would be fine and I have some hopes about progress in that area following the Eminent Persons report, but we cannot be sure about that at this time.

This raises the question: what should small open economies do about this in the absence of international reforms? My reflections on that are informed by my own experience in Iceland and my work at the BIS.

We cannot fully back away from cross-border financial integration as it has big benefits for small and open economies. Entering a big monetary union would of course greatly reduce the problem in the sense that the union would have greater control of financial condition than a small economy can have on its own. But that comes with its own pros and cons that I cannot discuss here. So, that leaves us with a solution that has now been implemented to a very significant degree in Iceland and I call inflation targeting plus. We combine flexible inflation targeting, which I think is - at least for a country like mine - the best option, with a managed float not a free float. We use foreign exchange interventions. We have improved micro-prudential policy, especially regarding foreign currency risk. We have built resilience with big foreign exchange reserves and a well-capitalized banking system. We have developed a macroprudential policy with a framework for oversight and the deployment of additional tools.

Nonetheless, sometimes all this is not enough because the capital flows we can be faced with are so big at the same time as all available policy tools are employed in a manner that is consistent with what the domestic economy needs - IMF calls them warranted economic policies. In this kind of a situation we might have to go one step further and use so-called capital flow management tools.

Such tools have been used recently in Iceland. The reason was that we have a significantly higher interest rate than the rest of the world, because our economy was growing much faster than the rest of the world. The high interest differential, we are talking about something like 5 percentage points, was sucking in a lot of capital, so we introduced a special reserve requirement to deal with that and it worked very well.

In addition, we need an institutional framework that promotes the total picture, and that harks back to something that was raised earlier by Charles Wyplosz about overburdening monetary policy. The Eminent Persons report talked about the risk management map at the global level: you also need that at the national level. That means that you cannot just say I am just thinking about monetary policy and I should not be concerned with other issues. As a Governor, I need to think about the side effects of whatever I am doing, and knock on the door of the government, or the supervisor, or alternatively say "why do we not integrate our policies better?" There is now a plan to merge prudential policy and financial supervision with the central bank.

Finally, if small open economies follow such heterodox policies, should they be left free just to do whatever they want? I am not sure that is good for the kind of the international financial system we want in the long run. International organisations need to accommodate them more, but monitor the use, for instance, of capital controls and capital flow management tools. We need to make institutions like the EU and the IMF more flexible in this regard. There are policies that need to be rethought in light of the crisis. We are going through a learning process on all of this and we should not be dogmatic.

I share the concerns about the US dollar swaps. Will they be there in the next crisis? I was at the BIS when this happened. I agree: I dread to think what would have happened in Europe and in many other places if they had not been provided. However, for small countries, there are other options. They can stay away from having big international banking systems with big foreign currency denominated balance sheets. That is what we have done in Iceland after the crisis. It comes at the price of making more use of foreign banks for international operations but the risks in the alternative are just too big.

It is time to redo self-insurance, especially if you do that by providing a credible alternative, but not by "preaching", because we have learned it the hard way from the last crisis. Yes, self-insurance may be optimal, but if you don't have this other safety net in place, better to self-insure than not insure at all. The President of Indonesia said at the IMF Meeting that "Winter is coming". He was not talking about the winter as we have here in Albania, he was talking about the winter in the "Game of Thrones" sense. That might not happen, we will see, but what do you do if winter is coming? What does that mean in terms of keeping your own house in order? You stock up the house, you close the windows, you solidify the house, and you stock up on resources of food, etc. You do that even if you know that somebody might come to help, but you are not going to take that chance. That somebody might think that since you did not self-insure then you are probably no longer in the house. Therefore, self-insurance and cooperative arrangements can and should, up to a degree, go together, and we should leave small open economies the freedom to do what they need to do.

Thank you!

Moderator: Very good, thank you very much for your insights. And now, the floor is for Governor Softić.

Governor Softić: It is my great pleasure and privilege to participate at today's Bank of Albania and London School of Economics and Political Science co-organized conference entitled: Monetary Policy, Economic Integration and the "New Normal". There is no doubt that the topic is relevant. We are talking about the Southern-Eastern Europe (SEE) joining the EU. What can be more relevant for the future of our countries? After the fall of the Berlin wall, and it was three decades ago, joining the EU for our region seemed like a done deal, something that might happen quite soon. After the initial adjustment to the basics of the market economy, convergence was (relatively and depending on a country) fast. But, as always in history, processes are neither simple nor linear. The Global Financial Crisis (GFC) has changed the world we live in, especially for us, central bankers. Indeed, as our organizers pointed out in the info about the Conference, it is time for some serious reconsiderations of previous experiences but even more so of some future challenges for us.

For the rest of my contribution, I will focus on giving my comments on the well thought-through information we received from the organizers. Namely, I will briefly discuss the following questions:

- What are the consequences of monetary policy changes in developed countries after the GFC on the Central Bank of Bosnia and Herzegovina (CBBH) and Bosnia and Herzegovina itself (B&H)?
- What do we expect from the "normalization" of the policy and when do we expect it to happen?
- Role of foreign banks and the capital market, About FINTECH and Artificial Intelligence and What can CBBH do on B&H's road to EU?

So let me start.

1. What are the consequences of monetary policy changes in developed countries after GFC on Central Bank of Bosnia and Herzegovina (CBBH) and Bosnia and Herzegovina (B&H)?

B&H is a small open economy that wants to be part of the European Union (EU) and therefore the Eurozone. That is our strategic goal. We have applied for EU membership two and a half years ago, but still we are a potential candidate country. Awaiting *avis*, we hope to become a candidate country soon. Joining the EU will most probably be a lengthy process, as nobody expects SEE countries to become EU member before 2025. Since 1997, the CBBH has been running a currency board, with very strict criteria. Our currency, the Convertible Marka (BAM) was pegged to the German mark and then, after its birth, to the Euro. In addition, supervision of banks is not in the domain of CBBH, but nested in two separate banking agencies. Some claim that running a currency board means we have no independent monetary policy or exchange rate policy. At a surface it might sound right. But we are far more than a „big exchange office" as some call us. In other words, having a currency board does not mean that the CBBH does not play an important role in this process of joining the EU and the Euro and in monetary policy itself. And this has not changed with the GFC, i.e. we still have limited powers to stabilize the economy. So, we might be one of few institutions that have not changed the way we operate due to the GFC. Let me remind you that we have some important instruments at our disposal and we do our best to use them efficiently on B&H's way to EU:

a) reserve requirement. CBBH is in charge of regulating reserve requirement imposed on commercial banks. We used it actively in the past, especially after the GFC to increase liquidity in the system. Furthermore, we use changes in this decision to harmonize with ECB policies as well. When ECB increased its „penalty „on banks overnight deposits in March 2016, as part of non-conventional monetary policy measures, we almost immediately introduced negative interest rates on excess liquidity that commercial banks hold with us. Presently we charge -0, 2%, i.e. 50% of ECB overnight deposit rate. We will continue to follow trends in Eurozone and in our economy and use our decision on reserve requirement and excess reserves in the future as well. b) payment system. CBBH is in charge of the overall payment system in BiH. We constantly improve it, following SEPA (Single European Payment Area) and PSD2 (Payment system directive 2). As you know, changes in payment systems are dynamic and we are ready to continue building a robust and resilient payment system in the future that will serve our economy in the best way possible. Fintech, innovations and in general disruptive technologies in this area are something that will keep us busy for a long time to come. c) We are learning to use the "latest" monetary policy instrument i.e. communication policies as well. d) Our research work including financial stability reports and our Annual report is a significant contribution to a better understanding of economic developments in B&H and a contribution to financial system developments in B&H. e) Coordination of banking supervision agencies in B&H and chairing of the PCFS (permanent committee on financial stability- SOFS) are part of CBBH mandate. During the "collateral damage" done to BiH in the aftermath of the GFC we used very actively those coordination mechanisms and reserve requirement. We intend to intensify coordination to be ready for the future crisis. Nobody knows when or how the next crisis will hit us, but there is no doubt there will be one before we join EU and we want to be ready for it. f) if the exchange rate is nominally linked to the Euro, i.e. we cannot use nominal exchange rate as a policy tool, this does not mean that we cannot influence competitiveness of the B&H economy. I am referring to the real exchange rate. First by maintaining price stability (by sticking to the currency board) and second we try via our speeches and publications to advocate speedier and deeper structural reforms.

For the region, monetary history is important and one must not forget ours is linked to the hyperinflation and misuse of permanent devaluations in the former state. That is why we want a different way forward. Given that there are constant political pressures for the currency board to be "weakened" or to be abandoned, it is very important for the CBBH to maintain existing policy independence and thus maintain and strengthen the credibility of the currency board. So we do not think about the when to exit the currency board and have "independent policy", because we consider that we should enter the EU with the Currency Board and then in the Eurozone, following the same or similar path as Baltic States successfully did not long ago.

2. What do we expect from the "normalization" of the policy and when do we expect it to happen?

First, will interest rates increase? For our central bank, it is the ECB policy, but also the global situation in the world, that are of primary importance. For example, low or negative interest rates on our assets (bonds, deposits) have led to a drop in our revenues. When the ECB changed its overnight deposit interest rates of banks (March 2016) we introduced a negative interest rate on excess reserves in bank accounts in the CBBH. In the future, we will continue along similar lines. We observe that some major central banks started raising rates, especially the Fed. The ECB keeps its "gunpowder dry" on interest rates, at least for the time being. Their forward guidance indicates that there might not be increase in their rates until mid-next year. In October, the ECB decided that "net purchases under the asset purchase programme (APP) at the new monthly pace of €15 billion (will continue) until the end of December 2018". This may affect commercial banks interest rates in Eurozone thus influencing indirectly ours. So, it seems reasonable to expect that interest rates will start increasing in the Eurozone but we think very gradually. True, it is difficult to predict, especially the future. Second, to answer the question when will normalization be achieved, we would need to define what is "normalization". Is it simply an average of the past rates? If yes for how many years? Five years before the GFC? Difficult to say. But I think most of us in this room would agree that levels of interest rates we now observe are "not normal" but "exceptional". But, whether the "new normal" will be around 5% nominal rates or closer to 2% is not clear at this point. If the rates go up, we will look for the "silver lining" i.e. we expect this will have a positive impact on our revenues. As far as commercial banks interest rates are concerned, in our view, the ECB policies and external world do influence local rates, but the main causes of relatively higher lending rates in B&H are primarily within Bosnia and Herzegovina like: sovereign risk, inadequate foreclosure procedures or more generally lack of enforcement of contracts – rule of law, etc. So, we in Bosnia and Herzegovina should worry less about the time when the ECB will start raising rates and focus more on our own domestic problems instead. And we have no influence on the ECB anyhow. As the old saying would have it: Why worry about things we cannot change?

3. Role of foreign banks and the capital market.

In B&H, the capital market remains underdeveloped. The fact is that on the already very small market both entities created their own stock market infrastructure with separate stock exchanges. One in Sarajevo (SASE) and one in Banja Luka (BLSE). Activities on them started more than 15 years ago. But, due to the usual factors in such cases i.e. small size of the markets, lack of privatization, and public mistrust in previous privatization programs resulted in very shallow market. Unfortunately, as a result of the GFC foreign investments are not growing. Most probably political instability added that foreign investors shy away from B&H. Thus, commercial banks are the main financial intermediaries. Most banks are foreign owned. Our systemic stability is influenced by the behaviour of systemically-important banks in BiH. As most of them are foreign owned we strongly support the Vienna Initiative including Vienna 2.0 and maybe Vienna 3.0 in the not so distant future. All the countries in our environment are small and for all of them foreign banks play a dominant role. NPL remain high in BiH, compared to other countries covered by Vienna 2.0. That is why we are for even stronger cooperation among our countries. Maybe this Conference can communicate *urbi et orbi* support for this?

4. About FINTECH and Artificial Intelligence

Financial sector is heading toward significant changes as digitalisation is changing the landscape of the financial industry very rapidly. There is an abundance of literature on this topic, without a consensus view of the outcome for central bank. Some play with the idea to issue their own digital currencies, the Central Bank Digital Currency (CBDC), like Riksbank, the Reserve Bank of India, the People's Bank of China, etc. But harsh reality is that distributed ledger technologies (DLT) i.e. blockchain and numerous and various crypto-currencies make not only main headlines of mass media but are also increasing their share in the financial world. One cannot say what will prevail in the future. Our approach is that we want to be careful with our own regulation of those issues. We believe that the conservative approach to cryptocurrencies is optimal for us. Honestly, small central banks like ours do not have human resources, nor would they be well used to have the so-called: regulatory sandboxes (like central banks of Russia or Lithuania), Fintech Accelerator as Bank of England or having an iLab for Financial Innovation as the International Monetary Fund (IMF) does. But we will continue to closely monitor the development and attitudes of central banks in the world, especially the ones of Financial Stability Board (FSB), BIS and IMF and of course the main central bank for our currency board, the ECB. Better to be safe than sorry. We have been building our credibility for two decades now and we are well aware that we can lose it any moment. Yes, we know from Argentina's currency board history in particular that confidence in the currency board can quickly be lost. And vice versa, especially from the Baltic States, it is possible with the currency board to enter the EU and the Eurozone. An example of Latvia, although extreme, says that when in economic policy we have a clear goal (enter the Eurozone) and all policies should be subordinated to it, then success is guaranteed. As the old saying would have it: „An obstacle is something that you see when you take your eyes off your goal“. That is why we want to continue our conservative policy, of course, by following developments in the environment. Let me make a comment on Argentina, a case sometimes used as an argument that currency boards are not sustainable. Recent negotiations with the IMF on the new program clearly show that it is not the currency board per se that is „crisis prone“. It is not following the necessary preconditions for its stability that will „kill it“. As we all know, it is the economic fundamentals and credibility that are the main “ingredients” for a sustainable currency board. More specifically we think that a sound banking system and fiscal discipline as well as focus on structural reforms and convergence toward the EU are among the most important preconditions for a sustainable currency board and prosperous Bosnia and Herzegovina.

5. What can CBBH do on the road to the EU?

Let me summarize the reply in three main points. First and foremost, we, at CBBH intent to keep strictly the principles of the currency board in the future. “If it ain’t broke, don’t fix it”. And, as I have repeatedly said, currency board has served us well in the last two decades. Second, we will continue to monitor closely developments in the area of financial stability in B&H and “warn” of the occurrence and accumulation of risks. As explained, in spite of the fact that we are not supervisors, the CBBH plays an important role in the coordination of banking agencies and overall financial stability of the system. Third, in our communications we will continue to stress the relevance of structural adjustment on the road to the EU. There is no alternative to EU convergence for BiH. Indeed, the absence of an “independent monetary policy” is a gift in our environment. But, we are aware that currency boards by themselves are not a sufficient condition for convergence. However, we do remember well the famous words of former German minister of the Economy and later Finance, Dr. Karl Schiller: “Stability is not everything, but without stability, everything is nothing.”

Ladies and gentlemen, thank you so much for your attention!

Moderator: Thank you. Without further ado I give the floor to Deputy Governor Švaljek.

Deputy Governor Švaljek: I would like to thank the organisers, the LSE and the Bank of Albania, for inviting me to this Conference. I must say that my impressions from the Conference are really good, not only for the quality of the speakers and their presentations, but also for the warm hospitality of the organizers. Also, while being a member of this last panel, I take the opportunity to thank Professor Reis for a very inspiring speech.

Since everyone disclosed a little bit of personal information, I would like to say that I am an absolute beginner. It is my first time here in Tirana, in Albania, and my firts time am speaking on behalf of the Croatian National Bank. However, I do not feel very intimidated here, because I come from the world of academia, and since many of you are from that world, I feel quite comfortable here.

What I would like to reflect on is the normalisation of the monetary policy from the point of view of a small and open economy. Being one among those few women that would rather not speak, I will skip whatever I thought in advance about the message I wanted to convey, and I will briefly summarize the earlier messages. The monetary policy normalisation in emerging markets may give rise to risks and challenges, mainly stemming from capital flows, interest rates and exchange rates. As we have already heard in today's lectures, there might be possible reversal of capital flows back to advanced economies, which may give rise to the vulnerability of deleveraged countries. Then there might be a yield decompression due to the monetary tightening and deterioration of financial conditions on many emerging markets. The third risk is strains on non-financial corporates that have borrowed heavily in foreign currency due to dollar appreciation and increased volatility in foreign exchange markets.

However, there are many uncertainties. Above all, we do not know if monetary policy is going to normalise and if so, then when, and to what extent. We do not know what would be the effects of the normalisation. Most probably for different countries the effects will be different and they range from almost none to really very negative.

Since the outcomes are uncertain, I also think that we can conclude that there is no single policy response.

My personal view, but also the view of us from the CNB, is that the best response we can think of now is strengthening our macro-economic fundamentals and policy frameworks. That means that the experience with taper tantrum suggests that countries with sound macro-economic fundamentals have smaller market reactions to monetary policy spill-overs from advance economies.

It is becoming increasingly important for countries to implement structural reforms that promote strong, sustainable and balanced growth. This requires coherent and sound fiscal, monetary and exchange rate policies.

Let me conclude that the countries need to ensure that their financial systems are resilient to asset price volatility. Another conclusion will also be that the vigilant macro-prudential stance is the first line of defence, particularly for countries with high foreign currency debt, like the case of Croatia, and those vulnerable to sudden capital flow reversals.

The third conclusion would be that the macro-economic policy mix should be calibrated to support external adjustments within the available monetary and fiscal policy space.

The fourth conclusion is that the appropriate policy mix path depends on the specific circumstances of a given country. Actually, Marco and I did not really talk about whatever we were each going to say here, but he said it really nicely at the beginning, and that is, build resilience and embrace diversity.

Thank you!

Moderator: Thank you very! And now is the turn for our last speaker, Deputy Governor Havolli from Kosovo.

Deputy Governor Havolli: Thank you very much Professor Reis, and thank you, Governor Sejko and the LSE for the opportunity to share our insights and viewpoints with this esteemed audience and panel.

Kosovo is a relatively young country, with a relatively young financial sector. Because of the War of 1998 - 1999 Kosovo did not inherit a financial system that would need to undergo a transition process. In the post-war Kosovo, we built the financial sector from scratch. With no presence of publicly owned banks, the development process of the banking sector relied only on privately owned banks, 90 percent of which were foreign-owned. In this context, Kosovo benefited from having to build a new system with the know-how of modern banking culture from the EU countries, and not having to undergo a costly transition process.

In addressing the topic of this conference, as to whether the aftermath of the crisis has brought "a new normal" for our financial market, or the general macro-economic environment in the country, one needs to have in mind the specificities of the economy and of the financial system of our country.

In the pre-crisis period, Kosovo's banking sector was characterized by very high interest rates - double-digit interest rates - between 12 and 15%, high credit and deposit growth rates, a very low non-performing loans ratio and capital adequacy ratio well above the minimum regulatory requirement.

During the crisis, some changes were noticed. Among others, interest rates went down, non-performing loans increased quite sharply compared to their initial level, reaching a peak of 8.7%. Deposits continued to grow at similar rates to pre-crisis period. Furthermore, it was also observed that the deposits from Kosovo diaspora increased too, given that many perceived that Kosovo's banking sector is safer for their deposits at that point of time, and also because the interest rates on deposits were higher than in their host countries. The NPLs increased substantially, compared to our standards, but compared to the regional countries, an 8.7% ratio did not seem to be very high. Moreover, the increase of the NPL ratio did not result from a substantial increase of the amount of the non-performing loans, but rather because of the base effect that resulted from the slowdown of overall credit growth.

This was an overview of the situation during the crisis period. What was the situation like in the post-crisis period?

In the very early post-crisis period, credit growth was slower. However, credit growth picked up from 2011 and further with relatively high growth rates. NPLs have been trending downwards continuously until today. The most recent data (September 2018) show that the NPL ratio in Kosovo stands at 2.8%, which is the lowest in the region and at a similar level with many advanced economies. Meanwhile, deposits continued their growing trend uninterruptedly.

Given that the Central Bank of the Republic of Kosovo lacks an autonomous monetary policy, we have been able to focus more on the development of the regulatory and supervisory capacities. Therefore, Kosovo has built a very comprehensive regulatory framework and supervision capacities. Furthermore, the CBK continues to sustain the trend of adjusting to the international standards with regard to regulation and supervision. The lack of monetary policy has also induced a form of self-discipline by the commercial banks given that the CBK does not have a traditional lender-of-last resort instrument. Are we very comfortable with this situation? Of course not, because currently we have the lowest rate of financial intermediation in the region, with a loans-to-GDP ratio standing at around 40%. We have sought to increase the financial deepening by introducing additional instruments in the market. Together with the Ministry of Finance, we have established the emergency liquidity assistance tool, which would come handy in the case of any solvent bank facing liquidity problems. Also, the deposit insurance scheme was introduced several years ago in order to increase the safety of deposits and boost the public trust in the banking system. Meanwhile, recently, the credit guarantee facility was introduced too. We believe that the above mentioned instruments may speed up the credit growth, especially for the SMEs. We can all argue that supervision - or more specifically say micro-prudential supervision - is a necessity, but it may not be sufficient on its own. Therefore, we have established a macro-prudential committee, which is responsible for functionalizing a macroprudential policy framework for Kosovo. Yet, given the health of the financial sector and the positive developments, we have never been put in a major test with the above mentioned instruments.

One of the challenges that we have faced, during the crisis in particular, was that this credit slowdown was not actually due to macroeconomic conditions in our economy, but rather due to decisions of the parent banks. This has obviously affected us, and not in a positive way.

This remains one of the challenges. We have to cooperate with home country supervisors of the banks that operate in our country, as well as with their parent banks, in order to be positive towards one another in good times as well as in bad times. We understand that the crisis was more widespread in the European Union, but there was no need for credit slowdown and hence a slowdown in the economy of Kosovo. I mentioned that more effective communications with home country regulators as well as developing further instruments for macro-prudential framework are very important in order to complete or complement the existing tools that we already have.

Moderator: Very good, thank you very much. Now, in the same order of speakers, I'd like for you to share individually your insight on the following. Many of you reflected backwards on the way in which your central bank had to change, and the challenges it faced. Looking forward, instead, I want you to imagine yourselves in five or even ten years, what would you either like or think would happen as a change to your national institution setup as well as the global financial architecture setup in terms of how the central bank evolves. And to be clear, I am not asking about future policy instruments or future policies, I am asking about the institution's struggles. So, for example, you have just mentioned developing macro-prudential tools as a necessity, I would ask you now to pinpoint, if you can one particular institution that you think will be part of the development both at the national level as well as the global architecture level.

Governor Sejko: The ways in which central banks are going to evolve five to ten years from now, will of course be related to the challenges that we are going through as well as the nature and the intensity of the challenges that we expect to face in the next five to ten years.

Looking forward to the future, I would like to say that in my view somehow expectations are positive; however, I would also like to remind ourselves that the balance of risks is tilted to the down side.

This comment has been mentioned frequently in the last couple of years. So, basically there are still many risks that we are facing. Most of them are related to financial stability. Basically we have to enforce and strengthen the financial stability tools and the role of the central bank in order to protect the financial system and be prepared for any distress, stemming from domestic or external changing conditions. We have taken many measures that I have already mentioned, yet we need to work more on strengthening the role of banking supervision within the central bank. There is a set of regulatory framework in spite of Basel III, and other regulations required from the ECB and the EBA that we are working on. Specifically, we are revising capital buffers for the commercial banks based on a risk approach. What we expect from this is to be able to overcome the current situation with further consolidation of the banking system via potential mergers and acquisitions in the system or by entry of new groups which share interest and experience in the banking sector of emerging Europe. We want the banks to learn from the lessons of the past and evaluate their business case with a more realistic view and be prepared to become more resilient to potential shocks, so as not to repeat the same mistakes. Banks were burdened by very high levels of NPLs just a few years ago. The situation was getting worse due to legal and regulatory bottlenecks as the banks could not efficiently resolve the issue via potential write-offs, collateral execution and restructuring process. So we want to prepare the regulatory framework so that banks are deterred from repeating the same mistakes of their past lending behaviour.

But certainly, there are also various other risks that we are facing. The operational risk, for example, is another crucial point for the banking sector. We are working in this regard with banking supervision to address the risk that the banking sector might face in the next five years.

Of course, new technological developments and FinTech are becoming real issues. This is also very much related with financial literacy and financial inclusion in our country, both are currently lower than what we would like them to be. There are many aspects that need to be addresses in both directions however, current technological revolution and Fintech innovations are two potential forces that can contribute to improve financial inclusion and financial literacy. They (technological developments and FinTech) both bring business to the banks while at the same time bringing competition, increasing efficiency, reducing inequality in the society and providing people with more opportunities and lower costs, in terms of time and monetary value. In addition, an environment with an adequate level of financial literacy should increase the effectiveness of our monetary policy. Without going into detailed figures, the Bank of Albania strategic goal, is to achieve an adult account ownership ratio of 70% by 2022, aiming to encourage them to use commercial banks and other non-bank financial institutions for more sophisticated services and products in the future. This is especially important for the rural areas where banks are not present and many people might not even have a bank account. Thus, in Albania, we have followed a dual approach by promoting FinTech and introducing a banking agent model for payment services aiming to fulfil the needs of the rural population.

However, it is important to remind ourselves that technological developments and FinTech also introduce new risks and uncertainties not only for the consumers but also for the financial system itself. Banks and other segments of financial markets will share part of these risks either directly by adopting these recent technological and FinTech developments or indirectly by interacting with FinTech. The complete nature of risks associated with this revolution is not fully understood by the market itself or the supervisory authorities. The authorities have the duty to identify these risks and regulate FinTech revolution not only for protection of public but also for the stability of financial system itself. This leaves us with even more work to do in order to increase financial education.

Risks are related to crypto-currencies and other forms of payments, exchange and financial intermediation, which are not present in Albania as yet, but we have to be prepared. There is a lot of pressure from different directions to introduce these new financial products and services, not only in Albania but also in the region. Most of these innovations are established and developed in a different technological framework and environment, and will require a new legal and regulatory framework from the traditional banking model. In this respect we would need to adapt and make changes to enhance our (or establishing new) legal and regulatory infrastructure; adopt or build new supervisory framework and procedures; adapt the composition of human resources and upgrade the quality of human capital in line with the requirements of these new technologies.

With regard to monetary policy, we do not think we will need to change much in the next five years. We have already implemented the tools, we did not enter into negative interest rates territory and we resisted to use unconventional instruments. Fortunately, there has been no urge about it. Therefore, I believe the focus should be mostly placed on financial stability tools, on strengthening and consolidating our institution in the next five years.

Moderator: Very good. Thank you very much. Now the floor is for Governor Guðmundsson.

Governor Guðmundsson: Before I speak more specifically, I should give you a piece of background information. The government in Iceland has said a few weeks ago that it aims to merge financial supervision into the central bank. I think five years ahead that will be finished.

We have a good national risk map, and a comprehensive national strategy for preserving financial stability in the country. Now, I understand this is like a wish list. Having said that, if I look five years ahead globally, then I hope that the process described here by Charles Wyplosz of the disappearing of the safety net has been stopped and we have more certainty, at least about the existing arrangements. So, we don't have the kind of situation at the global level where you have banks doing a maturity transformation on their balance sheets on a big scale, with no lender of last resort to back it up; that is very dangerous. If we look ten years ahead, then I think that my country might have introduced central bank digital currency in some form like some others and that we will be using supervisory technology where we are no longer asking the banks for data; we are in their system every minute and looking at whatever we like.

The fundamental problem that we have with the global financial system is of course a kind of contradiction. The currency that is underlying all of it is also somebody's national currency and that will always be a problem. In principle, that can only be solved by having some kind of global currency to back it all up. I know it is not going to happen, but I was asked for my opinion.

Moderator: I invite Governor Softić to share his views.

Governor Softić: First and foremost, we at the central bank of Bosnia & Herzegovina intend to strictly stick to the principle of currency board in the future, because as I have repeatedly said, the currency board has served us well in the last two decades. The currency board was and is a very good choice for the B&H.

Secondly, we will continue to closely monitor developments in the area of financial stability in BiH and fight the accruing and accumulation of risk. As explained, in spite of the fact that central bank are not supervisors, and in view of the fact that the central bank plays an important rule on the coordination of banking agencies and the overall financial stability of the system.

Third, in our communications we will continue to support the relevance of structural adjustment on the road to the EU. There is no alternative to EU convergence for Bosnia and Herzegovina. Indeed, the absence of an independent monetary policy is a gift of our environment, but we are aware that currency boards on themselves are not a sufficient condition for convergence. However, we remember the famous words of the former German Minister of Economy and later Finance, Dr Karl Schiller: “Stability is not everything, but without stability everything is nothing”.

Thank you.

Moderator: Thank you. Now, we would like to hear from Deputy Governor Švaljek.

Deputy Governor Švaljek: As for the changes in the institutional setup in the European Union, my first wish of course would be for Croatia to become the 20th member of the euro area. So, that will be quite a change from our perspective. The second would be to abandon unconventional monetary policy. From our point of view, some space for manoeuvre of monetary policy response should be made because crises will happen, but we do not know the type of the crises we can expect. However, what we know for sure is that there will be some crises at a certain point of time.

Third, many of you mentioned already the European Stability Mechanism. I will not elaborate on that, but definitely this Mechanism should provide solid and flexible instruments for the provision of financing.

And fourth, I think that we should wish for stronger and fuller financial structure within the EU or the euro area. The reason is that there are some institutions simply missing, for example anti-money laundering is left to the various national institutions and we know that financial transactions are mostly cross-border and a lot of money laundering can happen between the countries. I think that Europe should find a solution to this. It may not be possible to prevent but we can lessen the money laundering already happening in the European Union.

Moderator: Very good. Thank you very much, and finally, Deputy Governor Havolli will share his insight on the matter.

Deputy Governor Havolli: Well, for us it is really important that we continue to strengthen these instruments that we have already establish, such as credit guarantee facility, deposit insurance scheme, macro-prudential instruments to be further expanded, interconnecting the banking sector with the rest of the economy. We have realized that it is not only up to the health of the financial system to potentially prevent a crisis. Very healthy financial sectors have ended up being very deeply into crisis. However, this has not been the case of Kosovo, but we will try to address other elements of the economy that could potentially pose a threat to the financial sector.

Also, I really hope that crypto-instruments do not really expand so quickly, because countries with small capacities and small central banks will face difficulties emerging from the possible challenges in the crypto-currencies area. Anyway, it is clear that the financial sector is moving at a moderate speed towards digitalization and this requires the regulators to keep the pace with ongoing developments. But most importantly, the current setup overcame well the effects of the crisis so we should pass the lessons of the previous crisis into adjusting our systems in a more digitalized world.

Thank you very much!

Moderator: Very good. So, I think it is a wonderful time to close this panel and then to give the word to our hosts for final words.

Before we move on with the schedule, please join me thanking the Governors for their contribution and patience, staying almost into dinner time, to share their opinion with us.

CONCLUDING REMARKS

Gent SEJKO, Governor, Bank of Albania
Erik BERGLOF, Director, LSE Institute of Global Affairs

Berglof: I would rather not make this a very lengthy final session. I just want to say thank you to all of the contributors to this Conference.

There are many lessons from today. One lesson that I take away from Professor Reis' talk was that we learned a lot from the last crisis and now we just need another one. This is the academics' view of the world.

I think we also know in so many different ways what impact that crisis had on so many aspects of life. Therefore, we really have to think very carefully about how we design our financial systems and how we work to make them safer.

I took down a few notes on what I took away as the new normal. I think actually our first time presenter at the panel from Croatia put it very well. She said we should build resilience and embrace diversity. I think this kind of summarizes a lot of the conversations we have had. We understand that there are many ways of achieving the same objectives, but I think we need to understand the local context on what is the most effective way to do things. We also learned from the presentations earlier that we are going to have to live with larger balance sheets. This is actually a good thing; they are probably too big, but they do serve a very useful function and we should embrace that. Also, financial resilience is the key, because we really do not know where the next crisis comes from. That is something we need to think about at the level of individual states. On the other hand, we need to think about the global financial safety net, the way we can face all those dangers that Charles Wyplosz pointed out, and how we can use the emergence of some of these new regional structures.

Perhaps, we should also take into account the fact that there are new players. The fact is that China has entered this space in a major way and we need to see if there some ways in which these facilities that China provides can be integrated into something that is a more complete safety net.

The bottom line is that when you look at the crisis we are facing right now in South America, in Turkey and in some other countries, the global financial safety net is not strong enough to deal with it in the event we get a real crisis. We have a lot of work to do on that.

Finally, on financial innovation, I think we saw that particularly in countries like Albania and [now North] Macedonia, there is a lot of potential for effectively using this and maybe leapfrogging some stages of development. On the other hand, of course the risks are very much there. Again, it is about understanding the context, and this is what I find so fascinating traveling in this part of the world. You are really forced to think in a different way about what the implications of different policies and different innovation instruments are.

Anyhow, that is what I took away from today's discussion. It was a very useful day and I think we benefited a lot from the hospitality of the Bank of Albania. Both hospitality in the sense of treating us well, and hospitality in terms of sharing ideas and engaging in a very productive way as we go forward.

Governor Sejko: Thank you very much Professor Berglof.

While a very long day indeed, I believe it was a very efficient and very fruitful time. The Bank of Albania has been organizing conferences for 15 years, every year. This year was the longest and perhaps somewhat exhausting for some people - but it was surely the most interesting one. It really was a very good day actually. However, I would rather not repeat what others have already affirmed, but I must say that we all learned and shared opinions. Most of the countries, not only in the region but also in the euro area, are moving towards the normalisation of monetary policy and we are all facing challenges in terms of financial stability. We are all stressed - especially governors and central bankers - from these challenges.

We have faced many significant challenges and risks, for example, during the Greek crisis. Many of us still remember that period. Fortunately, we navigated through it safely and came out without facing any trouble. We learned many lessons, leading us to move towards changes in regulatory framework for the financial stability.

This may be the case not only with Albania, but also with all the region.

Having said that, we may need to rethink and be aware and careful towards strengthening financial stability.

For the monetary policy, we will follow what the ECB is doing, definitely. We have our local currencies. In Albania, the central bank has full competences. Kosovo and Montenegro have adopted the euro. Basically, they have limited space for manoeuvring with monetary policy. On the one hand, we have are other risks. For example, though we have room for manoeuvring, we have the foreign exchange risk, which jeopardizes financial stability. It may be complex, but within this complexity, we exchange experiences and opinions with each other. We exchanged views today, we learned many lessons and we are going to bear in mind how to better implement ideas, experiences and policies in the future.

For me, this was the best Conference we have ever had. This is not an exaggeration, it really is the best Conference. I would like to thank you specifically Professor Berglof, all the LSE team, Piroska Nagy-Mohacsi, Mario Blejer, all the colleagues coming from LSE that helped us and brought here their experience, thoughts, and know-how and shared them with us. I would also like to thank all the governors, deputy governors and other colleagues for their presentations in the panels, and their patience throughout this long yet fruitful day.

Thank you Professor Berglof, thank you Piroshka.

I really appreciate the assistance and cooperation in the organisation of this Conference.

Thank you all very much!