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## 2014 H1

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## EDITORIAL FINANCIAL STABILITY MAP IN ALBANIA

The assessment of financial stability remains one of the most difficult tasks for all central banks that have included this objective among the main tasks of their mandate. In early 2014, the Bank of Albania published for the first time the Financial Stability Map<sup>1</sup>, an important tool to assess developments in the financial system and its exposure to internal and external risks. The construction of this instrument supplements the broad base of methodologies established in the framework of assessing the financial stability in Albania, aimed at various financial stability aspects, with a view to providing the necessary information in this regard<sup>2</sup>

In the absence of a single indicator that would comprise financial system developments and determine whether the financial system is under stress, central banks have constructed a series of methods to assess financial stability. Dalh et al. (2011) summarises the main methodologies central banks apply in relation to indicators for financial stability assessment, according to the main dimensions. They are detailed as follows:

- a. Indicators which present the main developments in a given sector of the financial market, such as data on banks' balance sheet in the case of the banking sector, developments in the foreign exchange market, and indicators about the interest rate. The IMF summarises these indicators in what is known as the Financial Soundness Indicators. In the case of the Bank of Albania, these indicators are carefully monitored and serve as the basis of the Financial Stability Report. They incorporate the main developments in the financial system at home and its exposure to various risks facing it, such as the credit, exchange rate, and interest rate risks. However, experience has revealed that, although these indicators largely address the main developments in the financial system, the information they provide is lagged, as it is processed after 1-3 months.
- b. The aggregated indicators, which are generally constructed based on market data and summarise the main developments in some of the market segments in the form of a single index. In the case of Albania, Kota and Sague (2011) present the Financial Systemic Risk Index (FSRI), which measures the level of financial stress in the economy into a single and comprehensive index. It assesses the interrelation between

<sup>1</sup> The Financial Stability Map was first published in early 2014, analysing financial stability developments until the end of 2013 (Financial Stability Report 2013 H2).

<sup>2</sup> A comprehensive technical paper on the methodology used to construct the Financial Stability Map will be published in the Bulletin of the Bank of Albania 2014 H2.

various financial segments by measuring their impact on economic growth. Results show that the FSRI captures the pressures in the form of the financial stress, not only from different market segments, but also from their interaction. However, in the case of Albania, data suffer from lack of frequent information from the market and are used only on monthly basis. The Financial Strength Index is another tool, which, unlike the Financial Systemic Risk Index, incorporates various banking sector-related developments in a simple aggregation and provides rapid and summarised information on the strength of the entire sector.

- c. Stress testing is another way to assess the banking sector's stability in the event of strong macroeconomic shocks. In this context, the Bank of Albania is currently employing two approaches: a. top-down assessment, whereby the central bank constructs suppositions about macroeconomic developments according to various scenarios. Then it applies them on data about the banks' balance sheet to assess their impact in terms of capitalisation; b. bottom-up assessment, whereby the central bank constructs macroeconomic suppositions. Then individual banks assess the impact of such suppositions on their activity. In both cases, the aim is to assess the banks' resilience to such extreme shocks. Currently, the impact of macroeconomic shocks on elements such as portfolio quality (Shijaku and Ceca, 2011) is unilateral as there is no feedback from financial indicators towards macroeconomic ones. Meanwhile, the macroeconomic model MEAM (Dushku and Kota 2010) is the basis for constructing the suppositions.
- d. Several econometric models determine how economic shocks affect financial indicators. The construction of these models is currently in Bank of Albania's focus and will aim at completing the framework for assessing macrofinancial relations for stress test, projections and simulations purposes. The first version of a macrofinancial model is introduced and is being discussed internally at the Bank of Albania (Dushku and Kota, 2013).

The purpose of this material is to introduce a new method of processing the information stemming from various risks facing the financial system, in a single tool. This tool is known as the Financial Stability Map (FSM) and introduces the conditions and main risks facing the financial stability in a given country and beyond, through the use of a cobweb diagram. The purpose of using such a diagram in financial stability analysis is to: summarise the main fields, also called "categories" that constitute sources of potential risk to financial stability; and, monitor over time how these sources of risk evolve. Each category is based on a group of sub-indicators, which are considered as more appropriate in reflecting risk or vulnerabilities to the financial stability. Selection, and later, construction of categories and sub-indicators depend on the structure of the economy and the financial system, and the discretion of authors. For that reason, the cobweb diagrams by various central banks differ in shape and design.

The Financial Stability Map, constructed as a cobweb-style model, is a technical instrument that summarises in a single graphic representation the risks arising in a given moment from factors inside and outside the banking sector. To construct the Financial Stability Map (FSM) for Albania, we refer to several works such as the introduction of the IMF's global map by Dattels et al. (2010) and the construction of this map for a single country, as in the case of Norway, by Dahl et al. (2011) and New Zealand by Bedford and Bloor (2009). To construct it, we have defined the main sources of risks or vulnerabilities that arise from the banking sector, as the most dominant part of the financial system, and from outside this sector, related to overall economic developments and main economic agents. Following this logic, eight categories have been selected: 3 related to the characteristics and structure of the banking sector ("capitalisation and profitability"; "liquidity and financing"; "banking sector structure") and 5 categories outside the banking sector (developments in the "domestic economy"; developments in the "external economy"; "households"; "businesses"; and "government"). These 8 categories make a full summary of the domestic and external sources of risks and vulnerabilities facing the Albanian financial system stability. Each category contains 4 or more sub-indicators, totalling 38 sub-indicators.

The map constructed for the case of Albania seems to perform overall well, reflecting the effects of external shocks (such as the financial crisis of 2007-2008) or domestic ones to the country's financial stability. The performance of averaged indicators for the selected categories reflects accurately the impact and key points where main financial and economic indicators undergo breaks as a result of domestic or global crisis. Some of the categories react faster, thus signalling elevated risk to stability, while others react more slowly. Since the instrument measures the risk level based on the historical time series (sub-indicators) included under each category, it helps improve our perception of the financial stability situation. However, the moment of reaction is closely related to the moment of reporting the data used for constructing the sub-indicators for each category. Some of them are lagged by several months, which is a drawback to the model. Moreover, the performance of the model depends highly on the type of sub-indicators used to construct each category, which leaves it open for discussion. In some cases, for some indicators the experts' judgment is necessary to determine the final position of the risk score.

Taking into account the above-mentioned remarks, the FSM should not be seen as an instrument that judges whether the financial system is stable or not, but as a practical tool to anchor discussion, and focus readers attention to actual risks to financial stability. The financial stability assessment requires a series of factors that may be aggregated into a single model. For that reason, it is important to bear in mind that FSM results should be used together with results of other analyses and instruments the Bank of Albania uses regularly to judge on the financial stability in the country.

While the financial environment is very dynamic and every crisis has a specific nature, it is vital to update and improve the map regularly, adapting to domestic and external economic developments, for better and timely capturing

the risks to our financial system. This may require incorporating new indicators or further elaboration of the existing ones.

Currently, the FSM is updated regularly every three months, and the results are published in the half-yearly Financial Stability Report. FSM results serve to assess the performance over time of risks to which the Albanian financial system is exposed. Moreover, it serves to compare various results between them and the main contributors to each risk. In this way, the decision-making and economic analysis at the Bank of Albania may focus on discussing the main elements affecting the financial system and its stability, enriching the existing methodologies in this institution.

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ADDRESSES AND  
PRESENTATIONS  
BY BANK OF ALBANIA'S  
ADMINISTRATORS IN ACTIVITIES  
IN ALBANIA AND ABROAD

## SPEECH BY ARDIAN FULLANI, GOVERNOR OF THE BANK OF ALBANIA

On the Monetary Policy Decision of the  
Bank of Albania's Supervisory Council  
29 January 2014

Today, on 29 January 2014, the Supervisory Council of the Bank of Albania reviewed and approved the Monetary Policy Statement of the Bank of Albania on the second half of 2013. Given Albania's latest monetary and economic developments and discussions on their outlook, the Supervisory Council of the Bank of Albania decided to keep the key interest rate unchanged, at 3.0%.

The Supervisory Council deems that the inflationary pressures from the real and financial sectors of the economy are weak and will remain so. These circumstances require maintaining a stimulating monetary policy over the period ahead. The monetary stimulus, transmitted through the low key interest rate and ongoing liquidity injection, provides the proper conditions for meeting our inflation target in the medium term.

Let me now proceed with an overview of the economic developments and key issues discussed at today's meeting.

\* \* \*

Year 2013 was a difficult one for the Albanian economy. Aggregate demand and economic growth remained at low levels. Inflation fluctuated around Bank of Albania's lower targeted band, while the budget deficit and public debt increased sharply. The unfavourable economic environment, both at home and abroad, led to this performance. Moreover, Albania's June parliamentary elections added uncertainties to the economy and financial markets. As we have already stated, consumption and investments continue to suffer from low confidence and tight lending terms. Fiscal policy is faced with a high public debt level, which has limited the possibilities for macroeconomic stimulus. On the other hand, the external environment was characterised by ongoing euro-area problems, hence limiting our export growth and making financial markets pursue conservative policies in terms of lending to developing economies.

However, 2013 saw positive developments. Financial markets were characterised by improved liquidity and downward interest rates, in response to Bank of Albania's easing monetary policy. Also, the introduction of new financial agents and instruments has further deepened these markets. The banking system remains solid and well-capitalised, regardless of the increase in non-performing loans. The current account deficit has narrowed, creating better premises for a sustainable external position of the economy and stable exchange rate. These developments have contributed to maintaining macroeconomic stability.

Analysing the specific developments in the second half of 2013, the official data show a slowing economic activity and a sustained downtrend in inflation. Average annual inflation reached 1.5% in the fourth quarter, remaining unchanged from the third quarter. In December, inflation rate edged up to 1.9%, almost entirely due to higher prices of foods, particularly unprocessed foods. Prices of other CPI basket items were generally stable and affected slightly on inflation.

From the macroeconomic viewpoint, the low inflation rate was determined by the sluggish aggregate demand, lower imported inflation and subdued inflation trends.

Third-quarter gross domestic product dropped 2.3%, driven heavily by short-term shocks arising from full fiscal stimulus withdrawal and post-election uncertainties, which impacted negatively on consumption, investments and tourism over this period. Excluding agriculture, the other sectors of the economy dropped, in annual terms.

All the aggregate demand components performed poorly over the second half of the year. Private consumption was at low levels, reflecting the low consumer confidence and the decelerated income growth. The low inflation rates contributed to maintaining the savings value. However, Albanian households continue to show a cautious behaviour toward consumption. Also, private investments deepened the downtrend in the second half of the year. The performance of this component has reflected the weaker final demand, the high uncertainty and the tight bank lending terms. Periodic surveys report that the financial position of businesses remains difficult, restraining in turn their ability to invest.

Fiscal policy was stimulating in 2013, mainly concentrated in the first half of the year. The fiscal stimulus was carried out by increasing spending and reducing taxes. The latest fiscal data are as of November 2013. During the first 11 months of the year, the budget deficit increased 71.5% in annual terms, budget spending increased 4.7%, while fiscal revenues dropped 3.1%. The revenue drop was due to easing tax policy and poor economic performance. Fiscal developments in 2013 worsened the public debt dynamics. This debt tends to increase over the periods of economic slowdown, in response to fiscal counter-cyclical policies and the impact of automatic stabilisers. However, given the essential role of fiscal sustainability in the overall economic and financial stability, and the high level of Albania's public debt, the Bank of Albania has supported and called for measures to control and reduce this debt in the medium term.

In this context, we reiterate our message for anchoring this process to a fiscal rule, which will orient the fiscal policy in the long term, and will be reliable and transparent for all Albanian and foreign economic agents.

Developments in the external sector of the economy signalled a sluggish foreign demand in the third quarter of the year. Though trade deficit dropped,

the external sector impacted negatively on the economic growth due to lower tourism revenues. In October and November, the external trade data show ongoing annual nominal contraction of the trade deficit, at 11.9%. This contraction was due to increase in exports by 12.0% and decrease in imports by 2.0%, over this period. The Albanian economy's capacity to maintain and speed up the positive export growth rates will determine the country's medium-term and long-term economic growth. In the medium term, increasing exports helps offset the domestic demand sluggishness, while in the long term, increasing competitiveness of the Albanian economy in the world markets should be at the core of Albania's new economic growth model.

The weak demand for consumption and investment, and banks' conservative lending policies, have slowed the monetary indicators. The increase in money supply slowed down to about 2.5% in October and November due to private sector's weaker demand for funding. Lending to the economy continued to contract and in November, it was 2.4% lower than a year ago.

The above monetary and economic dynamics has exerted weak inflationary pressures. The weak aggregate demand has expanded the negative output gap. The labour market pressures have been subdued against a setting of unchanged unemployment rate, moderate wages, and partially-used capacities. This performance has affected the control on output costs and profit margins, and has reflected in low core inflation rates over this period.

Also, imported inflation has been downward due to lower primary commodity prices in the international market and stable exchange rate.

Based on the economic outlook and aiming to encourage aggregate demand, the Bank of Albania lowered the key interest rate by 0.5 percentage points, to 3.0% in the fourth quarter. Also, Bank of Albania's monetary policy decisions have been associated with ongoing liquidity injections and orientations toward the future monetary policy stance. This policy has managed to keep liquidity premia and inflation in check, by contributing to lowering the interest rates in the interbank, government debt security, lek loan and deposit markets.

However, the lek loan price has not fully reflected our monetary policy, indicating the presence of high risk premia and containing the monetary stimulus transmission to the economy. These risk premia are also reflected in other lending terms, unrelated to the loan price, and appear tighter as compared to their historical performance.

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Under the Bank of Albania's baseline scenario, the economy will improve slightly during the current year. Increase in exports and a better performance of consumption and investments will continue to support the aggregate demand. The monetary policy will support the domestic demand, by maintaining macroeconomic stability and ongoing injection of monetary stimulus in the economy. Also, payment of arrears will help improve the balance sheets of

firms and the private sector, and is expected to improve business borrowing. Excluding the payment of arrears, the 2014 budget has projected a fiscal adjustment needed against the backdrop of a rapidly increasing public debt. Inflationary pressures are expected to be weak reflecting the weak economic and monetary dynamics in the country.

After four quarters, inflation is expected to range 0.7% - 3.8%, with a 90% probability of occurrence. This will require maintaining a stimulating monetary policy even in the medium term.

\* \* \*

At the end of discussions, the Supervisory Council decided to keep the key interest rate unchanged at 3.0%. Given the expected inflation developments, the Supervisory Council deems that the monetary policy will remain stimulating in the medium term. The monetary stimulus intensity may increase further over the period ahead, in the event the economic and monetary developments continue to shift the balance of risks on inflation to the downside. In any case, the Bank of Albania remains determined to guarantee price stability, in accordance with its inflation target.

The Bank of Albania deems that 2014 will be a turning point for the Albanian economy. Maintaining financial and economic stability, improving external environment, pursuing stimulating macroeconomic policies and continuing structural reforms will open the way to Albania's stable and long-term development.

## SPEECH BY ARDIAN FULLANI, GOVERNOR OF THE BANK OF ALBANIA

On the Monetary Policy Decision of the  
Bank of Albania's Supervisory Council  
26 February 2014

Today, on 26 February 2014, the Supervisory Council of the Bank of Albania reviewed and approved the monthly Monetary Policy Report. Based on Albania's latest monetary and economic developments and discussions about their outlook, the Supervisory Council of the Bank of Albania decided to lower the key interest rate by 0.25 percentage points, to 2.75%. The Supervisory Council deems that increasing the monetary stimulus creates proper conditions to meet inflation target in the medium term, by boosting aggregate demand and anchoring inflation expectations.

Let me now proceed with an overview of economic developments and key issues discussed at today's meeting.

\* \* \*

Macroeconomic developments in 2013 were characterised by weak economic growth and downward pressures on inflation. For 2014, the Bank of Albania expects the economic activity to improve gradually but the Albanian economy will remain below potential and inflation will be low. In particular, excise tax increase will make lower-than-expected impact on inflation. Against this backdrop, easing of monetary conditions aims to create proper monetary stimulus to push inflation back to its target in the medium term.

Annual inflation was 1.7% in January, falling slightly from the previous month due to lower unprocessed food inflation, as a consequence of lower prices in Albania's trading partners and higher domestic agricultural production. Excise tax increase for certain product categories made additional impact by 0.5 percentage points to headline inflation but the fall in food inflation fully offset it. Prices of other CPI basket items fluctuated around past months' levels.

Overall economic and financial environment transmitted weak inflationary pressures over the last two years. The sluggish private demand continued to determine the cyclical vulnerability of the economy, being associated with slight increase in employment and producer prices, and putting pressure on profit margins. This chain of factors was further transmitted to weak pressures on the rise of final prices of domestically produced consumer goods and was reflected in low core inflation rates. In parallel, the low inflation global-wide and exchange rate stability were reflected in low imported inflation rates. This picture is likely to be present over the next quarters.

The Albanian economy showed clear signs of slowdown in 2013. External demand and fiscal stimulus were the main drivers of economic growth, while private investments and consumption shrank. Incoming information on real-sector developments over the fourth quarter has confirmed our projections for a weak aggregate demand and below-potential economic growth. However, it has shifted the balance of risks around the projection to the downside.

Low business and consumer confidence, sluggish labour market and tight lending terms continue to weigh on private demand. Disposable income increased and consumer balances were liquid. However, consumers are reluctant to spend and tend to save. On the other hand, lack of final demand and unutilised capacities curbed private investments.

The latest data on external trade show an annualised 13.5% widening of the trade deficit for December. Exports of goods continued to trend up but import growth at double-digit rates led to a higher trade deficit for this period. Imports widened as traders intensified their importing activity one month in advance, awaiting the entry into force of the new fiscal package in January 2014. Imports rose 15.8%, whereas exports rose 19.5%.

Fiscal policy was easing in 2013, giving 1.3 percentage points impulse to economic growth. Fiscal stimulus was reflected in higher expenditures and lower fiscal revenues. Thus, budget spending increased 4.7% in annual terms, whereas fiscal revenues fell 0.5%. However, budget deficit was lower than expected, reaching 4.8% of the gross domestic product, from 6.2% projected.

In 2014, the fiscal policy is expected to be cautious, reducing the budget deficit and fiscal stimulus. In view of this policy, Government's payment of arrears will improve the private sector balances and will create better conditions for the recovery of demand.

The Bank of Albania has requested and supported measures to maintain public debt sustainability. In spite of short-term costs, maintaining public debt at subdued and sustainable levels would lead to lower uncertainty, greater room for the private sector and higher flexibility of public finances. In a longer term period, we deem that an efficient and transparent fiscal rule should be adopted.

In response to easing monetary policy and relaxed liquidity situation, financial markets appeared calm in terms of trading and showed slight tendencies of reduced interest rates. The interbank market was characterised by higher volumes and low interest rates.

Following the seasonal increase at year start, the government security yields tended to fall again in February but did not reach December's levels. As already expected, deposit and loan interest rates fell over the last months.

Monetary indicators performed in line with the real economy developments and our analyses show weak monetary pressures on inflation. Money supply

expanded at slow paces during 2013, supported mainly by the public sector borrowing, which was concentrated in the first half of the year. Lending remained weak, reflecting economic agents' weak demand for financing and banks' conservative lending policies. The lower loan interest rates in the fourth quarter did not boost the credit demand. At year-end, the annual change in the banks' loan portfolio settled at -1.2%.

\* \* \*

Our baseline projections for future economic developments show a gradually recovered growth rate in 2014. Alongside the positive external demand, private sector demand will improve this year. Government's payment of arrears to the private sector is believed to improve this sector's liquidity and ease the banks' balance sheets. Also, the accumulation of financial savings and easing monetary policy stimulus will materialise into better performance of private investment and consumption. Despite the improvement, the Albanian economy is expected to operate below potential over the period ahead. Below-potential economic growth and weak inflation pressures from the external sector are expected to reflect in a low inflation rate.

At the end of discussions, the Supervisory Council decided to lower the key interest rate by 0.25 percentage points, to 2.75%. Given the available information, the Bank of Albania deems that the expected economic and financial outlook requires maintaining an easing monetary policy over the quarters ahead to help create the proper conditions for meeting inflation target in the medium term.



## SPEECH BY ARDIAN FULLANI, GOVERNOR OF THE BANK OF ALBANIA

At the forum with the Albanian banking system on  
"Recent regulatory amendments: causes and expectations"  
28 February 2014

Dear bank executives,

Dear participants,

I would like to welcome you to this discussion forum between the Bank of Albania and the banking system. The topic of discussion for this roundtable is to inform you on the recent decisions of the Supervisory Council of the Bank of Albania in more details. We are on the last day of the second month of 2014 and we are all witnessing an intensive period of discussion and suggestions between the Albanian authorities on the one side, and international institutions on the other. Recovery of economic activity, potential structural reforms, lending to the economy, and financial soundness have been at the core of the discussions. Taking into account its role and significance in decision-making, the Bank of Albania has been an important part of them, materialising its contribution with a number of decisions relating to both macroeconomic and banking supervision.

Following, I would like to share with you in brief the reasons, expectations and the way we will monitor this decision-making.

### 1 – Decision-making on monetary policy and money market operations

As we have constantly informed, the Albanian economy is facing cyclical weakness. In response to the weak demand, the Albanian economy is growing below its potential, inflation is low, public and private balance sheets show difficulties, and the banking system has been facing upward non-performing loans. These problems have been detected at an early stage by the Bank of Albania and we have, therefore, taken relevant measures to tackle them.

The monetary policy of the Bank of Albania has been constantly on the easing cycle. The key interest rate reached the record low 2.75% last Wednesday, from 5.25% in 2011. In line with the best practices of central banking, we have adopted a forward-looking communication strategy. I am convinced that not only the financial market, but also the real economy has received our message that the monetary policy is and will continue to be on the easing side in the quarters ahead. Moreover, we have intensified our liquidity injection operations, which have succeeded in meeting all the market liquidity needs, by extending the horizon for injection and facilitating access to liquidity by broadening the collateral base.

Time has proven our monetary and operational policies successful. The Bank of Albania has managed to contain and control the downward inflation pressures. We are convinced that the steps we have taken will bring inflation back to our 3% target, in the medium term. We have managed to anchor the economic agents' expectations on inflation. This has enhanced the effectiveness of the monetary policy and contributed to maintaining confidence in the national currency and the Albanian financial system. The continuous liquidity injection through transparent and time consistent operations has managed to relieve pressures in financial markets. The key interest rate cut was followed by an overall decline of interest rates in the financial market. Bank lending costs, government borrowing costs, and business and consumer borrowing costs have dropped rapidly.

All these factors have laid a sound foundation for economic and financial stability in Albania. Stability is a precondition for sustainable and long-term growth, financial system development, functioning market economy that generates growth, employment and welfare for the country. I take this opportunity to emphasise that this philosophy of prudence and stability will guide our decision-making in the future, as well. The businesses, consumers and financial system will find in the Bank of Albania an institution determined to maintain economic balances of the country, uphold the value of the national currency, encourage financial markets and support sustainable and long-term development for the country.

However, the monetary policy has not been transmitted in full to the real sector of the economy. We are aware of the causes of this phenomenon, which is not an isolated case in Albania, but a global-wide one.

Economic agents' uncertainties, economic and financial problems in the euro area, and problems with the balance sheets that characterise a part of the economy are objective obstacles to the monetary stimulus transmission to the economy. Nevertheless, we are aware that within this reality, there is room for a more positive approach to consumption and investments, and more lending. Uncertainties and reluctance are the main problems standing in the way of the Albanian economy. The purpose of this forum is to identify, together, ways to overcome this situation. In this context, I would like to quote President Roosevelt: the only thing we have to fear is fear itself.

## 2 – Decision-making on banking supervision and financial stability

Recently, non-performing loans have been mentioned frequently. I will take this opportunity to make the following necessary clarification:

First, I would like to underline that we have identified this problem at an early stage and have been very scrupulous with the banking system to evidence every penny of a loan that is not being repaid duly. This is why non-performing loans increased rapidly in the first period, and have stayed at the current levels for a long time. In contrast to other countries in our region, we have persisted not to conceal the non-performing loans, but evidence them accurately and comply with our rules to make provisions for every loss penny.

Second, we have adopted a rather conservative approach to non-performing loans classification. In our case, when we calculate the value of non-performing loans, we do not take into account the value of collateral, as is the practice in many countries. If we deducted this value from that of the non-performing loans, the NPLs' value would be significantly down. I am confident we have made the right choice as it has produced more security for the stability of both the banking system and the deposits of Albanian citizens.

Third, in the recent negotiations with the International Monetary Fund and the World Bank, under the conditionalities of the new arrangement that will be approved today by the IMF Executive Board, we have agreed to include the write off of banks' loss loans that are provisioned and have no hope of being collected, having no financial effect on the banking system. Amendments are formalised in a draft law that is expected to be passed by the Assembly in the near future.

Fourth, the recovery of lending is considered one of the main instruments contributing to improving the level of non-performing loans. I would like to dwell a little longer on this aspect.

Despite some optimistic developments in terms of the increased number of credit applications submitted for execution or restructuring, the larger banks, which have considerable potential to lend, are not using properly the measures promoting the recovery of lending, as opposed to the smaller banks, which appear more active. We believe the main reasons forestalling a more significant effect of these measures are as follows:

First, actions taken to boost credit supply need to be complemented by other actions to boost credit demand. The latter remains unstable in the face of sluggish economic growth and weak consumption and investments. As a result, credit risk perception by banks remains considerable.

Second, in spite of a better reflection of the key interest rate cut in the last quarter of 2013, the credit price (including other related costs) is still considered relatively high. For that reason, banks need to cut the credit price down, having better control of their operational costs, especially foreign currency funding costs.

Third, credit restructuring should be conceived as a broader process of deep restructuring of the activity of borrowing businesses. Each non-performing loan should be seen as a new opportunity. Our approach should extend to the micro level, according to the motto: door to door and case by case. From the bank's perspective, this would mean that credit restructuring is not merely a rescheduling of credit instalments in agreement with the businesses, but an in-depth analysis to assess the possibilities of its future existence in the market and acknowledge on time the loss of a part or full credit value.

Fourth, infrastructure and legal practice concerning collateral execution remains subject to adaptation to the new situation.

Fifth, it may be necessary to allow longer time to see the effect of the measures taken until now, and other measures that should further address the above-listed problems.

Despite the existing problems listed above, the Bank of Albania believes that the circumstances are better for banks to be more active in this year in tackling non-performing loans. Economic growth prospects are better, mainly thanks to the improved foreign demand and eased monetary conditions. Furthermore, Government's payment of arrears to the private sector will begin this year, accounting for a considerable amount. We expect banks to assist in this regard for a smooth and effective process, and orient the cashed-in amount towards further lending to the economy.

From this process, we expect the business restructuring to ease and their demand for borrowing to grow. Likewise, the fiscal policy will gradually orient towards a steady consolidation process, which will create more room for lending to the private sector. The banking sector may serve as a catalyser to render the effect of such policies sustainable, and benefit maximally from them in the form of expanded activity, improved asset quality and enhanced income stability.

As you know, last November the financial system was subjected to the IMF and Vb appraisal. The banking industry was engaged in this process and I take the opportunity to thank you for this! Today, the IMF Executive Board is expected to approve the evaluation report. Overall, the financial system and its supervision infrastructure have managed to successfully weather the global financial crisis.

In the meantime, risks facing it are analysed and assessed, and a series of actions that need to be taken are identified. For banks, the focus is on strengthening their human and technical resources to assess operational risks and undertake concrete actions to mitigate these risks. The need to improve asset quality and maintain financial soundness indicators are also focal issues. The Bank of Albania will support this process by cooperating with the banking industry and improving the regulatory and supervisory framework. For the supervisory authorities of the financial system, the recommendations relate to strengthening the preventive and management framework of risks and, in this regard, improvement of the legal, operational and inter-institutional cooperation infrastructure is recommended.

Concluding, I would like to reiterate our message: the prospects for Albania's development remain positive.

The economic and financial stability, geographical position and natural resources, and integration with the European Union make us optimistic about Albania's future development. I invite you all to share in this vision and work together to make it a reality.

I assure you that the Bank of Albania, as the supervisory authority, will undertake all the necessary actions, under its scope of activity, to support the industry to successfully overcome these challenges and ensure that the sector remains well capitalised and liquid.

## SPEECH BY ARDIAN FULLANI, GOVERNOR OF THE BANK OF ALBANIA

At the Meeting with Agro-Business and  
Banking Sector Representatives, Lushnja  
13 March 2014

Dear guests,

It is a great pleasure for me to be here today to discuss one of the most important sectors of the Albanian economy - agriculture. Moreover, the fact that this meeting takes place in one of the areas with extraordinary potential for the development of this sector - I am referring here not only to Lushnja, but the entire Fier district - is very significant.

I do not think I am surprising anyone, particularly those engaged daily with entrepreneurship, when I state that the recent years' global economic crisis had an easily recognisable impact on the Albanian economy as well. The pace of economic growth has slowed markedly, particularly in the past two years. According to the latest forecasts, the Albanian economy is expected to pick up slightly in the next few years due to improved monetary and financial conditions, and the fact that our trading neighbours are, similar to Albania, showing the first signs of recovery after several years. However, we expect growth to remain weak for a while yet compared to the pre-crisis period.

Under these circumstances, the Bank of Albania has been promoting a public debate around the new economic growth model, even before this global financial crisis took hold.

The central bank's stance has been clear and transparent to the public. We have constantly stated that the main sources of economic growth in the two decades of transition are reducing markedly, and the Albanian economy needs to be re-oriented towards new sectors in the very near future. The Bank of Albania sees agriculture - and, in a broader sense, the entire agro-business - as one of the main sectors standing at the front of this re-orientation.

My presence here today, and Bank of Albania's presence, should serve as a confirmation of our commitment to discussing the new growth model and the primary role that agriculture should play in it.

\* \* \*

The Albanian economy had a very difficult year in 2013. Domestic demand, and consequently economic growth, hit one of the lowest levels in history. The inflation rate hit the lower bound of the Bank of Albania's target tolerance band, while budget deficit and public debt increased considerably.

The economic performance was also accompanied by uncertainties surrounding the external economy - Albania's trading partners in particular -, but also the domestic economy considering that 2013 was an election year. All the above contributed to the deceleration and a more cautious behaviour of economic agents. Some of domestic product indicators saw significant changes. Worth mentioning is the construction sector, one of the top contributors to economic growth during 2000-08, which has shrunk considerably in the past years.

Fortunately, the Albanian banking system remains solid and well-capitalised. Despite the increasing non-performing loan portfolio, banks have sufficient capital to address this phenomenon. I would like to elaborate more on this latter point.

The performance of lending has become the focus of attention for policy-makers and economic agents. The slower economic growth was followed by sharp deceleration in lending. The reasons are quite understandable: on the one hand, businesses have reduced their demand for loans due to uncertainties relating to the sale of their own products; and on the other hand, banks have been pursuing a more conservative approach to lending, being uncertain about the success of different business plans.

Global theory and practice suggest that the investment and credit cycles progress in line with the performance of aggregate demand. In other words, we will see a stable recovery of lending only when economic growth recovers at a steady pace.

However, as we have already stated, we believe that there is room within the Albanian reality for a better performance of lending. Channelling savings into profitable investments and supporting businesses with lending are the reasons for the existence of the banking system. We have been constantly emphasizing this message, and we have taken concrete steps, which have lowered the banking system's financing cost and provided incentives for lending through an adequate regulatory environment.

The Bank of Albania expects the situation to improve in the next few months, following the macro prudential measures we have taken to facilitate lending, and banks' cleaning up of balance sheets and credit restructuring. I did not intend to make a random overview of the situation, but to show the Albanian economic reality at this moment and present the future challenges. It is easily understandable that the weak economic growth calls for innovative solutions from other new sectors.

There is room for banks to lend to profitable projects as they continue to collect deposits and maintain sound levels of financial ratios. It is now the responsibility of all policy-makers to help entrepreneurship, in order to get a clear view of the right investments for the future. We have stated in our reports that the new sources of growth should originate from competitive sectors in the domestic and, even further, in the external market, so that the trade balance keeps on showing the improvements of 2013.

Export growth is important in the long run to offset the moments of weakness in domestic demand, by diversifying the sources of income. Although the economy benefits from the increase in the exports of mineral products, the latter are often exported without any sort of processing in the domestic market and, consequently, make little contribution to improving productivity and competitiveness of the Albanian economy.

Bank of Albania's research and analyses show that traded goods' sector has shown increasing productivity compared to the non-traded one.

During the 2000s, the Albanian economy was most focused on non-traded sectors like construction, and hotels and tourism, with a low share in the growth of productivity. Improving them and successfully facing competition in the international markets should lie at the core of Albania's new economic growth model. Bank of Albania's analyses suggest that these structural changes will contribute to recovering the economy at a faster pace in the years ahead and restoring the previous growth rates.

The agriculture sector meets the above criteria to lie at the core of this new model better than any other economic sector. On the other hand, we must recognise that despite Albania's vast natural resources, we have not managed to fully utilise these potential resources for the agriculture sector to face competition in the international markets. The Bank of Albania sees great potential in agriculture, which, for a number of reasons, could not materialise in the past years but can become more beneficial in the future. Unlike other sectors, whose future benefits may be limited, agriculture may represent an important source for a second period of dynamic economic growth.

The Albanian economy should be re-oriented towards those sectors whose capacity to compete in the international markets is the best signal for the development potential. The Albanian economy being a net importer of food products hints at a low level of competitiveness and represents one of the major future challenges. Lushnja is one of the main regions of the Albanian agriculture the recovery of our economy should start from - and holding this meeting here today is not mere coincidence.

Bank of Albania's analyses have been paying increasing attention to developments and related perspectives in this sector. As we speak, 47% of the Albanian population and around 49% of the labour force lives in rural areas and engages in agriculture-related activities. According to the latest data for 2012, around 24% of the land area is used to cultivate different agriculture cultures. However, despite the vast resources concentrated in agriculture and the important role it plays as the main source of income for a considerable part of the population, only 20% of gross added value comes from this sector.

The low share in economy in proportion to the considerable number of the population involved in agriculture indicates the low productivity in this sector. The latest data show that the exports of 'Food, beverages and tobacco' account for 6.2% of total exports. Livestock and agricultural products share 0.78% and 2.3% in total exports, respectively, whereas agro-industry shares

3%.

Fier district represents a considerable part of production factors in agriculture.

The latest data show that Fier shares 18% in total agricultural land, thus being classified as the district with the highest share in the country.

In 2012, more than 56 thousand farms were registered in Fier, the highest number on a country-level. This number accounts for 16% of total farms in the country, providing the highest share of income from the sale of agricultural products, and about 20% of Albania's total income. Related to livestock, Fier, and mainly Lushnja district, have a considerable share in livestock products. As a district, Fier produces 20% of total livestock production (milk), whereas Lushnja produces 9%.

The above setting witnesses private efforts and entrepreneurship to develop this sector. In order for this process to go ahead at a more accelerated pace, policy-makers should identify the advantages and problems this sector encounters, in order to address them quickly.

In 2012, the Oxford University published a book focused on economic growth in South-Eastern European region. This book elaborates on a number of structural problems and challenges facing the Albanian economy, in its efforts to develop further. Agriculture has significant share in this analysis.

Some of these problems are acknowledged and frequently mentioned, such as the important infrastructure-related issues that include the road, watering, draining, storage and processing systems. Problems with land ownership and the transformation of its function for other activities continue to remain a major obstacle for the country's normal development, and raise ongoing concerns relating to the price and use of this important factor of production, and further on, to the normal functioning of product markets and other land-related factors.

Agriculture is affected by other structural problems that need a long-term solution. Average-size farms continue to be relatively small, thus restricting the development and growth of average productivity, or differently known as "the economies of scale". There are many reasons behind this. We can mention the inheritance of the communist system and the separation of land after its collapse. As it was stated above, the lack of a normal land market also due to ownership problems, naturally plays an important role in establishing larger farms and, consequently, more competitive ones. These problems also affect the agricultural sector-bank relationship and the lending activity at home.

The recent data show that lending to the agricultural sector accounts for 1.25% of total lending to businesses, on average. It is a considerably low figure, which should raise our concern, considering that this sector contributes by one/fifth to the gross domestic product.

I believe that there are two reasons driving the banking system to be reluctant to finance different projects in this sector. First, risk classification and



categorisation for credit to agricultural sector is a commitment different from the other activities. The lack of formalisation, even for matters such as regular maintenance of information and statistics about ownership, and financial statistics, damage the farmers' credibility from the early steps of lending. I find that there is room for prudential intervention by public institutions, not to condemn farmers, but to better prepare them and assist them in formalising their business.

In light of this, the Bank of Albania has in the past years initiated a campaign to improve the financial education of the Albanian people. The recent results of our questionnaires indicate that the Albanian urban population shows increasing and a more complete knowledge related to various financial problems they encounter. But the results on rural areas reveal that the education level remains considerably lower.

Second, the Albanian agricultural sector suffers from the lack of information and evaluation. As I noted above, one of the reasons why banks hesitate to increase their lending is the lack of complete information on farms and their products. Further, the quality certification standards for Albanian products remain low. One of the main reasons restricting higher exports and, consequently, higher production, is the lack of certification in accordance with the highest standards for all the Albanian agricultural products. This type of certification does not only prove the elementary food security required by the European markets, but also establishes a starting point for competition in the market.

The presence of these standards at a reliable level would lead to the improvement of all market mechanisms, by helping bank lending in proportion to the quality of products. In the framework of concerns facing the agricultural sector, the Bank of Albania has increased its interest in microcredit institutions.

In many developing countries, these institutions have led to an increase in lending, particularly to the agricultural sector and the rural population in general, thus trying to work out the formalisation and evaluation problems I stated above. I find that the successful experience of microcredit institutions in other countries could be imported to Albania. Consequently, all policy-makers should get closer to these institutions and help them grow, as the microcredit institutions are the ones that have great potential to become important lenders to the private agricultural enterprises, better than any other intervention by financial and public institutions.

Let me conclude by saying once more that the agricultural sector should be an important source for Albania's further development. But the solution to the problems facing this sector calls not only for greater attention, but above all, for a modern way of thinking and a more concrete cooperation between all related stakeholders. I, therefore, hope that today's meeting will contribute to drawing the attention towards this important sector and push forward the required structural reforms, which would also encourage the cooperation between agriculture and the banking and financial sector.

## SPEECH BY ARDIAN FULLANI, GOVERNOR OF THE BANK OF ALBANIA

On the Monetary Policy Decision of the  
Bank of Albania's Supervisory Council  
27 March 2014

Today, on 27 March 2013, the Supervisory Council of the Bank of Albania reviewed and approved the monthly Monetary Policy Report. Given Albania's latest monetary and economic developments and discussions on their outlook, the Supervisory Council of the Bank of Albania decided to keep the key interest rate unchanged, at 2.75%.

The Council deems that inflationary pressures on the economy remain subdued. Under these circumstances, the monetary policy will continue to be stimulating in the period ahead to provide the necessary conditions for compliance with our inflation target in the medium run.

Let me now proceed with an overview of economic developments and key issues discussed at today's meeting.

\* \* \*

Annual inflation stood at 1.9% in February, slightly up from a month earlier. The increase resulted from higher prices of agricultural products, tariffs of potable water in some regions of the country, and vehicle insurance premiums. Prices of other items of the consumer basket are stable and their inflation is low.

New information obtained during the last month is limited. It does not alter our assessment that the overall economic and financial setting is characterised by weak inflationary pressures. Our projections have remained overall unchanged, but short-term downside risks are assessed as high.

Reflecting the weakness in aggregate demand, the output gap remains negative and the Albanian economy is still characterised by incomplete utilisation of production capacities. The lower economic growth and poor performance of the employment index have led to weaker pressures on increasing wages and production costs. Also, the sluggish aggregate demand keeps profit margins low. Weak pressures from production costs and downward inflation expectations were the main drivers lowering core and headline inflation rates. In parallel, imported inflation was contained due to low inflation rates internationally and the exchange rate stability. This situation is expected to continue in the quarters ahead.

The macroeconomic analysis, updated with information for the first two months of the year, suggests low economic growth during this period. Private investments and consumption remained weak because of the low confidence

of economic agents, slowdown of disposable income, tight lending terms, and presence of spare production capacities.

Trade deficit expanded 3.6% in January, primarily as a result of declining exports, in contrast to a month earlier, when it expanded due to unusual import growth. 'Minerals, fuels and electric energy' were the main drivers of contraction in exports of goods. On the other hand, exports of goods in the category of 'Textiles and footwear' increased.

In response to enhanced competitiveness and shifting of financial and human resources towards exporting sectors, export growth should be one of the main pillars of Albania's economic development in the period ahead. In the near future, the exporting sector of the economy is expected to be sustained by improved demand in Albania's trading partners.

Fiscal indicators were characterised by higher revenues and lower expenditures during the first two months of the year. As of February, budget revenues increased 4.9%, year on year, whereas expenditure and budget deficit fell 9% and 82%, respectively. Expenditures decreased mainly due to downward capital spending, while revenues upped thanks to increase in tax revenues.

These developments have determined a consolidating trend of the fiscal policy and have kept its impact on aggregate demand and economic growth subdued. Excluding the effect of payment of arrears, the consolidating trend of the fiscal policy is expected to be maintained over the medium-term period. As always, the Bank of Albania endorses and encourages measures for fiscal consolidation, considering them as necessary for reducing risk premia in the economy and maintaining the country's medium and long-term stability. Moreover, the Government will pay a part of its arrears to businesses within this budget year. This development is expected to improve the private sector's balance sheets and demand.

In response to the easing monetary policy and the liquidity situation, financial markets have been calm, in terms of trading, showing a tendency to cut interest rates. The latest key interest rate cut in February was transmitted to short-term interest rates in the money market. The yields of government securities and interest rates on lek deposits have also fallen, whereas the interest rate on lek loans continues to move in line with a medium-term downward trend. Overall, while downward, the credit cost takes into account high risk levels arising from loan default.

Monetary indicators have reflected developments in the real economy and exerted weak inflationary pressures. Broad money expanded 2.8% in January, from 2.3% a month earlier, in annual terms, driven mainly by the expansion of the foreign exchange component.

Credit to the private sector maintained the annual contraction rates in January, standing at -1.4%. The banking system continues to be well capitalised, with sound financial parameters. But, the banking system's lending continues to

reflect the private sector's weak demand for funds, resulting from the downward credit demand and added prudence by banks when lending.

\* \* \*

New available data support our assessment for gradual growth of the economy in the quarters ahead. The transmission of the monetary stimulus, Government's payment of arrears to businesses, and improvement of confidence are expected to boost consumption and investments in Albania.

Also, the steady recovery of the global economy is expected to boost foreign demand and its contribution to aggregate demand. The Albanian economy, however, is expected to operate below its potential in the period ahead. Below-potential economic growth and weak inflationary pressures from the foreign sector are expected to be reflected in low inflation rates, in the short-term period.

At the end of discussions, the Supervisory Council decided to keep the key interest rate unchanged, at 2.75%. This policy will help provide the requisites for complying with the inflation target and is consistent with our projections for inflation rates returning to within the target band in the medium term.

In this context, I avail myself of this opportunity to underline that the Bank of Albania expects a better response by the banking system with regard to lending. This response should take into account, among others, the positive prospective of economic development in Albania and the stimulating policies applied by the Bank of Albania.

Based on the available information, the Bank of Albania deems that expected economic and financial development requires maintaining the easing monetary policy stance in the quarters ahead.

## SPEECH BY ARDIAN FULLANI, GOVERNOR OF THE BANK OF ALBANIA

At the meeting with the banking sector, introducing the bilateral SWAP agreement on national currency exchange between the Bank of Albania and the People's Bank of China

2 April 2014

Dear bank executives and representatives,

Dear guests,

I would like to welcome you to this round table between the Bank of Albania and the banking system in Albania. Today's discussion will focus on the bilateral agreement signed by the Bank of Albania and the People's Bank of China (PBoC), and the opportunities the agreement offers.

On 12 September 2013, in Yerevan, Armenia, together with the Governor of the People's Bank of China, Mr. Zhou Xiaochuan, we signed a SWAP agreement on the bilateral national currency exchange between the Republic of Albania and the People's Republic of China.

For the Bank of Albania, this important financial instrument will have a positive impact on widening and deepening trade exchanges between the two countries. Most importantly, this agreement will have a positive impact on another aspect: expansion and deepening of the financial market in Albania. The economy, its agents, including financial institutions, are provided with an additional opportunity to contribute together to the quick recovery of economic activity, lending more to the economy, and the country's financial soundness.

The agreement is reached in the light of the considerably increasing share of the People's Republic of China in both the global economy and international financial system. The financial cooperation between the two central banks reconfirms the excellent relations between the two institutions, which peaked with the landmark visit of PBoC's Governor Zhou Xiaochuan to the Bank of Albania in 2011.

This cooperation materialises the increasing share of trade exchanges between Albania and China. Moreover, it precedes the potential increase in financial and capital transactions between the two countries.

Despite quantitative differences between the economy of Albania and the economy of China, we expect the trade exchanges with China to increase in the period ahead. Potentially, financial ties will also be strengthened. China is Albania's third trading partner, by origin of imports (behind Italy and Greece), and is an important station of our exports. In the last year, 5% of Albanian exports targeted the Chinese market and 6.7% of our imports originated from China.

Strong trade relations provide the foundations for strong financial relations. History has proven that trade has always been a forerunner of financial exchanges. As trade relations increase, corporations, enterprises and businesses will have to rely on a safe financial services network. On the other hand, a sound financial relation helps businesses in both countries to identify and boost their investments.

Aware of the existence of these opportunities, we believe that an economy may be developed and well integrated, only if its markets are open, efficient, transparent and supervised. Our ambition to establish a solid financial infrastructure to support long-term and sustainable development for the country, with the ultimate goal to boost employment and enhance welfare, means necessarily becoming part of global markets, wherein the People's Republic of China is a key actor. For this purpose, we negotiated and signed a bilateral SWAP agreement on the bilateral exchange of respective national currencies.

In other words, the SWAP instrument implies an opportunity to exchange our national currency with the Chinese national currency, renminbi, to the amount equivalent of EUR 250 million, which may be set higher in the future. I would like to inform you that the Albanian banking system may access renminbi funds with the only goal to further boost trade and financial relations between the two countries.

This agreement is an important element of financial infrastructure that the Bank of Albania is establishing to attract more Chinese foreign direct investments into Albania. Market participants from both countries, especially Chinese investors, should feel secure about adequately meeting their needs for liquidity.

Dear bank representatives, your contribution is therefore indispensable. I would kindly advise for immediate measures to be taken to build a solid platform that would provide for higher volumes of trade and financial exchanges between you and your Chinese counterparties, and consequently between Albania and China. On our side, we will take all the necessary measures to facilitate the flow of funds in both directions. Furthermore, the Bank of Albania will transmit no additional costs to the banking system, which may arise from intermediation.

Dear bank executives and representatives,

In addition to the cautious pursuit of primary objectives, the Bank of Albania proactively provides a new stimulus to reinvigorate the country's economic, trade and financial activities. Thus the Bank of Albania joins an increasing group of central banks in this regard, becoming one of the few European central banks that have entered into such an agreement.

I would like to draw your attention on some of the elements of the agreement.

First, by easing the lending terms, the agreement stimulates the deepening of trade relations between the two countries. It enables the local banking

system to access the renminbi. This is translated into a possibility to lend in this currency for Albanian importers or exporters that trade with their Chinese partners, providing, therefore, an impetus to exports.

Second, the agreement promotes Chinese foreign investments in Albania. The SWAP mechanism establishes the necessary basis and stimuli for Chinese investors to expand their activity, which would eventually bring about direct positive effects on the Albanian economy.

Third, the foreign currency SWAP agreement can substantially improve risk assessment of a country, because, through this mechanism, a central bank can easily access external foreign currency funds even in case of market shock.

Most essentially, the existence of a SWAP agreement implies a strong commitment on behalf of the central bank to ensure the system's financial stability, because it can be supported by other central banks in the event of shocks. Even this information in itself can send calming signals to financial markets.

Along the same lines, it is clearly understood that the efforts made by all of us for a successful implementation of this agreement bring about benefits to all the parties: the overall economy, the banking system, and the Bank of Albania.

Dear bank executives and representatives,

The Bank of Albania regards the successful implementation of this agreement as a process that requires our constant commitment, which would yield tangible benefits to all of us. Deepening and expanding the financial market through this agreement will facilitate, also, the government's access to a new debt and funding market, providing for a new base of buyers by diversifying the government's funding sources.

I would like to invite you, following the presentation, to share your views and opinions in an open and fruitful discussion about the appropriate ways to implement the agreement.

Thank you!

## SPEECH BY ARDIAN FULLANI, GOVERNOR OF THE BANK OF ALBANIA

At the launching ceremony of the Needs Analysis  
for the Bank of Albania project  
17 April 2014

Dear Mr. Mersch,  
Dear Mr. Hamza,  
Dear Mr. Bajrami,  
Your Excellencies Ambassadors,  
Dear guests,

The purpose of the programme we are launching today is to support the Bank of Albania in the process of approximation with the EU central banking rules, procedures and standards. This is another step forward in the increasingly closer cooperation between the Bank of Albania, the European Central Bank (ECB), and the Eurosystem. I am delighted we have here today the Governor of the Central Bank of Kosovo and Vice Governor of the National Bank of Macedonia, as co-beneficiaries under this project.

The Project addresses 13 different fields of central banking, as identified by Bank of Albania and ECB experts, wherein the Bank of Albania needs to make progress to reach comparable benchmarks to an EU central bank. These fields relate to all the main functions of the Bank of Albania, such as monetary and financial stability, operations, financial infrastructure, transparency, accountability and human capital.

For the first time, information technology is also incorporated in the project scope, hence reflecting the impact of technology's evolution on central bank operational systems over the past decades.

The cooperation programme will be implemented with the support of experts from 11 central banks in the EU, with the ECB being the overall coordinator. Only two years ago, the Bank of Albania successfully concluded a twinning project with two of them: Banca d'Italia and Banque de France.

During the six months of the project implementation period, central banks of the Eurosystem will provide expertise through training, conferences, seminars, study visits and support to strengthen administrative capacities, and regular technical missions. This form of cooperation will aim at fostering the existing relations and building a broader network of cooperation between the Bank of Albania, central banks of the region and the Eurosystem.

The Project is funded by the European Commission, in the framework of support policies for the central banks of the Western Balkans, to promote macroeconomic and financial stability in the region. This form of technical



assistance has been particularly successful in the past, creating strong institutional ties between the central banks of the Eurosystem and those of our region. The twinning is based on a detailed plan of action for achieving a series of concrete and measurable objectives.

This means that upon conclusion of the project, having benefited from the technical assistance, the Bank of Albania will be able to discharge its institutional duties and responsibilities in the relevant fields more effectively and more efficiently. I believe the main factor of success for such technical cooperation programmes is closely related to having clear goals and objectives, set jointly with our European partners.

Twinning agreements are an important instrument for ensuring Albania's compliance with EU legislation. This agreement is reached at a convenient time, taking into account that only two months from now, a decision will be made by the Council of the European Union on the candidate status with regard to Albania's EU membership.

The ultimate objective of this cooperation will go beyond the assistance. It will contribute to achieving high levels of professionalism, independence and transparency. It will also contribute to promoting the monetary and financial stability in Albania. Moreover, the assistance will be an impetus to the country's European integration, with special focus on compliance with criteria for legal and economic convergence with the European Union. This underlines, once again, the role of European integration as a driver to economic and social modernisation in our countries. Today's agreement comes at a moment when the commitment of the European Central Bank to our region is focused not only on the field of technical cooperation, but also on the political one.

In addition to the close monitoring of the economy of Albania and other countries in our region, the European Central Bank plays an active role in the Vienna Initiative 2.0, which aims at identifying and mitigating systemic risks in the countries where European banks operate. This initiative is experimenting a new coordinating mechanism between the European Union and our region, bringing together representatives from parent banks, subsidiaries, home and host supervisory authorities, international financial institutions and the European Commission.

Moreover, the European Central Bank is assuming a new supervisory role for 130 systemic banks in the euro area, some of which operate in Albania or other countries of the region through their branches or subsidiaries. This role, which is expected to become functional in the field as of November this year, will be exercised in cooperation with the national supervisory authorities and will have implications for Albania and other countries of the region, given the presence of euro area-based banks in our banking sectors.

With the establishment of the Single Supervisory Mechanism, the European Central Bank will become the home supervisor for a number of banks operating

in Albania. In addition to improving the quality of banking supervision, this mechanism has the potential to facilitate cooperation between home and host countries, hence fostering cooperation between the European Central Bank and central banks in the region on financial stability.

Dear participants, the common challenges that lie ahead of us are numerous and should be solved within a short period of time.

On behalf of the Bank of Albania, I would like to assure you that we will continue to be in close contact with the European Central Bank and Eurosystem central banks, furthering our existing open and sincere communication.

Approximation with best EU central bank standards and practices is a crucial process for a central bank not only for the effective discharge of the duties, but also for the efficient and stable functioning of the financial system, and benefit of the economy, overall. I am confident that the implementation of this project will be characterised by the cooperative spirit between the Bank of Albania and central banks in the region, on the one hand, and the European Central Bank and Eurosystem, on the other.

I would like to conclude with a heart-felt appreciation and gratitude for all the stakeholders having an active role in the launching of this project:

- The European Central Bank for coordinating all the activities;
- Member central banks for providing a large number of experts to assist us with the project implementation;
- Delegation of the European Union in Tirana for funding it.

We highly appreciate the Commission's assistance with regard to adopting the implementation of the European Union legislation and are seriously committed to continuing with the successful cooperation, established with the Delegation in the last twinning project.

In this context, I would like to reiterate my message that the road to European Union integration passes through regional integration. The financial system and central banks spearhead this process. We expect public and private economic agents to determinedly follow this step we are taking. In my view, regional cooperation can and should serve as a forerunner to European integration.

Lastly, my special thanks and highest appreciation for Mr. Mersch for the fruitful cooperation between our institutions during his mandate as the Governor of the Central Bank of Luxembourg, and now as an Executive Board member of the European Central Bank and, above all, as a friend of ours.

Thank you for your attention!

## SPEECH BY ARDIAN FULLANI, GOVERNOR OF THE BANK OF ALBANIA

At the Parliamentary Committee on Economy and Finance,  
presenting Bank of Albania's Annual Report 2013  
23 April 2014

Honourable Chairman,

Honourable Committee members,

I avail myself of the moment to thank you, on behalf of the Bank of Albania, for this annual opportunity to present the economic and financial developments over the past year, as well as to report on central bank's progress and results conform to its mission and objectives.

As we have mentioned on several occasions, 2013 was a very difficult year for the Albanian economy. It posed serious challenges to both economic agents and policy makers. As one of the key institutions that design macroeconomic policies, as well as the supervisor and regulator of the banking system, the Bank of Albania has been fully committed to addressing these challenges. Overall, I am confident we have been successful in fulfilling our objectives, although the problems facing us may not be considered as overcome, and require even greater attention in the future.

First, I will briefly present the main developments during 2013. Then, I will make a summary of the work of the Bank of Albania. Lastly, I will share some issues I believe should be addressed with priority in the future.

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### 1. Albanian economy during 2013

Economic activity in Albania slowed down significantly in 2013. According to preliminary data from INSTAT, the Albanian economy grew 0.44% in 2013, from 1.2% in 2012. The economic activity dynamics reflected the contraction in the services sector, especially tourism, whereas the production sector contributed positively, driven by investments in infrastructure, further growth of exports and rise in agricultural produce.

Aggregate demand was weak, reflecting the weak private sector demand for consumption and investments. This component continued to be negatively affected by the low economic agents' confidence, slower income and relatively tight financing conditions. The general elections held last year elevated the uncertainties in economic agents and financial markets, hence decelerating their consumption and investments in the post-election period. Foreign demand and public expenditure contributed positively to economic growth, but they did not manage to fully offset the sluggish private demand.

The external sector was characterised by relative stability of the current account deficit and increase in the country's foreign exchange reserve. Exports of goods surged 13.5%, reflecting the improved economic situation in Albania's neighbouring countries and the structural improvements in certain sectors of the economy. Furthermore, imports of goods were 1.8% lower from a year earlier, as a result of the weak domestic demand. These developments materialised in the correction of the trade deficit by 13.5% in annual terms. Moreover, the balance of services deteriorated significantly, due to the fall of net exports in tourism. Main foreign currency inflows during 2013 were in the form of net foreign investments. These foreign inflows were sufficient to cover the current account deficit and provided the premises for a stable exchange rate. During 2013, the gross foreign exchange reserve hiked by about EUR 42.5 million, settling at EUR 2,015 million, sufficient to cover 4.6 months of imports and 170% of the short-term foreign debt. In spite of improvements, the balance of the external sector remains fragile. I would like to reiterate our appeal for taking the measures to boost the competitiveness of Albanian products and create a favourable climate to attract foreign investments.

During 2013, the Government pursued an expansionary fiscal policy, providing a positive impulse to economic activity. In annual terms, budget expenditure increased 4.7%, whereas revenues fell 0.5%, from a year earlier. Government's fiscal behaviour increased the budget deficit to ALL 65.4 billion, standing 42.7% higher than a year earlier. Last year's fiscal expansion increased the public debt and public finance's fragility, adding thus concerns over fiscal sustainability in the medium and long run. Considering the public debt as one of the biggest structural weaknesses of the Albanian economy, we have called for measures to be taken for ensuring the long-term soundness of public finances, and eventually welcomed such measures. In this context, we think that there is still much to be done, especially with regard to adopting a transparent and efficient fiscal rule.

Financial markets were characterised by good liquidity conditions and low inflation risk premia. This enabled a fast transmission of monetary policy signals to the interbank and deposit markets. Also, the increase in deficit and public debt was absorbed by the liquidity generated in the domestic financial market. Against the backdrop of a high demand for investment in government securities, their yields dropped significantly for all maturities. All these developments created premises for credit interest rates to decline in 2013.

Monetary indicators were largely in line with the real-economy developments. The annual money supply growth slowed down during the year. This slowdown reflected the weak demand for borrowing by the private sector, especially businesses. Lending to the private sector started to contract in the second half of the year. At the end of the year, the loan portfolio stood 1.4% lower than a year earlier. Similar to developments in the other countries in the region, this performance was influenced by economic agents' reluctance to spend and invest, and banks' more conservative lending policies. The following elaborates on lending issues and measures taken by the Bank of Albania to boost lending.

Summing up the performance of the economy for 2013, aggregate demand remained weak and economic growth was low and below potential. This economic slowdown had serious implications for the economy's soundness and balances. It affected public finances, which saw increase in budget deficit and public debt. Albanian businesses faced financial constraints and banks' balance sheets suffered from worsened non-performing loan portfolios. It also led to a higher unemployment rate and slower rise in wages and prices.

Let me now inform you further on the monetary policy implemented by the Bank of Albania.

## 2. Bank of Albania's monetary policy

The primary objective of the Bank of Albania is to achieve and maintain price stability. In quantitative terms, the Bank of Albania aims to keep the CPI inflation at around 3.00%. The inflation target is set to be achieved in the medium-term period, while the actual inflation may be subject to short-term deviations from the target, due to unexpected shocks or shocks independent from the monetary policy. Monetary policy decisions are forward looking and in line with market principles.

In 2013, the weak inflationary pressures were reflected in lower annual inflation, which averaged 1.9%, ranging close to the lower bound of Bank of Albania's tolerance band. It pursued a downward trend during the year, being more pronounced in the second half of the year. Unprocessed foods inflation accounted for around 90% of the headline inflation, hence determining the direction and fluctuation of the CPI inflation.

From the viewpoint of macroeconomic factors, consumer prices have reflected, first of all, the weak demand for goods and services, a factor that has generated low inflation over the last two years. Increase in demand, which was significantly below Albania's production capacity, generated weak pressures for rise in the labour and production costs, and in the profit margin. Supply-side factors also influenced inflation on the downside. Imported inflationary pressures fell due to lower inflation in Albania's trading partner countries, weak increase or fall in primary commodity prices, and stable exchange rate. On the other hand, economic agents' expectations for inflation have been well anchored, limiting inflation's sharp deviation from the Bank of Albania's target.

Against the backdrop of weak inflationary pressures, the Bank of Albania pursued a stimulating monetary policy in 2013. It cut the key interest rate four times during the year, lowering it from 4.00% to record low 3.00%. In parallel, the Bank of Albania continued to supply the financial market with the necessary liquidity. So, in addition to the standard instrument – the 7-day reverse repurchase agreement – longer-term instruments have been used to better adapt to the needs of the banking system for liquidity. The easing monetary policy was further reinforced by unconventional measures. The aggressive key interest rate cut was accompanied by the announcement of the future monetary policy direction. This type of communication is considered by

central banks as a monetary policy instrument, in the context of interest rates ranging close to minimum values. It aimed and was successful in orienting financial market expectations, and helped reduce the interest rates even further in the financial market. Monetary policy signals were transmitted quickly and interest rates dropped across all market segments.

Overall, the monetary policy implemented by the Bank of Albania proved successful in containing the downward trend of inflation and in anchoring inflation expectations, hence contributing to maintaining monetary stability. The latter is a prerequisite for the country's economic and financial stability, and the Bank of Albania has accomplished its mission in this regard.

However, our monetary stimulus was not transmitted in full to the real economy. As we have mentioned before, the monetary policy transmission mechanism faces problems, as a result of uncertainties of both the private sector and the banking system, for the future. In this framework, in March, the Bank of Albania adopted a package of measures to stimulate lending. In broad terms, these measures sought to: i) boost lending by reducing regulatory requirements for capital and liquidity; (ii) encourage intermediation in foreign currency by discouraging foreign currency activity abroad; and, (iii) promote credit restructuring to support businesses in temporary difficulties. Similar to other countries, where such measures have been taken, their success was partial. This fact shows that credit-related problems are very complex and, oftentimes, structural. Dwelling longer on credit-related problems, I would like to underline that its poor performance is a phenomenon that is present in all the European economies, including those of the region. This phenomenon reflects mostly the added prudence of large European banking groups against credit risk and poor economic performance. In this regard, the asset quality evaluation process by the European Central Bank, in June, will serve to give insight into the financial soundness of banking groups and may become a premise for a more positive attitude towards lending. In the domestic context, lending would benefit from the reduction of risk present in the Albanian economy. Therefore, all policymakers should work harder to improve the business climate, develop a new economic growth model, based on producing and exporting activities, and solve legal issues still present in the area of collateral execution.

Once the monetary policy easing reinforces, the external setting improves, and optimism in the economy increases, we expect a fuller transmission of the monetary stimuli to the real economy during the current year. However, as proven by world practice, boosting lending cannot and should not be an issue of concern and scope of work only of the central bank.

I would like now to elaborate on issues pertaining to banking supervision and financial stability.

### 3. Banking supervision and financial stability

The Law on the Bank of Albania sets out a series of rights and obligations, which serve to safeguard the country's financial stability. The Bank of Albania is responsible for licencing, regulating and supervising the activity of the banking

sector, which dominates the financial system in Albania. By implementing macro-prudential policies, regulating and supervising the banking sector prudentially, playing the role of the “lender of last resort”, and regulating and overseeing the payments infrastructure, it aims at sustaining an effective and stable banking system, by providing direct contribution to safeguarding the country’s financial stability. The legal framework also establishes the responsibility of the Bank of Albania to communicate its assessment on the financial system’s stability.

Despite challenges produced by economic realities both at home and abroad, the Albanian banking system is solid, liquid, and well capitalised. At the end of 2013, its financial profit was positive and stood higher than in 2012. The capital adequacy ratio and liquidity indicators were significantly above the minimum regulatory requirements of supervision. Banking sector assets increased, albeit at lower rates from a year earlier, as a result of slower increase in deposits and decrease in lending.

Overall, the banking system is considered as stable. It is little exposed to direct market risks, but credit risk has been upward and at the focus of Bank of Albania’s attention during the past two years. In order to reduce the negative effects of this risk to the financial system and the real economy, the Bank of Albania has intensified banking supervision. Moreover, in March, we adopted some regulatory amendments to address the rising non-performing loans. In constant communication with the banking sector, the Ministry of Finance and the legislative authority, the Bank of Albania initiated amendments to the Code of Civil Procedure and the Civil Code. These amendments aim to alleviate the banks’ balance sheets by improving the collateral execution process. They have started to yield positive results with regard to decelerating the rise in non-performing loans and reducing credit costs. As at end-2013, non-performing loans accounted for 23.5% of the loan portfolio, rising at much lower rates compared to the recent years.

During the past year, the Albanian financial system and its supervisory framework were subject to an appraisal by the International Monetary Fund and the World Bank (FSAP programme). This process consisted in the performance appraisal for all the segments of the financial system, the supervision method, and approximation with international standards. It evidenced, among others, the capacity of public authorities to identify and manage diverse risks and the inter-institutional cooperation to maintain the stability of the country. From this perspective, interconnection of financial system segments that are supervised by different institutions was underlined as very important. Similarly, it was pointed out that the responsibility to safeguard financial stability depends on policy coordination by all relevant authorities.

The process concluded that the financial system is able to withstand the international financial crisis and that the actions taken by the authorities to identify and manage risks have been on the right direction and extent. Moreover, it found that the supervisory process at the Bank of Albania is highly compliant with Basel’s core principles for effective banking supervision.

Year 2013 was a challenging year for the supervisory process of the banking system. In addition to direct involvement in evaluation processes of the financial stability, the Bank of Albania is also involved in other main projects related to: addressing non-performing loans case by case, guidelines on loan restructuring and real estate appraisal, guidelines on recovery and resolution plans, developing credit instrument for development policies, and improving reporting standards. In parallel, it amended the regulatory and supervisory framework to adapt it to the new financial conditions and approximate it with the new international standards. With regard to the latter, we have worked to gradually transfer the supervisory practices from Basel I to Basel II system.

In view of integrating the Albanian banking system with the European one, we have intensified the cooperation with counterparts in other countries. Bank of Albania's membership into Vienna Initiative 2.0 Steering Committee was particularly important in this regard. This initiative is a platform of cooperation, which brings together the European Commission and other institutions of the European Union, international banking groups that operate in Central, Eastern and Southeastern Europe, as well as authorities from home and host countries. Its main objective is to promote coordination between home and host country authorities, to avoid disorderly deleveraging. Given that the Albanian banking system is dominated by cross-border banking groups, decisions from the Vienna Initiative 2.0 have considerable effects on it. Therefore, our participation in the decision-making process is very significant. Albania is the only non-EU member country participating in Vienna 2.0. As such, it also represents the interests of other non-EU countries that are not represented in the Steering Committee. For all these reasons, I believe the involvement of the Bank of Albania in Vienna Initiative 2.0 is an important institutional achievement.

The normal functioning of the banking system relies on a safe and effective payment infrastructure, which, in Albania, is operated by the central bank. Over 2013, the Bank of Albania focused its efforts on improving AIPS and AECH systems. Moreover, in order to render the financial markets infrastructure complete, we are working to establish the Central System for the Settlement and Registration of Securities. This system will provide possibilities for the further development of the secondary market and will guarantee the settlement of transactions in this market, conform to international standards.

In 2013, the approval of the law "On Payment System" was finalised. This law provides a special legal framework for regulating, licencing and overseeing payment systems by the Bank of Albania. It aims at minimising the systemic risk, which is related to the participation in payment and security settlement systems, and risks related to the insolvency of participants in the system. The passing of this Law implies the liberalisation of the payment systems market through the establishment of private payment systems. Furthermore, to encourage the use of electronic payment instruments and reduce the use of cash in the economy, the Bank of Albania has adopted the regulatory framework for using these instruments, by reflecting the principles of the relevant EU directive.



The successful accomplishment of the main objective for maintaining price stability and the objective for safeguarding the financial system stability required improving all business processes within the institution, both the ones related directly to the legal duties of the Bank and those related to supporting aspects. During 2013, human and financial resources of the Bank of Albania focused on the qualitative development and improvement of these processes and their approximation with European practices.

I would like to present them in brief.

#### 4. Other activities of the Bank of Albania

The Bank of Albania has started a project to review the collection and processing of statistics according to Eurostat requirements, and has completed the technological infrastructure to automate and process reporting. This process is in a testing phase and is expected to be functional within this year. The Bank of Albania has continued cooperation with the World Bank to improve the reserve portfolio management system. Drawing on the experience of other countries for the administration of the crisis in the euro area, the respective regulation was revised to establish buffering and monitoring mechanisms against the materialisation of investment risks. The regulatory framework for the issue and control of banknotes and coins was amended, setting the standards for banknotes fit for circulation, and strengthening the monitoring of their protection against counterfeiting. In 2013, the laboratory for analysing banknotes suspected as counterfeit was made functional. Its instruments employ state-of-the-art technology, hence fulfilling one of Albania's obligations arising from the SAA.

During 2013, we continued our work to approximate the regulatory framework and working practices with EU directives and ECB standards, in the framework of the European integration process. The last annual report of the European Commission confirms the progress made by the Bank of Albania with regard to achieving European standards in all the fields of its activity. It also commends the contribution of the Bank of Albania to safeguarding the country's macroeconomic stability.

Last, but not least, I would like to underline the approach of the Bank of Albania to the public. In our medium-term strategy, we have, among others, set forth two important factors that help achieve our main objective: public education, with the Bank of Albania assuming the role of the financial educator, and enhancing the confidence in our institution. In the framework of financial education, after introducing financial education as an elective subject in the high school curricula, this year we targeted the elementary education, with a new teaching set for both pupils and teachers.

We have also consolidated our position as a scientific research centre. Every year, the Bank of Albania brings together economists and academics from different countries and institutions. During 2013, a part of our resources was invested in enhancing research and organising scientific research activities.

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Concluding, I would like to reiterate our long-term commitment to maintaining price stability as the primary objective of the Bank of Albania. The monetary policy has been appropriate and has contributed to safeguarding macroeconomic stability. It will continue to be stimulating for the economy in the period ahead, as stated in our public communications. I must underline, however, that not all things can be solved by the monetary policy, and the central bank alone cannot achieve all. Many economies are facing the difficult situation of sluggish economic growth and low inflation rates. These conditions require all authorities at home to coordinate active policies and approach a new economic thought. This approach should aim at establishing a favourable climate for investments, boosting demand, increasing productivity in competitive sectors, supporting technology development, improving education level and implementing reforms in the labour market. In particular, I would like to draw the attention on the implementation of FSAP recommendations, to develop further the Albanian financial system and enhance its stability. I think that 2014 poses new and difficult challenges for sustainable and all-embracing economic growth. These challenges require long-term solutions and the work to face them must continue, without delay.

Thank you.

## SPEECH BY ARDIAN FULLANI, GOVERNOR OF THE BANK OF ALBANIA

On the Monetary Policy Decision of the  
Bank of Albania's Supervisory Council,  
30 April 2014

Today, on April 30, 2014, the Supervisory Council of the Bank of Albania considered and approved the Quarterly Monetary Policy Report. Given Albania's latest monetary and economic developments and discussions on their outlook, the Supervisory Council of the Bank of Albania decided to keep the main interest rate unchanged, at 2.75%.

The Council deems that the inflationary pressures on the economy remain subdued. Under these circumstances, the monetary policy will continue to be stimulating in the period ahead, which will provide the necessary monetary conditions for compliance with our inflation target in the medium run.

Let me now proceed with an overview of economic developments and key issues discussed at today's meeting.

Data for the first quarter of 2014 are generally in line with our previous assessments of the Albanian economy and financial situation. Weak aggregate demand continues to characterise the economy, further impacting almost all the economic and financial parameters in the country. In response to the weak aggregate demand, economic growth remains low and the Albanian economy continues to operate below its potential.

The spare production capacities, both in the labour and capital markets, are reflected in low increase in employment and production costs, followed by weak inflationary pressures. From the financial point of view, the weak economic growth puts upward pressure on the budget deficit and public debt, and creates financial difficulties for businesses. These difficulties are reflected in higher non-performing loans in the economy, and negatively affect the banks' willingness to lend.

Such problems have been and continue to be present in the Albanian economy. However, new information signals that 2014 may be a turning point for the economic activity in Albania. The economic growth indices, businesses' perception and financial markets performance improved faster than our expectations. Such a development, combined with the expected improvement in the world economic outlook, subdued uncertainties, improved business climate at home, implementation of stimulating macroeconomic policies, and acceleration of structural reforms, signals that the Albanian economy may gradually improve in the quarters ahead.

The current risks to this scenario will remain present. In the following, I will dwell longer in describing the expected developments and related risks, while trying to highlight the policies that need to be implemented in order to avoid such risks.

Annual inflation averaged 1.9% during the first quarter of 2014; this is upward compared to the rate recorded in the previous quarter. The annual rate of inflation was 2.2% in March, returning to within the Bank of Albania's target band. The performance of inflation during the first quarter of 2014 was largely determined by the prices of unprocessed foods. Prices of other items in the basket of goods were generally stable, providing a minimum contribution to annual inflation.

From the macroeconomic point of view, the simultaneous action of weak inflationary pressures from the domestic economy, downward imported inflation and anchored inflation expectations led to low inflation rates. The domestic economic and monetary environment has put downward pressures on prices. Owing to the frail aggregate demand, the negative output gap persisted, despite the growth recovery in the fourth quarter of 2013. Pressures from the labour market were subdued due to the rise in unemployment rate during 2013 and the moderate rise in wages. These developments led to a low increase in production cost and controlled businesses' profit margins. The weak domestic demand narrowed the room for businesses to pass the increase in excise duty onto the final prices. Also, the imported inflation has been downward, reflecting the low inflation in our trading partners and the stable exchange rate. Economic and financial agents show anchored inflation expectations, with no considerable deviation from either the objective of the Bank of Albania or the average historical behaviour.

Analysing the economic performance, INSTAT data show that the gross domestic product increased by 1.1% during the fourth quarter of 2013, after a decrease by 2.5% in the third quarter of 2013. This increase was broadly determined by the positive performance of domestic private demand, while the contribution of the public sector and net exports was negative. From the sectorial point of view, economic growth was generated by the positive performance of production, whereas services declined.

Aggregate demand continues to be negatively affected by the difficulties of our main trading partners, low confidence of Albanian businesses and households, and tightened financing conditions. However, the domestic private demand increased in the fourth quarter, after decreasing a quarter earlier. Indirect indicators suggest that developments in private investments were positive in the fourth quarter, whereas final consumption by the population continued to be weak. As previously stated, the Bank of Albania maintains that developments in both components of the aggregate demand will dictate the economic performance in the short and medium term. In this regard, we deem that the expected improvement in financing conditions and balance sheets, due to the payment of fiscal arrears, and the reduction of uncertainties will provide the needed incentives for a better performance in the forthcoming quarters.

Nonetheless, the recovery of consumption and private investments will require a more courageous behaviour and higher risk taking willingness by economic agents.

Developments in the external sector signal a negative contribution from net exports during the last quarter of the year. Net exports deficit expanded, as imports increased in the fourth quarter. In January and February, the trade deficit marked an annual increase of 6.7% due to the increase in import of goods and the growth rate moderation in exports. The ability of the Albanian economy to maintain the stable pace of growth for exports and diversify the base of exported goods will be a primary factor for providing medium and long-term economic growth in Albania. In the long term, increase in competitiveness of the Albanian economy, diversification of growth sources, and integration in the regional and global markets will be prerequisites for sustainable economic growth. The Bank of Albania, therefore, supports pressing ahead with priority structural reforms in the export and import-competing sectors.

Fiscal behaviour in the first quarter was characterised by shrinking budget deficit and public spending. During this period, budget deficit decreased by about 57%, in annual terms, reflecting an increase of about 8.2% in budget revenues and a shrinking of about 2.4% in public spending. Albeit showing a higher intensity than our expectations, it is in line with the corrective fiscal policy to be pursued during 2014. Fiscal consolidation is expected to be more rapid on the revenue side, supported by a new fiscal package and a commitment for reducing fiscal evasion. Meanwhile, the clearance of arrears to businesses is expected to improve their financial situation and support economic activity in Albania.

Consistent with our previous messages, we support the corrective direction of fiscal policy, and consider this correction as an indispensable step toward improving macroeconomic balances in Albania. The implementation of a corrective fiscal policy has provided more room and opportunities for implementing a stimulating monetary policy to sustain aggregate demand and maintain our inflation target. The Bank of Albania has confidently moved in this direction.

Based on the economic outlook, and aiming at further boosting the aggregate demand, the Bank of Albania cut the key interest rate by 0.25 percentage points to 2.75% in the first quarter of the current year. This cut followed the previous monetary policy easing in the second half of 2013. To strengthen and better transmit the monetary stimulus, the Bank of Albania's monetary policy decisions were accompanied by continued liquidity injections and public guidance on the monetary policy direction in the near future. Our monetary policy has managed to control the inflation expectations of economic agents, keeping them anchored to our target. It has also mitigated the liquidity risk and inflation premia in financial markets, contributing to lowering interest rates in the interbank market, government debt securities market, deposit market and lek credit market. However, its transmission to higher lending activity remains incomplete. Interest rates on lek-denominated loans factor in the

relatively high risk premia. Moreover, banks remain considerably conservative in terms of lending, by tightening the applied standards. This development reflects the financial terms in the euro area and the uncertainty perceived by financial agents in the domestic market. It is an impediment to the transmission mechanism and illustrates the need for reducing risk and improving the business climate in the economy. This commitment should be the scope of work for both public and private economic agents.

Along with the conservative policies, lending continues to be affected by lack of demand for funds by businesses and consumers. The poor credit performance, particularly as regards lending in foreign currency and credit to businesses was translated into an annual shrinkage of 2% in the loan portfolio in February.

Looking ahead, our baseline projections suggest that, after a weak performance in 2013, the trajectory of the Albanian economy will be upward in the medium-term horizon. Economic growth is expected to be more balanced during 2014, driven by both the domestic and external demand. The improvement of confidence climate will enable the real sector to benefit from the monetary stimulus, hence stimulating consumption and investments at home. Also, sustainable recovery of the world economy will sustain Albanian exports, particularly during the second half of the year. Economic growth will be supported by the maintenance of the current stimulating direction of economic policies, and will benefit from continuing structural reforms. This trajectory will bring the Albanian economy close to its potential and will establish the conditions for complying with the inflation target in the medium term.

In the short term, the cyclical weakness of aggregate demand is expected to keep the economy below its potential and will be accompanied with weak inflationary pressures. With 90% probability of occurrence, four-quarter ahead inflation is expected to range between 0.5% – 3.9%.

At the end of discussions, the Supervisory Council decided to keep the key interest rate unchanged, at 2.75%. Taking into account the available information, our projections, force of action of the monetary policy transmission mechanism and other financial stability considerations, the Bank of Albania deems that the monetary policy will maintain a similar stimulating direction and range within similar parameters, over the medium term.

## SPEECH BY ARDIAN FULLANI, GOVERNOR OF THE BANK OF ALBANIA

On the Occasion of the First Edition  
of the Italian Week in Albania,  
5 May 2014

Honourable President of the Senate,  
Honourable Prime Minister,  
Your Excellencies Ministers and Ambassadors,

It is a special pleasure for me to address this important activity on Albania's cooperation and coordination with the Republic of Italy, our main economic partner. Years ago, two Italian missions, dubbed "Arcobaleno" and "Pelikan", provided food and order for Albania. Nowadays, Albania is about to being granted EU candidate country status. In this long journey, amid achievements and challenges, Italy's support has always been there for us, and for that, we are most sincerely grateful. Albania and Italy are natural partners.

Besides and beyond the geographic proximity, all the dimensions of economic and social development, such as the level of technological, financial and human capital development, demographic and labour market characteristics, exploitation and processing rate of natural resources, and strategic development plans render our two countries natural partners.

This close partnership and cooperation between our countries has its roots in antiquity. Despite the mutual benefit from economic and financial exchange on a voluntary basis, technology and capital have flowed mainly in one direction, from Italy to Albania. Technology and financial capital inflows have fostered trade exchange, exploitation of natural resources, and promotion of processing industry, consequently the country's economic development. Given the factors and stage of economic development, this cooperation is expected to continue in the period ahead, with Italy remaining one of the main partners for the Albanian economy, in spite of dynamics in the composition of our trading partners.

At a glance, Italian direct investments in Albania have doubled from the pre-crisis level. However, the share of Italy in total foreign direct investments has averaged only 14% during 2007-2012, showing that financial and capital integration is not commensurate with trade integration between the two countries.

Trade exchanges between Italy and Albania have expanded from 35% in 2007 to 37.5% in the last two years, hence strengthening the position of Italy as our main trading partner.

Demand from the Italian economy continues to play a key role in Albanian exports and industry expansion, but it remains limited to certain branches. It is a fact that the presence of the Italian economy is not homogeneous across all the sectors of the economy. The high share of trade and investments in such sectors as textiles and clothing, metals and construction, machinery and equipment, is not reflected in a comparable share with investments in energy, tourism, agribusiness, information technology or financial sector. Trade interests, penetration of capital and new technology in vital and lucrative sectors of the Albanian economy need both a higher presence and stronger and more direct support from the Italian financial sector.

Bilateral trade exchanges will continue to be determined by differences in productivity and the degree of exploitation of natural resources. These differences should be tackled until they are eliminated altogether, especially in some important sectors such as agriculture, tourism, financial services, and exploitation of natural resources. This would pave the way for further development of trade and investments, leading eventually to trade relations being no longer driven by differences but by similarities in development stage.

Obstacles have the same nature and characteristics that I have often mentioned in discussions on the economic growth model. They have been and remain one of the main reasons for the banking system and capital market's lack of attention with regard to expanding foreign investments or further integrating trade and financial activities with our partners. The recent policies pursued by Albanian authorities, also supported by the arrangement with the IMF and WB, pay special attention to these sectors and reforms. This approach would significantly boost the potential for cooperation. Development of agriculture, agribusiness and processing of Mediterranean products, development of tourism and their successful combination in the agri-tourism sector have turned Italy into a world leader in these sectors.

The same holds true for the financial, energy and technology sectors. In these fields, cooperation could be stronger, and trade and financial relations between the two countries more frequent.

Lastly, I would like to focus on the regional dimension. Albania provides the Italian businesses access not only to the Albanian economic space, but also to the entire Western Balkan region. From this perspective, I would like to draw your attention to the fact that investing in Albania is a prerogative for using the advantages that South East Europe offers.

Therefore, adapting regional development philosophy for infrastructure, labour market, human capital development, technology advancement, economies of scale, and above all, coordination of structural reforms and development policies in the region, are a great opportunity for Albania and Italy.

Optimising trade with financial relations, advancing the structural reforms, setting strategic priorities, formalising and introducing important and strategic sectors to the market (based on ownership and use of land and other important



natural resources of the Albanian economy), and utilisation of opportunities and potential offered under regional cooperation, would rapidly increase the possibilities for doing business and investing, yielding direct benefits for both countries.

Dear guests,

In the post-crisis period, our two countries underwent a process of deep structural reforms to revitalise the economy and establish solid foundations for sustainable growth. Considering it as a historic moment, I think that better coordination of economic and financial policies would be of mutual benefit, especially with regard to Albania's fast convergence.

I would like to assure you that the Bank of Albania remains deeply committed to providing a stable macroeconomic and financial environment, and guaranteeing a financially safe environment with low inflation rates. The Albanian banking system is willing to support initiatives that contribute to development.

Finally, I would like to thank Banca d'Italia for its assistance in renovating the central corpus of the Bank of Albania and the former Dajti Hotel, two landmark buildings standing out in the city of Tirana.

Thank you.

## SPEECH BY ARDIAN FULLANI, GOVERNOR OF THE BANK OF ALBANIA

At the 10th Vienna Economic Forum "Imagine the Future:

For a Better Economic Cooperation.

Economic Chamber's and Bank's Responsibilities"

7 May 2014

Dear Ladies and Gentlemen,

Dear colleagues and participants of the Vienna Economic Forum,

I am honoured and delighted to return and speak to such a constructive and important economic forum, discussing with you the economic development topics, which affect the present and the future of our economies.

The topic of this forum is very important for the economies of the South East Europe. It creates the proper environment, which enables the examination of the problems faced by our economies during the crises. We can certainly draw few lessons from what we have learned during the recent years, following the global economic and financial crisis. These discussions and the harmonization of economic policies will help us to project a strong coordinated economic structure for the long term future of our economies.

It is particularly important to converge here in Vienna and discuss the cooperation issue because one of the obvious outcomes (lessons) of the developments during the recent years is that the economic developments in particular for small open economies of the South East European region, are not local or regional anymore. Just like the flu, it is rather unexceptional and highly transmittable from one economy to the other, from one sector of the economy to the other.

Most importantly, European economies and their financial systems, among which the Austrian financial system enjoys a significant share of the market, define the globalization for the region and are, to a large extent, important determinants for the success or failure of these economies. Given the large share of the European financial groups, they have and will play an important role in the transmission of global shocks in the region. What is more important, they have a significant role in the transmission of legislative and regulative shocks carried over by European monetary and supervisory authorities. The size is such that even a simple change in the future business plans of a single European financial institution can transform into real shocks for the economies of the region.

It became evident during the crisis and afterwards that an increase in risk and uncertainty, led to increased incentives for banks to withdraw from the Emerging Europe economies. Though this was mostly prevented due to increased cooperation through institutions such as the Vienna Initiative, the concerns from our perspective have not completely dissipated. In this respect

the business plan of EU based groups can play a potentially important role in the nature and outcomes of this cooperation. The crisis showed some weakness in the growth model adopted by the emerging economies of South East Europe, but it is also true that, to some extent this behaviour was also encouraged by the development strategies of financial groups in the region, as it is also true that there was also some weakness in the coordination and collaboration between different European Union institutions, such as monetary policies (ECB), fiscal policies (of member countries) and the inexistence of specific mechanisms (such as bailout funds) to safeguard the European Union during difficult economic times.

This conference pays homage to these lessons, while acknowledging the importance of coordination, by mutually collaborating in multidimensional institutional levels, within the region and with our common partner countries. We in the region hope that our foreign partners share this same view.

The Albanian economy and its financial market share similar characteristics with the other economies of the region. Our main trade and financial partners come from the EU economy. Therefore, developments in the EU are directly and indirectly transmitted and play an important role in economic developments in Albania. Our reliance on EU affected not only our economic development but also constrained the effect of policy measures.

Several European banking groups operate in the Albanian financial sector. These entities brought into the Albanian market a lot of valuable know-how and experience, playing, thus, a crucial role in the financial integration of the Albanian economy to the European Union. However, EU supervisory regulations and risk requirements for European financial groups, along with the approach in which they are implemented, are posing significant constraints on our economy and the efficiency of monetary policy to respond to economic developments. Faced with new and stringent capital and risk requirements, banks are trying to comply by adjusting their future business plans and the size and composition of their balance sheets in the economies of the region.

These tighter regulations approved by European Supervisory and Banking Authorities and, subsequently, implemented by parent banks have already been accompanied by a decreasing level of credit to the economy. Our research shows that further tightening of crediting, due to the legal reforms currently under way, could have an important effect not only on economic activity but also on commercial bank asset quality itself, in particular situation with non-performing loans. A deterioration of economic activity would play out mostly in the same way, leading to worsening of NPL ratio, leading to smaller banks' profit and tighter capital constraints, along with slower growth. This second channel is seen as arguably more dangerous, with the empirical research pointing out that the elasticities are close to twice as large for a shock of similar size.

Such adjustments are imposing significant constraints on our economies. More directly, we have observed a decrease in financial intermediation,

arising from tightened lending procedures even for economies or sectors that were doing ok during the crisis. As a result, this was reflected in stagnating investments and slowing down dynamics of the Albanian economy, both in the private and public sectors. Moreover, current business practices and policy orientations are imposing significant constraints in the efficiency of monetary policy transmission mechanism, and the ability of authorities to provide much needed stimulus to the economy.

It is understandable that banks would have to be careful, prudent and responsible given the current situation with non-performing loans; however, they must also consider the fact that credit and financial intermediation is important for growth, which, in turn, can improve the ability of economic agents to repay their loans. This is especially true for particular sectors like agriculture and agro-business, which, so far, have not benefited from credit expansion, but have large untapped potential for growth.

The era of an economic growth model, led mainly by the domestic consumption, is now gone. Banks, their European headquarters and their supervisory authorities should work together with authorities of host countries to develop a new long-term and sustainable economic growth model. This new model needs to be based on investments in productive sectors of the economy. Our products and services need to be competitive not only in the home market, but they should also offer comparative advantages in the regional and European Union markets. It is clear that cooperation is the only choice for the future.

For more than 15 years now, the European integration, in all its politic, economic and financial dimensions, has been main driving force for the economic and social prosperity of South East European region. EU represents the main trading partner, a large share of FDI, by far the biggest investor in the banking system. Our countries have undergone structural reforms, adaptations of regulatory and legislative frameworks, and institutional adaptations to adjust to these partnerships.

Led by the European integration process, countries of the region have also signed bilateral free trade agreements among them. Our studies at the Bank of Albania show that these free trade agreements have positively affected trade flows among West Balkan countries. However, these studies also suggest that trade flows among Balkan countries are below their potentials. The aims of these bilateral free trade agreements are to create a regional free trade area among West Balkan countries.

Authorities in South East European countries have shown signs of consistent regional collaboration; however, they need to make additional efforts to unify and harmonize their legal, institutional, regulatory and infrastructural frameworks. These efforts need to be supported by a clear commitment by EU financial groups to the region's small open economies. The development of the regional markets for products and factors, investment in education and improvement of human capital, exploitation of economies of scale and comparative advantages, will depend on the availability of credit and

investment and the financial support of the banking system. In this respect, EU financial groups will be instrumental factors for building bridges of cooperation among economies of the region and its transformation into a larger, better integrated, more competitive, more profitable and prosperous economy, eventually leading to a prosperous economic future through economic cooperation. In this respect, I encourage foreign groups to adopt a regional rather than a country specific view when considering their future in the region. It goes without saying that any policy that restricts commitment and exposure of EU financial groups in the region does not support economic cooperation among our countries. It rather creates a struggling environment and a less prosperous future for all economies of the region.

The Western Balkans region offers great opportunities and profitable perspectives for EU -based corporations and financial groups. The harmonization of above-mentioned reforms will create an even more attractive environment for different private entities interested in investing in our region. I invite EU financial groups to see the region under this perspective.

European institutions and financial groups should support and become a positive force to facilitate, smoothen and support regional economic cooperation, which will lead to a better prosperous future and a faster European integration process of the region.

Thank you for your attention!

## SPEECH BY ARDIAN FULLANI, GOVERNOR OF THE BANK OF ALBANIA

On the Monetary Policy Decision of the  
Bank of Albania's Supervisory Council  
30 May 2014

Today, on 30 May 2014, the Supervisory Council of the Bank of Albania reviewed and approved the monthly Monetary Policy Report. After discussing the recent economic and monetary developments and their outlook, the Supervisory Council decided to lower the key interest rate by 0.25 percentage point, to 2.50%.

The key rate decrease aims at creating more favourable conditions for inflation to return to our target in the medium term. The decision reflects our assessment and projections for weak inflationary pressures in the quarters ahead, in response to the weak aggregate demand and the downward trend of inflation in Albania's trading partners. This move contributes to boosting domestic consumption and investments, aiming at a fuller utilization of production capacities and a faster return of inflation to our target.

Let me now proceed with an overview of economic developments and key issues that were discussed at today's meeting.

\* \* \*

Annual inflation rate was 1.7% in April, slightly down from the average rate recorded in the first quarter of 2014. In the last months, the dynamics of inflation have been largely determined by the performance of food prices. The added volatility of inflation for these items over the past months was in response to structural changes in the domestic market and the downward trend of inflation in regional markets. Prices of other items in the basket continued to give low contributions.

In spite of the volatility, medium-term inflation trends remain clear. The overall economic and monetary environment is characterised by weak inflationary pressures, reflected, in turn, in low core inflation rates. The analysis of macroeconomic factors shows that aggregate demand remains weak, maintaining economic activity below its potential level. The unutilized productive capacity led to low increases in employment, wages and production costs. Supply-side inflationary pressures remain weak, owing to the downward inflation in our trading partners, low primary commodity prices and stable exchange rate. Inflation expectations remain subdued and close to Bank of Albania's inflation target.

Regarding economic activity, recent data corroborate our earlier assessments for positive growth rates in the first months of the current year. Aggregate

demand increased due to the positive performance of domestic private demand, while the public sector's contribution was negative. Foreign demand continued to grow, as reflected in export growth.

Consumption and private investments increased in the first three months of 2014, though at slower pace than in the fourth quarter of 2013. Their performance remained sluggish, reflecting the uncertainties of economic agents and tight financing conditions. The recovery of these components of demand will be a determining factor for the country's economic growth in 2014. Today's key interest rate cut aims at providing a further boost to consumption and private investments, creating premises for lower financing costs in the banking sector.

Data on public sector performance refer to the first four months of the current year. Revenues increased 9.1%, in annual terms, while spending shrank 5.9%. This performance materialised in the budget deficit of about 73.1% lower than a year earlier. A similar dynamics, though less intensive, is expected to persist in the months ahead. Consistently, the Bank of Albania has been in favour and has endorsed the consolidation path of fiscal policy, deeming that such policy contributes to the reduction of risks in the economy.

Developments in the external sector led to an annual expansion of the trade deficit by 8.7%, during the first quarter of 2014. Albanian exports grew 11.6%; yet, the trade deficit expansion was determined by a 10.1% annual increase in imports. A more detailed analysis of trade developments shows that trade deficit expansion was almost entirely attributable to the increase in electrical energy imports. Albanian exports' growth, however, was driven by the gradual improvement of foreign demand and depreciation of the real exchange rate over the past years. A steady improvement in this area should be anchored in structural reforms supporting the increase in productivity, development of Albania's comparative advantages and reduction of vulnerabilities in certain sectors of the economy.

Forecasts for a low inflation level in the period ahead have dictated the implementation of an accommodative monetary policy in the last quarters. The policy rate cuts have already been passed through to interest rates in the interbank and deposit market, and to most of government securities' yields. Interest rates on loans have also reflected the expansionary stance of the monetary policy of the Bank of Albania, but they continue to contain high risk premiums for credit risk and other risks related to long-term investment. The slow performance of the economy is also reflected in the monetary indicators. Money supply continued to increase at low annual rates, standing at 2.1% in March. This performance has reflected the decrease in credit to the private sector and the lower financing needs of the public sector. Credit to the private sector shrank 2.4% in March. Besides the weak demand from businesses and households, the sluggish performance of credit reflects banks' conservative lending policies. This approach is reflected not only in the interest rates on loans, but also in other lending standards applied by the banking system.

In this regard, the Bank of Albania deems that the banking system in Albania has room for and should adopt a more appropriate behaviour towards lending to the Albanian economy. The country's economic and financial reality, ongoing monetary policy easing and our liquidity-injection operations, as well as the adaptation of our regulations to the market situation provide the premises for faster lending to the economy.

Consisting in financial institutions licenced to facilitate movement of funds in the economy, the banking system should be more active in lending, as the steady growth of the economy is a prerequisite for the sustainable growth of the banking system itself.

\* \* \*

The Supervisory Council concluded that the incoming available information does not alter our baseline projections for the country's economic activity. The economy is expected to record gradual growth in the quarters ahead, driven by foreign demand and domestic private demand. The output gap will remain negative during 2014, though the gap is expected to narrow. The price performance will continue to be contained and inflation is expected to gradually approach the target. Recent information, however, reinforces our judgement for subdued inflationary pressures in the period ahead, keeping the balance of risks to the downside.

At the end of discussions, the Supervisory Council decided to lower the key interest rate by 0.25 percentage points, to 2.50%. This further easing of monetary conditions is expected to facilitate a faster return of inflation to the 3% target of the Bank of Albania.



## SPEECH BY ARDIAN FULLANI, GOVERNOR OF THE BANK OF ALBANIA

On the Monetary Policy Decision of the  
Bank of Albania's Supervisory Council  
25 June 2014

The Supervisory Council of the Bank of Albania reviewed and approved today the monthly Monetary Policy Report. Based on the most recent economic and monetary developments in Albania, and following the discussions on their outlook, the Supervisory Council decided to keep the key interest rate unchanged, at 2.50%. The Council considers that the gradual transmission of earlier interest rate cuts to the financial markets will provide adequate monetary conditions for inflation to return to target over the medium term.

Let me now proceed with an overview of the economic developments and key issues discussed at today's meeting.

\* \* \*

Annual inflation rate was 1.6% in May, slightly down from the previous month. Inflation fell due to the reduction of health care prices, while prices of other items in the basket recorded low volatility. As in the previous months, annual inflation continues to be determined by unprocessed food prices, which contribute by around 88% to its final rate.

From the macroeconomic perspective, the performance of consumer prices continues to reflect weak inflationary pressures, both from the domestic economy and the external sector. The negative output gap does not favour an increase in employment and wages, leading thus to a low increase in other production costs. Imported inflationary pressures remain subdued; inflation in Albania's trading partners and the rise in commodity prices are at low levels, while the exchange rate is stable. Inflation expectations and the liquidity situation in the economy are in line with the low inflation rates for the period ahead.

Indirect available data on economic activity signal positive growth rates in the first months of the year. Aggregate demand improved, driven by both private domestic and foreign demand, while the consolidating fiscal policy pursued during this period did not contribute to an increase in demand.

Incoming data for June have not changed our assessment on the performance of private consumption and investments. While these important components of aggregate demand were upward during the period, their performance remains weak. Their steady recovery continues to be impeded by uncertainties faced by households and businesses, and reflected in the greater risk aversion of the real and financial sectors of the economy. The Bank of Albania expects further improvement in private consumption and investments for the rest of the year, reflecting, among others, its easing monetary policy. The pace of

recovery of these two indicators will determine the short and medium-term dynamics of the country's development.

Data on public sector performance show a consolidating fiscal policy over the first five months of the year. This policy materialised in a budget deficit of about 68% lower than in the previous year. The tightening fiscal policy is evident both on the revenue and expenditure side. Fiscal revenues increased 9.0% in annual terms, whereas budget expenditures were 7.5% lower than in the previous year. Our monetary policy easing has also taken into account this feature of fiscal policy that the Bank of Albania has urged and supported. However, the Bank of Albania would like to bring to attention the need for a more uniform distribution of expenditures and budget deficit over the year, to enhance their effectiveness and avoid the fluctuations that their excessive concentration may cause to the country's economic and financial indicators.

The improved foreign demand and positive dynamic of some sectors of the economy were reflected in an increase in annual exports by 10.3% in April. The detailed analysis of trade data reveals encouraging signals about re-exporting and agricultural activities. Trade deficit, however, expanded 1.8% in April, due to the simultaneous increase of imports by 6.0%. In particular, the energy situation continues to burden the trade balance of the country due to high levels of energy imports. Structural improvements to the economy and a more favourable external environment would pave the way for a faster growth of Albanian exports. The Bank of Albania considers this channel as the most appropriate tool to support the country's sustainable growth in the medium and long term.

Projections for low annual inflation rates, against the backdrop of below-potential economic growth, have dictated the pursuit of an easing monetary policy by the Bank of Albania. At the end of May, monetary stimulus was strengthened by a further cut in the key interest rate. Available information on financial markets shows that this cut has been fully transmitted to the interbank and government securities markets. It was also reflected in lower financing costs of the banking system, creating, in turn, premises for the transmission of stimulus to the lending interest rates and further to the economy. The Bank of Albania calls on the banking system to comply with this important link of the transmission mechanism.

Despite the easing of monetary conditions, the economy's demand for financial assets remains weak. Monetary indicators for April show a slower annual growth of money supply, to 0.7%. Its performance reflects the weak borrowing demand from the public sector and the contraction of credit to the private sector. In April, credit to the private sector was 2.4% lower than in the previous year, continuing to shrink for all but a year. The poor credit performance reflects mainly the contraction of credit to businesses. The analysis of credit demand and supply factors shows that there are uncertainties on both sides, which are materialised in high risk premiums. As we have previously stated, the steady improvement of crediting will follow the improvement of economic activity in the country

At the end of discussions, the Supervisory Council concluded that the incoming available information does not alter our baseline projections. The economy will see a gradual growth during the year, with an improved pace over the second half. Nevertheless, the increase of aggregate demand will remain below the economy's potential even during 2014, thus determining the gradual return of inflation to target.

At the end of discussions, the Supervisory Council decided to keep the key interest rate unchanged, at 2.50%.



## PERIODIC ANALYSES\*

*\* The views expressed in these analyses are those of the authors and do not necessarily reflect the views of the Bank of Albania.*

## TRENDS IN LENDING 2014 Q2

ERJONA SULJOTI, SOFIKA NOTE, OLTJA MANJANI  
 MONETARY POLICY DEPARTMENT, April 2014

This analysis aims to present a detailed overview of the most recent lending developments in Albania. To this end, the document analyses the monetary data for the loan portfolio by economic agents, and the lending standards. In more details, lending standards will be addressed in both price - interest rate - and non-price terms. In addition, this analysis presents a summary of lending trends in Central East and South East Europe (CESEE) countries. The spillover effects of the global financial crisis in the CESEE countries and its consequences on Albania have often been the subject of our periodic analyses. In this context, regularly updating such information becomes crucial, in order to better understand the impact of both domestic and external factors on the performance of financial indicators in general and of lending in particular.

The main statistics taken into account in this analysis are:

- Monetary data<sup>1</sup> for the volume of bank lending in the two main portfolios, businesses and households.
- Qualitative data from the bank lending survey, with a special focus on analysing lending standards and demand, and the factors affecting them. Moreover, based on survey results, non-price elements are analysed.
- Statistics on credit price, represented by the average interest rate weighted with the amount of new credit, denominated both in lek and in euro. The intermediation margin applied by banks to the cost of funds is also analysed.
- Monetary data on the volume of credit for the countries of the region include data from: Bulgaria (BU), Croatia (CR), Romania (RO), Serbia (SR), Poland (PL), Hungary (HU), the Czech Republic (CZ), and Former Yugoslav Republic of Macedonia (MK).

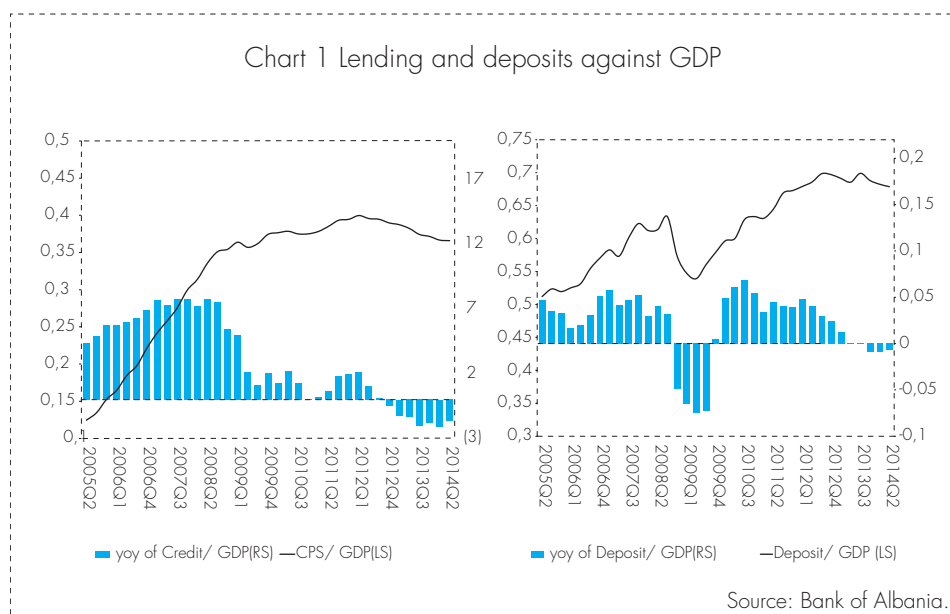
The analysis covers data published as at 20 July 2014, which include information for monetary and financial data for May 2014 and data from the bank lending survey 2014 Q2.

<sup>1</sup> The monetary methodology is based on the resident and non-resident concept, and loan data include only loans to residents. For more information, refer to "Monetary and Financial Statistics Manual" of the International Monetary Fund, 2000 ed.

## 1. BANKS AND INTERMEDIATION

During the second quarter of 2014, the banking system conducted its activity amid a more favourable macroeconomic setting than in the first quarter. Indirect data show that the Gross Domestic Product continued to grow in the second quarter of 2014. Consumer and business confidence has improved and preliminary data point to added trade activity, signalling thus a recovery of consumption. The fiscal authority has pursued a consolidating policy and has paid up most of arrears, contributing to the circulation of liquidity in the economy and improvement of businesses' financial situation. Despite the poor performance of available income, households financial standing has been improving for more than a year. The monetary authority has implemented an accommodative policy, further lowering the key interest rate by 0.25 p.p. to the new 2.5% record low, at the end of May. However, the creation of money in the economy remains sluggish, affected both by the cyclical weakness of the economy and conservative intermediation policies implemented by banks.

As at the end of March 2014, banking system assets accounted for about 90.8% of total financial assets, from 91.3% at the end of 2013 and 92.6% in the same period a year earlier. While banks dominate the financial sector, their share in the total system has been downward, due to the increasing financial activity of non-bank financial institutions. In the meantime, bank assets stand 4.2% higher than in the previous year. Banking activity increased driven by both collection of funds and funding of government needs and placements abroad. The gradual improvement of economic activity at home and of economic agents' confidence is yet to be reflected in higher credit demand from the private sector. Banking activity was characterised by improved liquidity and profitability, whereas capitalisation ratios remained significantly above the required regulatory level, reflecting the sluggish lending activity.



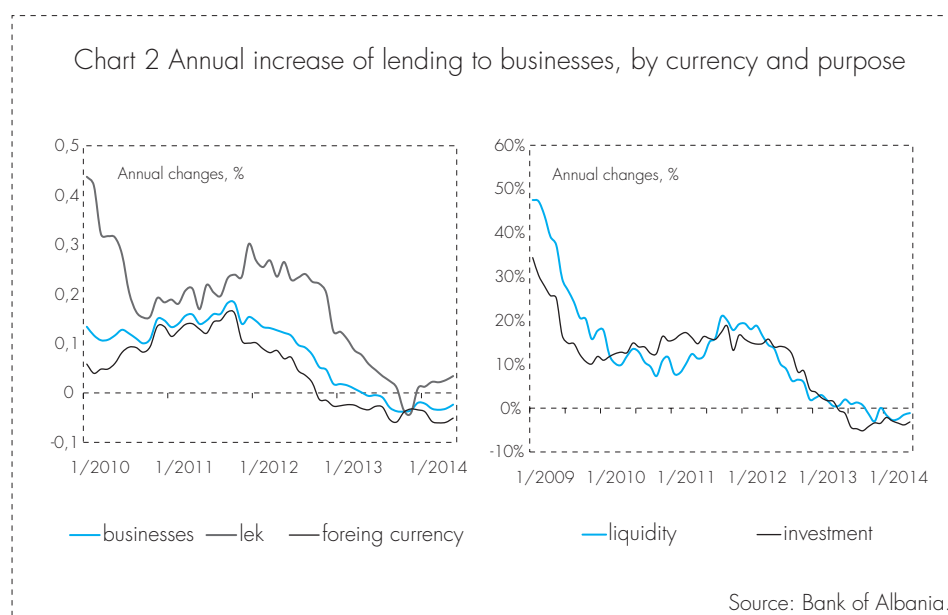
The loan portfolio continued to contract by 1.7%, albeit slightly improving its pace by contracting 0.6 percentage points less than in the first quarter of 2014. Empirical studies suggest that, especially after financial crises associated with a “credit crunch”, lending improves with a lag to the rebound of the economy (Calvo et al (2006)).

In parallel, the performance of deposits was weaker than in the previous quarter. Their annual growth rate slowed down to 0.9%, mainly driven by developments in lek deposits. The latter has been affected by the shift of households savings towards investment products with higher return rates, while deposit interest rates continue to drop. During the second quarter, households continued to invest in government securities of longer-than-three-years maturity term and in bank deposits of longer-than-two-years maturity term.<sup>2</sup> Total deposits accounted for 67.9% of the GDP, down by 0.4 p.p. from the first quarter. A year earlier, deposits stood at 68.6% of the GDP.

## 2. LENDING TO BUSINESSES

Lending to businesses continued to perform poorly in April and May, across all its segments. In May, it recorded a low increase in monthly terms, and continued to contract, but at lower rates, compared to the previous year. Moreover, banks report easing standards and upward demand in the second quarter. These positive signals are expected to continue in the third quarter of 2014. They are also in line with the responses of the businesses survey. These indicators show an improvement in the banks’ approach to business credit and business confidence, and are expected to materialise in a better performance of lending to businesses in the months ahead.

Lending to businesses continued to contract, in annual terms, in April and May. At the end of May, its annual change was -2.4%, from -3.4% at the end



<sup>2</sup> According to the methodology of monetary statistics, such deposits are not included in total deposits.



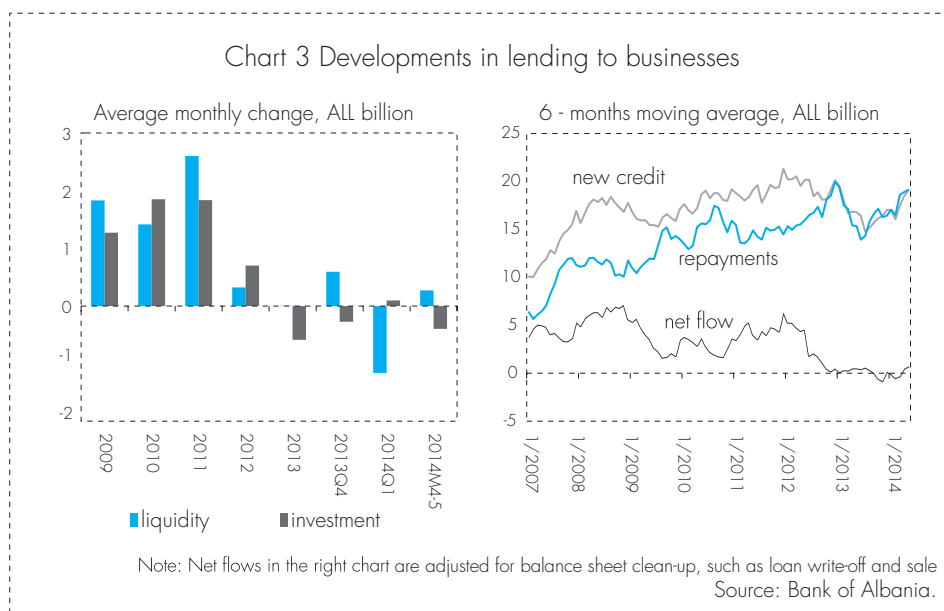
of the first quarter. Lending to businesses was sluggish for both segments: for investment and liquidity purposes. Loans for investment purposes contracted the most, by 3.2% in annual terms, as at May, whereas loans for liquidity purposes contracted more moderately, by 1.2%. By currency, foreign currency lending to businesses continues to shrink, mainly due to the weak performance of loans for investment purposes. Lek lending maintained the positive pace of annual growth, as lek loans for investment purposes increased at the end of the last year and beginning of the current year.

Table 1 Portfolio structure of lending to businesses

	2008	2009	2010	2011	2012	2013	2014 M5
% lek	20%	26%	26%	30%	33%	34%	34%
Liquidity	49%	50%	49%	50%	49%	50%	50%
% lek	23%	33%	34%	37%	44%	45%	44%
Investments	51%	50%	51%	50%	51%	50%	50%
% lek	19%	20%	21%	24%	27%	29%	30%

Source: Bank of Albania.

During April and May, lending to businesses was up by about ALL 1 billion, as lending for liquidity expanded, while lending for investments contracted. Changes in the credit stock, especially during 2013, were also affected by the write-off or sale of loans by banks, in the context of cleaning their balance sheets. Also, new credit recorded low levels. Excluding overdraft<sup>3</sup> loans, new loans to businesses have been in constant decline. On average monthly terms, new credit (excluding overdraft), during April-May, stood about 17% lower than in the first quarter and about 23% lower than in 2013.

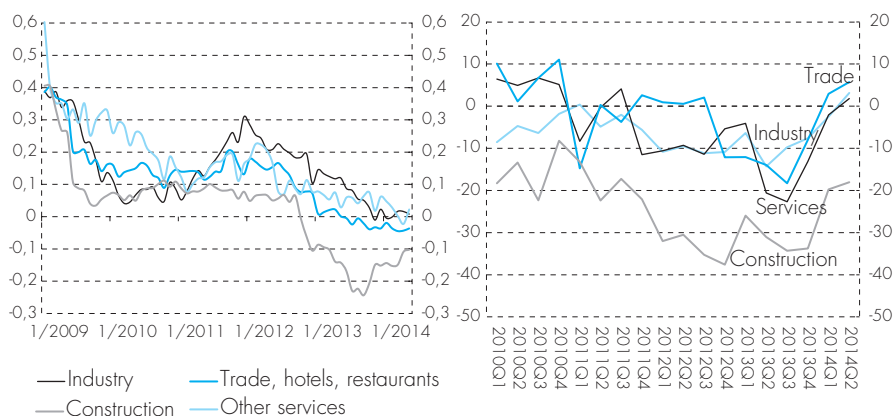


From a long-term perspective, deterioration of lending to businesses is present across all the sectors of the economy. It is more pronounced in construction,

<sup>3</sup> Overdraft loans are characterised by consecutive closure and renovation, and increase the new loans artificially by including renovations of existing loans.

in line also with the poorer performance of its economic activity. In April and May, lending expanded for businesses operating in the extractive industry and energy, construction and trade. Loans for transport, and financial and processing industries contracted.

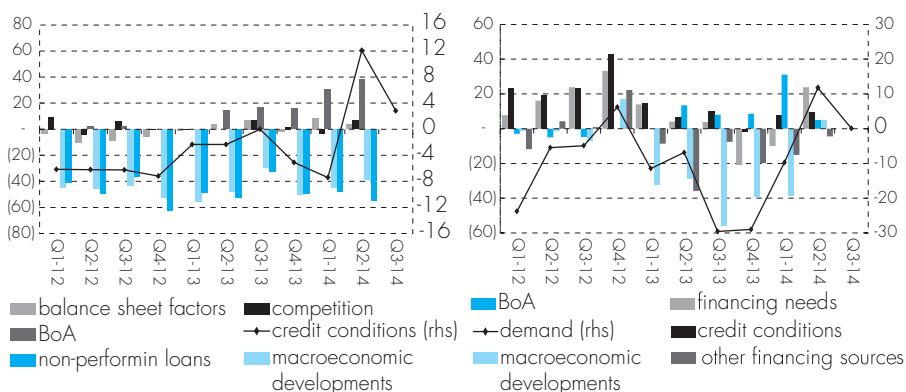
Chart 4 Annual increase of loans by sector (left, %) and business confidence indicator (right, p.p.)



Source: Bank of Albania.

Lending standards for businesses have been tightening until the first quarter of this year, in parallel with the downward demand for loans. In the second quarter, banks report easing of lending standards and upward demand, stating, at the same time, their optimism for the performance of credit demand and supply over the third quarter. Both lending standards and credit demand appear improved across all the segments, but mostly in those for working capital and small and medium-sized enterprises. The easing of standards for the latter would be a welcomed development, as they are an important pillar for the sustainable recovery of economic activity.<sup>4</sup>

Chart 5 Changes in supply (left) and demand (right) for business loans and factors affecting them, response balance, p.p.



Note: Positive/negative balance means easing standards (upward demand) / tightening standards (downward demand). In the supply-side factors, balance-sheet factors are calculated as a simple average of the results for the situation of liquidity and of capital. Similarly, macroeconomic developments represent the average of the balances for macro developments in general and those in particular sectors. Among the demand-side factors, need for loans averages the need for liquidity and need for funding investments.

Source: Bank of Albania.

<sup>4</sup> In developing countries with low capital base, small and medium-sized enterprises are considered as the drivers of economic development and employment. They also provide more competitive and efficient markets, and contribute to lowering the poverty level.

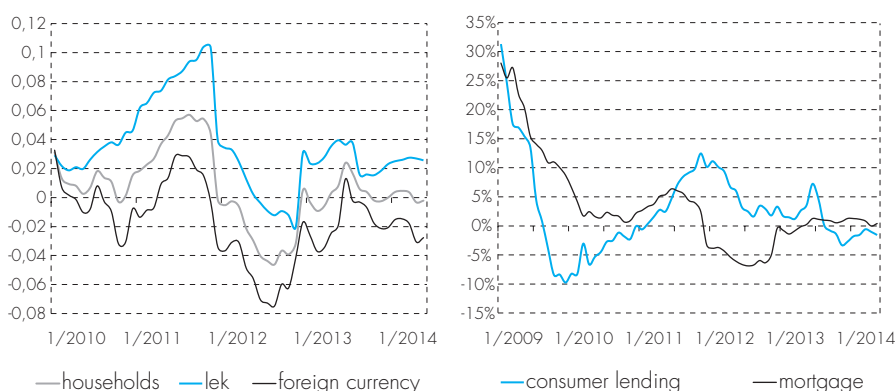
While bank balance sheets do not represent any limitations as to the further credit expansion, uncertainty for the future, in general and in certain sectors, high level of non-performing loans, and policies of parent bank groups in home countries are among factors reducing banks' willingness to lend to businesses. According to the bank lending survey, the accommodative policy of the Bank of Albania has contributed both to easing credit supply and boosting credit demand. Additionally, the increased need for funding business projects, related to expectations for improved macroeconomic situation in the country, has contributed to the expected upward demand. The enhanced business confidence on the economic outlook is also confirmed by the business confidence survey. The confidence index for all the sectors of the economy has improved significantly and, besides construction, they returned to positive values after being in negative territory for several years.

Filtered information from the bank lending survey provides positive signals; however, as of May, they were not materialised in the performance of lending to businesses. If these signals are actually a turning point in the banks behaviour and business confidence rather than a short-term improvement, then they are expected to be reflected in credit expansion during the next months.

### 3. LENDING TO HOUSEHOLDS

Lending to households continues to be sluggish. In April and May credit expanded more than in the first quarter; however, on a year earlier, lending to households is almost unchanged. Both lending standards and credit demand improved in the second quarter, and this trend is expected to continue in the next quarter. Combined with data from the consumers survey, this information sustains the expectations for a better performance of lending to households in the months ahead.

Chart 6 Annual change of lending to households, by currency and purpose in %



Note: The above annual changes are affected by the reclassification of a part of the portfolio from lending to households to lending to businesses in December 2011. The effects of this classification extend to November 2012 and affect annual changes of foreign currency loans for households, mortgage loans and total loans for households.

Source: Bank of Albania.

Lending to households did not change significantly in April and May. Its annual growth has been fluctuating around 0% since the second half of the past year - at the end of May it stood at around 0.2%. The annual performance of lending to households has reflected the low growth of mortgage loans and the further shrinking of consumer loans. At end-May, the annual changes in both portfolios were 0.4% and -1.6%, respectively. Lending to households is oriented towards the domestic currency, stimulated by the increased lek loans for real estate. Foreign-currency lending continues to shrink both for the consumer and mortgage loans.

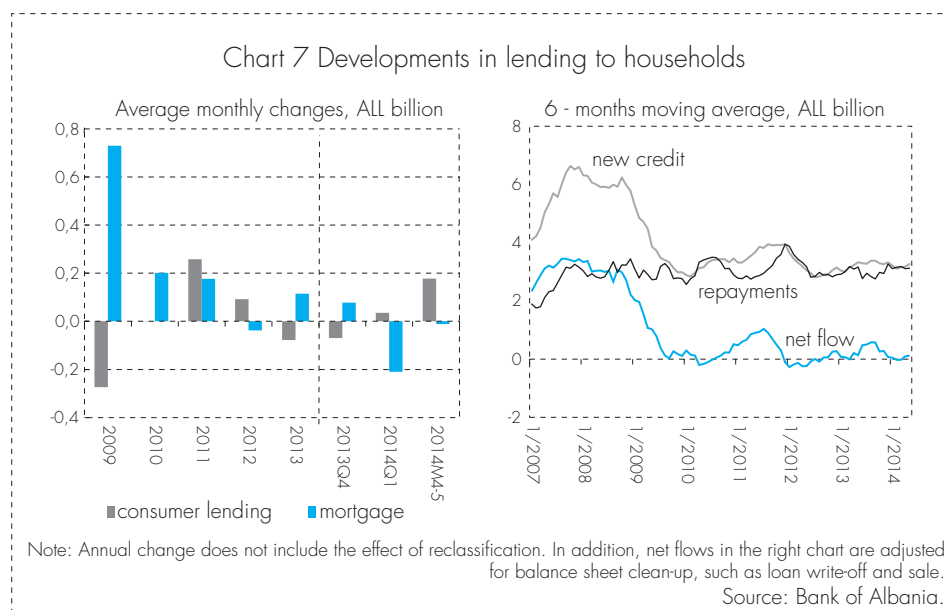
Table 2 Portfolio structure of lending to households

	2008	2009	2010	2011	2012	2013	2014
% lek	43%	43%	44%	46%	47%	48%	49%
Consumer	25%	22%	21%	24%	24%	24%	24%
% lek	74%	77%	80%	80%	77%	77%	78%
Mortgage	75%	78%	79%	76%	76%	76%	76%
% lek	30%	30%	31%	32%	34%	36%	37%

Source: Bank of Albania.

In April and May, lending to households was up by about ALL 0.3 billion, the entire amount to finance consumption in Albanian lek. The structure of consumer credit in this period reveals lending increased for financing durables purchase. This development bears positive signals on the performance of consumer demand and is in line with the results obtained from the consumer survey.

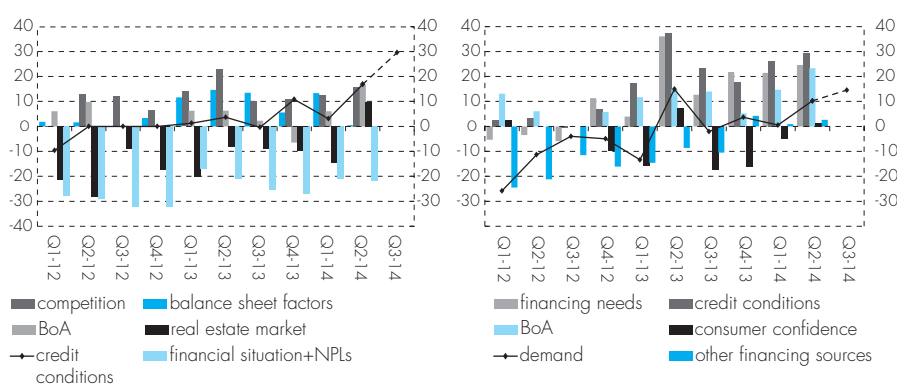
Similarly to lending to businesses, the low increase of lending to households reflects overall the low levels of new credit. In April and May, however, new credit to households improved - its average monthly level, excluding overdrafts, stood at 25% higher than in the first quarter and about 6% higher than in 2013. Also, the clean-up of balance sheets has affected the performance of lending to households negatively, albeit less than lending to businesses.



Unlike lending to businesses, banks have adopted a more positive approach towards lending to households. Lending standards have been on the easing side since the second half of the previous year. Standards eased stimulated by Bank of Albania's policy and interbank competition, which has been more pronounced in this segment of loans. In the meantime, the households financial situation and the level of non-performing loans continue to dictate banks' prudent approach towards lending to households. According to the banks, the more favourable situation in the real estate market has contributed to the easing of standards in the second quarter.

Households credit demand increased in the second quarter of the year. Banks state that all the conditions are in place for households to apply for more loans to support their consumption and investments. The accommodative policy of the Bank of Albania has helped stimulate credit demand. In addition, banks pick out the consumers' confidence on economic outlook as a factor that has not prevented demand from growing in the second quarter.

Chart 8 Changes in supply (left) and demand (right) for lending to households and factors affecting them, balance of answers, p.p.



Note: Positive/negative balance means easing standards (upward demand) / tightening standards (downward demand). Amid the supply-side factors, balance-sheet factors are calculated as a simple average of results for the situation of liquidity and of capital. Similarly, changes of two factors have been averaged: financial situation of households and non-performing loans, which have a similar performance. Amid the demand-side factors, need for loans averages the needs for funding consumption and needs for funding real estate transactions. Source: Bank of Albania.

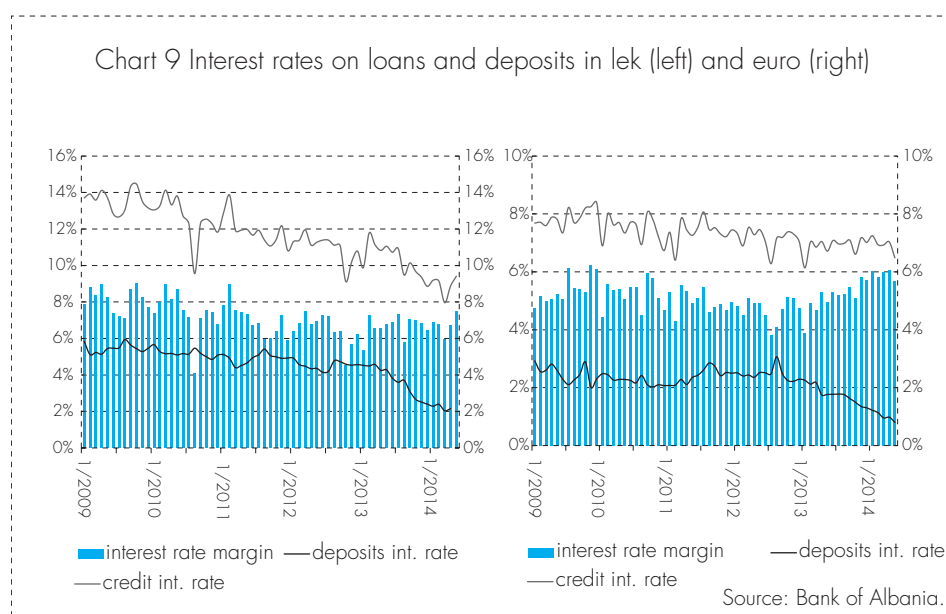
As with lending to businesses, survey results showing easing lending standards and increased credit demand in the second quarter have not been completely reflected in the actual performance of credit, as of May. Consumer survey indicators provide positive signals for upcoming developments regarding consumers' demand. Moreover, banks expect credit demand and supply for households to be more favourable in the third quarter. All these signals, if stable, may be reflected in recovery of lending to households in the months ahead.

#### 4. CREDIT PRICE AND OTHER STANDARDS

Credit interest rates have been downward, but their margins against deposit interest rates have expanded, due to the faster decline of the latter in the second quarter of 2014. From a longer-term perspective, interest rates have fallen

more on the lek than on the euro and their spread has narrowed, contributing therefore towards lending in the domestic currency. Information obtained from the bank lending survey suggests that the slow decline of credit interest rates is due to the application of higher margins for high-risk loans. Other lending standards, unlike before, were widely used by banks to ease credit supply.

Given the low levels of new credit, its average interest rate is affected significantly by the interest rate of some non-representative (atypical) loans, thus it fluctuates over the months. Beyond the monthly volatility, credit interest rates have been on the down side, especially for lek loans.

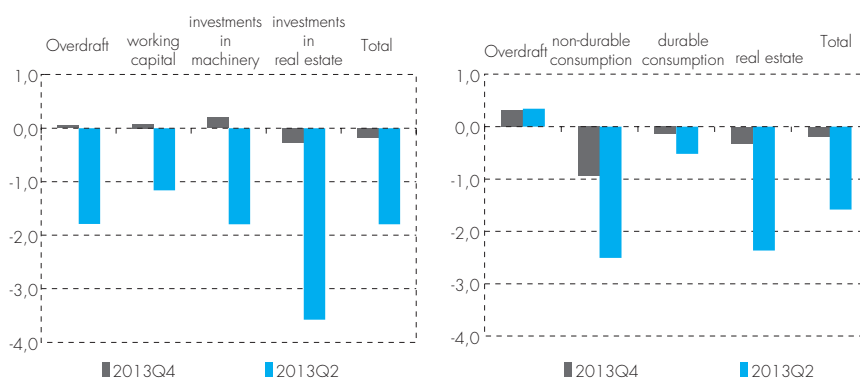


The average interest rate on lek loans in April-May was 9.1%. It is up from the average rate recorded in the first quarter, but the latter was especially low, due to preferential rates on such loans. Compared with the fourth and second quarters of the previous year, it fell, by 0.2 p.p. and 1.7 p.p., respectively. The margin of interest rates on lek loans against those on deposits expanded during the period, due to the faster decline of deposit interest rates. In April and May, they averaged 2.0% from 2.4% in the first quarter.

The interest rate on euro loans averaged 6.8% in April and May, standing slightly down compared to both the first quarter of the current year and the previous year. Moreover, interest rates on euro deposits have trended down, starting from the second half of 2013. In April and May, they averaged 1.0% from 1.8% a year earlier. Interest rates on deposits declined faster due to the ample accumulation of liquidity in this currency in the preceding years, given that alternatives for investments in euro are more limited. The simultaneous developments in euro interest rates led to significant increase of the interest rate margin in this currency, by about 1 p.p. from a year earlier. From the risk perspective, the increased margin on foreign currency loans reflects also higher risks facing such loans, as a result of the exchange rate volatility.

From a historic perspective, interest rates on euro loans have been lower than those on lek ones, and their decline is more gradual. As a result, the spread between rates on lek loans and those on euro loans has narrowed significantly. For the first five months of 2014, it averaged 2.0 p.p., from 3.4 p.p. in 2013. This development favours the orientation of borrowers towards borrowing in the domestic currency, contributing to financial stability and improvement of the transmission mechanism.

Chart 10 Change of interest rates on lek loans to businesses (left) and households (right), in p.p.

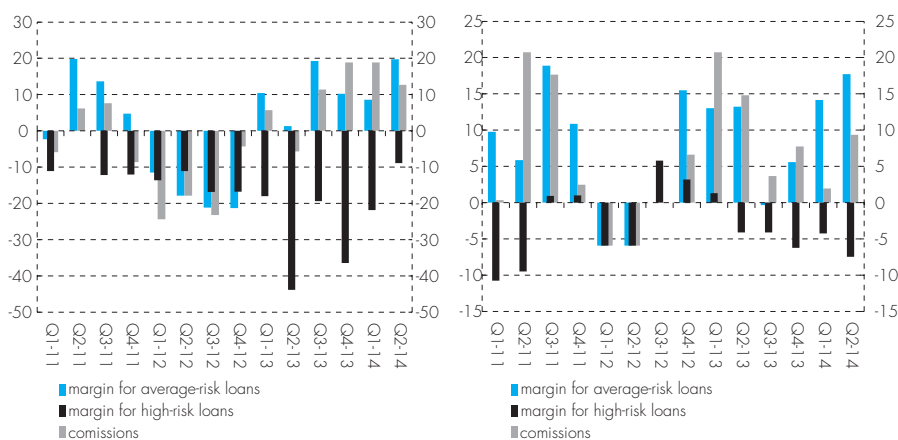


Source: Bank of Albania.

Turning to lek interest rates, the analysis by client and purpose of use shows they fell across almost all the segments during the last year, but exhibit two-way volatility compared to the end of 2013. Interest rates for business loans fell on average by about 1.8 p.p. from a year earlier, with the highest decline recorded in loans for real estate investment. In the same segment, interest rates fell compared to the last quarter of 2013, whereas other interest rates have fallen only slightly. Interest rates on households loans dropped by 1.6 p.p. and 0.2 p.p. on average from those noted in the second and fourth quarter of 2013, respectively. The interest rates fell more pronouncedly for non-durable consumables and for real estate; in contrast to the overall trend, the interest rates on overdrafts increased slightly.

Banks report reduction of interest rates on normal-risk rated credit. They continue to be even more prudent on risk price, applying higher interest rates on high-risk loans. This is especially apparent in the segment of business loans. The diverging performance of interest rates according to the risk level explains why the average interest rate on loans, analysed above, is characterised by slower decline compared to other interest rates: it also incorporates the upward rates for high-risk loans. Lastly, while not related directly to the credit price, commissions were down, contributing to the easing of lending standards.

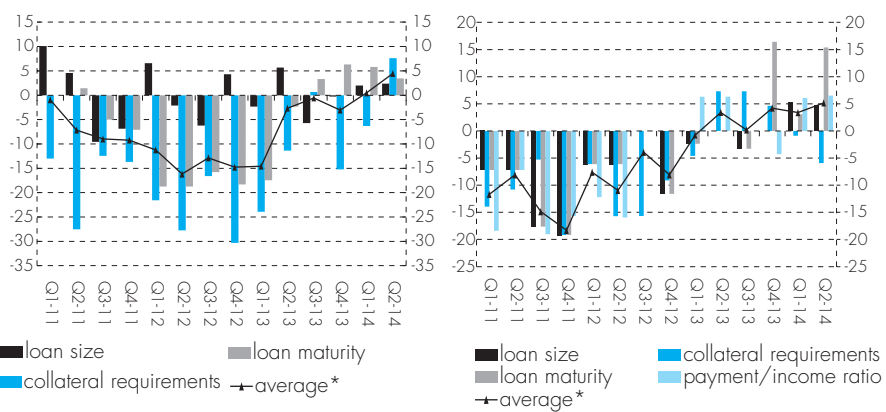
Chart 11 Bank lending survey results: Cost of lending to businesses (left) and households (right), p.p.



Note: Positive/negative balance implies easing/tightening of standards.  
Source: Bank of Albania.

Other lending standards have widely trended on the easing side. For businesses, for the first time in the second quarter of 2014, all non-cost lending standards eased. After the extension of credit maturity term and increase of credit size in the previous quarters, in the second quarter, banks eased the collateral requirements. The latter have been among the factors contributing most to the tightening of lending standards in the previous quarters.

Chart 12 Non-price lending standards applied to businesses (left) and households (right)



Note: Positive/negative balance implies easing/tightening of standards.  
\*Simple mean of factors.  
Source: Bank of Albania.

In the case of households, a good part of non-price standards started to ease in previous quarters. In the second quarter of the year, banks report more favourable standards for the size and maturity terms as well as the instalment/income ratio. In the meantime, they tightened collateral requirements again.



## 5. LENDING TRENDS IN THE REGION

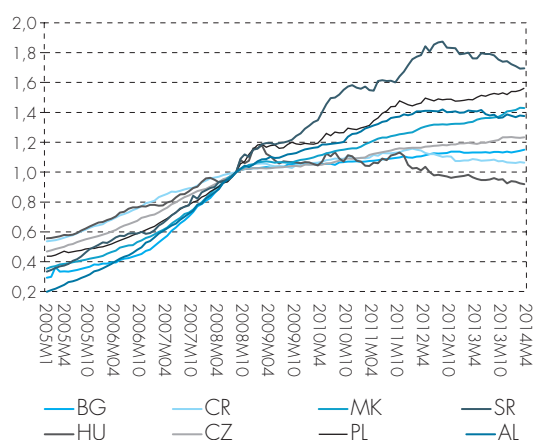
The latest global financial crisis, followed by the public debt crisis in EU countries, brought an end to the rapid credit growth in the countries of Central East and South East Europe (CESEE). The high presence of foreign banking groups in this region implied not only a share of profits arising from their interconnection and well-integration in good times, but also the rapid spillover in times of crisis. The banking system in most countries in the region and beyond faced similar situations and problems. Immediate consequences from the financial crisis appeared in the form of reduction of funds and capital within the group for their subsidiaries in the region, rapid deleveraging; and, subsequently, deceleration and reduction of credit to the economy, that is overall reduction of exposure by these banking groups in the CESEE region.

### Lending in the countries of the region

Credit slowed down and declined affected by domestic and foreign demand and supply factors. Economic agents' demand in these countries was conditioned by developments in the broader macroeconomic framework such as deceleration and decline of economic activity in most of them, sluggish labour market and higher jobless rates, and a series of uncertainties related to economic outlook. In the meantime, domestic factors, such as uncertainties about the future, and factoring of high risk premiums, as well as the high level of non-performing loans are considered to have contributed to the low bank lending supply. Some of the external factors conditioning banks' behaviour towards lending include changes to and uncertainties about the international (European) regulatory framework, tightening of capital indicators at group level, developments in non-performing loans at group level, and situation of international markets and access to funds in these markets.

Referring to the latest lending survey in CESEE countries<sup>5</sup>, credit appears to recover slowly in the countries of the region. For the six-month period (September 2013 - March 2014), the bank lending survey shows that the overall lending situation has shown signs of improvement. Foreign banking groups in this region continued the restructuring process, by selling assets and/or branches of banks. The use of the financial leverage continued to trend down, although more slowly. The assessment of the banking groups position in the CESEE market and its potential show that this is one of the most profitable markets. It also shows that the presence of foreign bank branches in this market has a significant share in the total of operations of such banking groups. Banks in this region report for credit demand settling at low levels and tightened lending

Chart 13 Index of credit to private sector in countries of the region (September 2008 = 1)



Source: Respective central banks.

<sup>5</sup> CESEE Bank Lending Survey, 2014 H1, European Investment Bank.

standards. While the high level of non-performing loans and the domestic and international regulatory framework have conditioned the credit supply, banks expect lending standards to ease in the next half of the year. Credit demand has improved slightly for certain types of credit and is expected to recover further for a number of products and maturity terms. Against the backdrop of low crediting, banks report to have sufficient funds for financing their activity, mostly short-term funds obtained through households and business deposits. The increase in non-performing loans is decelerating, especially in the segment of business loans, which are expected to expand more slowly than in that of household loans.

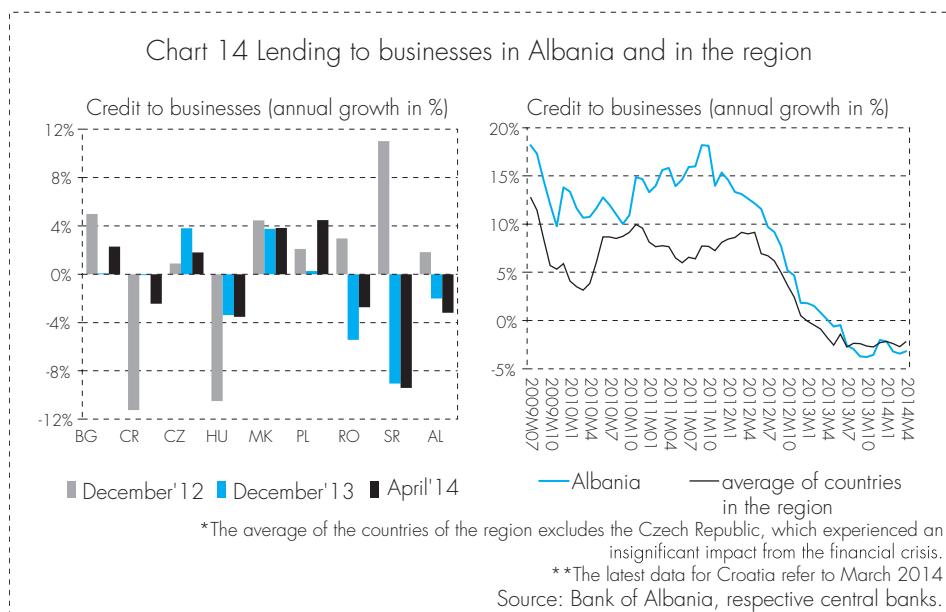
#### Lending to businesses

Lending to businesses slowed down significantly during the financial crisis, entering into negative territory in the past two years, both in Albania and in most countries of our region. A simple average of growth rates for the countries in the region reveals that, since 2013, the downward rates have slowed down. This performance has been conditioned mostly by countries with positive and faster growth rates of lending to businesses, such as Poland the Czech Republic, and FYR Macedonia. Nevertheless, at the end of April, the average rate of lending to businesses for the countries of the region was down by 2.2% in annual terms.<sup>6</sup>

The downward credit demand by businesses generally relates to the poor performance of economic activity, below-potential utilisation of production capacities and, subsequently, fewer investments. The bank lending survey in these countries finds that the businesses credit demand has improved slightly during the period (September 2013 - March 2014), although lending standards remain tight, especially the collateral requirements. Regarding the purpose of use, credit was extended mostly for debt restructuring and working capital, while credit demand for investment purposes remains very weak.

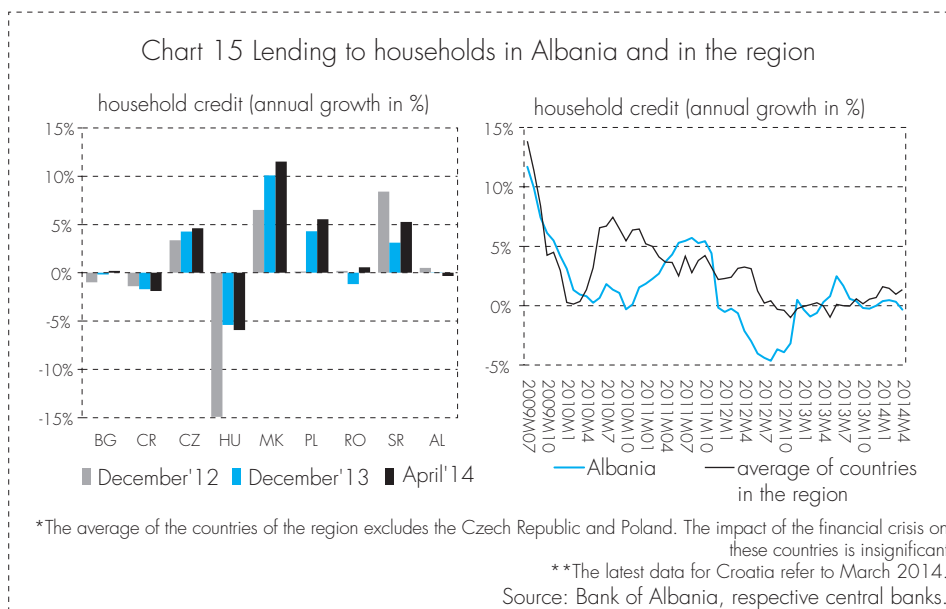
Poland, the Czech Republic and Bulgaria are among the countries least affected by the financial crisis and, therefore, experiencing minor consequences on macroeconomic indicators. They have maintained positive rates of lending to the private sector, both for businesses and households. The major share of credit to businesses in these countries was granted for investment purposes. In the Balkans, FYR Macedonia records positive annual growth rates for lending to businesses. Serbia and Romania seem to be the countries experiencing apparent worsening of lending to this segment. In Hungary, however, the situation has improved against 2012, although the rate of expansion of business loans remains in negative territory.

<sup>6</sup> The average of the countries of the region excludes the Czech Republic and Poland. The impact of the financial crisis on these countries is insignificant.



## Lending to households

In the countries of the region, lending to households performed better than lending to businesses. The reduction of credit outstanding for households seems to have started decelerating earlier than credit for businesses, since mid-2012. A simple average for the countries of the region and an individual analysis for most of the countries show an improvement of growth rates for lending to households, starting since end of 2013.



On average terms, in April, credit outstanding for households in the countries of the region, excluding Poland and the Czech Republic, was up 1.4% from a year earlier. According to the bank lending survey for CESEE countries, these positive developments reflect mainly the eased lending standards applied for

households, especially in the segment of consumer credit, and the higher credit demand by households, compared to the more sluggish recover of businesses demand.

FYR Macedonia, Poland and Serbia, and less the Czech Republic, are the countries with the highest growth rates of lending to households. In Hungary and Croatia, which have consecutively recorded negative annual rates in the past 2-3 years, there is a tendency towards improvement. However, these rates remain in negative territory, especially in the case of Hungary.

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## INFORMATION ON THE ECONOMIC PERFORMANCE OF ALBANIA'S MAIN TRADING PARTNERS, 2014 Q2<sup>1</sup>

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MONETARY POLICY DEPARTMENT, JULY 2014

### EURO AREA

Euro area's GDP grew 0.2%, q-o-q, in 2014 Q1. It grew 0.9%, y-o-y, recording higher growth rates than in 2013 Q4. The analysis of elements contributing to the formation of economic growth shows that it was positively affected by the recovery of domestic consumption and investments, whereas net exports shrank. Economic growth by country shows that its rates slowed down in most of them, with only a few countries recording a higher growth than in 2013 Q4.

Second-quarter preliminary data displayed volatile performance, showing no clear trend yet for sound growth in the euro area. Restoring euro area's growth engine appears sluggish and factors of vulnerability are surrounding its outlook. The rise in unemployment rate came to a halt in 2014 H1; yet, its high rate among the young people and in many countries remains a concern. The ECB continued the accommodative monetary policy in order to continuously improve the transmission channel and boost lending to the economy. The overall climate and ECB's accommodative policy benefited the financial and capital markets, with the interest rates and ask yields decreasing further in the last three months. Lending to the real economy remained slow and many banks seemed reluctant to lend. Preliminary and indirect indicators on the last months (retail sales, PMI index for manufacturing, new orders in industry and exports) suggest the euro area economy will grow at a similar rate in 2014 Q2 to the previous quarter. Survey results, and business and consumer confidence indicators, also converge towards the same direction. In a longer-term perspective, the easier pace of fiscal consolidation in a number of countries, ECB's accommodative monetary policy, opportunity to use "unconventional" policies, and EU authorities' new approach towards boosting economic growth are expected to be driving factors during 2014 and beyond. Inflation has been on a downward trajectory for several months, fluctuating below the ECB's target. This has raised the concerns of ECB's governing bodies, which, besides the above factors, should also face the risk of a potential deflationary spiral.

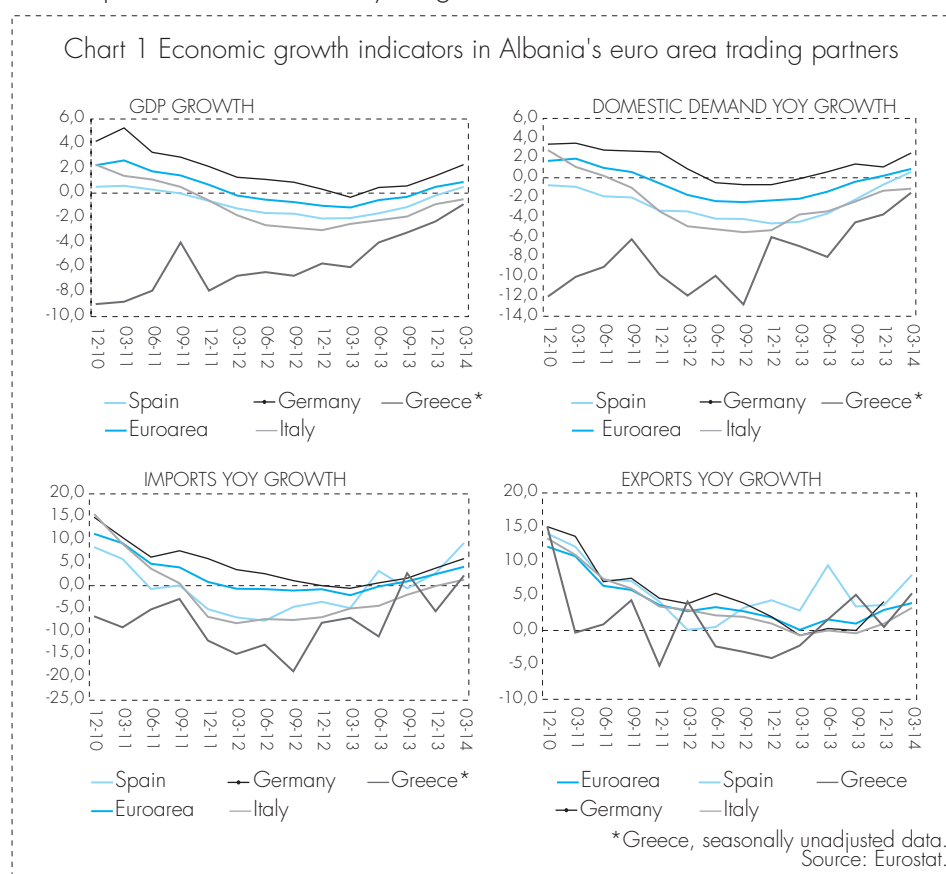
### ITALY

After the positive signals of 2013 Q4, Italy's economic growth was curbed in 2014 Q1, shrinking by 0.1%. In annual terms, the economic decline was

<sup>1</sup> Albania's main trading partners include Italy, Greece, Germany, Spain, China, Turkey, Macedonia and Serbia. Albania's trade with these countries accounts for around 70% of total trade activity.

more moderate than in the previous quarters (-0.5%, from -0.9%); however, the Italian economy has been recording negative growth rates for 10 consecutive quarters. The sharp fall in investments was the main factor contributing to the formation of GDP in 2014 Q1, whereas domestic consumption and net exports improved.

Leading indicators of GDP dynamics (manufacturing production, retail sales, new orders in industry, and business and consumer confidence) showed improvement in 2014 Q2. Their performance in May and June suggests modest expansion of the Italian economy in Q2, to further strengthen for the rest of the year. However, factors of uncertainty are still surrounding the production activity and the overall economic performance, which may curb and affect GDP's growth tendency in the current year. The Italian government has committed to carrying out reforms needed to boost employment, consumption and productivity, whose success is expected to be reflected in the economy's perspective. After recording stable rates in March and April, labour market indicators<sup>2</sup> hit negative rates in May, confirming yet again the frail recovery of consumption and the economy, in general.



Inflation maintained a downward trend, which became more pronounced across the months, to hit 0.3% in June, the lowest rate since 2009. The analysis of core inflation and Banca d'Italia experts' forecasts suggest a downward trend of inflation and absent related pressures in the period ahead.

<sup>2</sup> Unemployment rate was 12.6% in May, from 12.5% in April, remaining 1 percentage point above euro area's rate (11.6%). Youth unemployment rate fell 0.3% from the previous month (43.0%).

## GREECE

The Greek economy contracted 0.9% in 2014 Q1. Albeit a negative figure, it is an improvement from the previous quarters. Greece's economy made positive steps towards recovery, assisted by the Troika programmes and reforms aimed at adjusting the fiscal balances. Domestic consumption continued to recover and net exports, concentrated mainly in services, confirmed their contribution in 2014 Q1. Shrinking investments played major role in curbing the GDP rate. Taking into account that the first quarter historically contributes less to total GDP formation and generally records lower rates, this year's figure suggests that the economy will grow at a higher rate in the quarters ahead and may move into positive territory.

Preliminary and leading indicators on economic activity trends (manufacturing production, sales index, construction index, and business confidence) for April and May have improved, supporting the expectation that the Greek economy will improve in the quarters ahead. Trade activity and tourism performed very well, supporting the revitalisation of the Greek economy. The Greek authorities continued to adjust the fiscal balances, being commended by the Troika and enabling the timely disbursement of aid instalments. Unemployment rate dropped slightly in March (26.8%, from 26.9% in February), remaining below the previous year's rate. Consumer Price Index has been fluctuating in a negative territory for several months (-2.0% y-o-y, and -0.4% m-o-m, in May), displaying the risk of a long deflationary period.

## GERMANY

Private consumption and investment spending were the main drivers of Germany's economic growth in 2014 Q1. GDP grew 2.5% in annual terms, and 0.8% in quarterly terms. Unlike the historical performance, exports were not the main driver of the German economy. In 2014 Q1, they made a negative impact due to economic concerns facing Germany's trading partners. Indirect indicators suggest positive signals for 2014 Q2. Industrial production and export indices improved, and domestic consumption expanded due to improved consumer confidence. In July, the consumer confidence index surged to the highest level in seven years. The accommodative monetary policy and low interest rates on deposits were driving factors of the expected increase in consumer spending. In the meantime, private investments are expected to grow at a slower pace than in Q1. Business Climate Index (Ifo) dropped in the last months due to heightened uncertainties related to Ukraine and Iraq events. The German economy is expected to grow around 1.8% in 2014, lower than Q1's annual growth.

The growth of consumption may have been reflected in the inflation rate increasing slightly higher than expected. Annual inflation increased 1.0% in June, and 0.3% on a monthly basis, mainly due to changes in services sector prices.

## SPAIN

The Spanish economy grew 0.4%, q-o-q, in 2014 Q1, the highest growth in the last six years. On a yearly basis, Spain's GDP grew 0.5%, the first positive figure since 2011. The growth was attributable to the improved confidence and increased domestic demand, particularly the private consumption component. External demand made a negative contribution to GDP formation in 2014 Q1, due to the economic decline in some of Spain's euro area trading partners, deceleration in developing economies and loss of competitive advantages against these economies as a result of their depreciated currencies. Consumer prices remained almost unchanged. Annual inflation was 0.1% in June, driven by the lower food and energy prices. In June, the Spanish government announced a number of fiscal reforms expected to be implemented to boost economic activity. These measures include the decrease in income tax and progressive decrease of withholding tax rate. Spain is one of the countries with the highest sovereign debt in the euro area. In April, its sovereign debt was estimated at around 96.1% of GDP, and is expected to increase to 99.5% of GDP by the end of 2014. This year, Spain completed the EC bailout programme it was forced into in 2012. Government debt security yields have been falling during this period, reflecting improved confidence in the Spanish economy. Credit rating agencies have upgraded Spain's sovereign credit rating. In May, Standard & Poor's raised Spain's sovereign credit rating one level, from BBB- to BBB, reflecting their view of improved economic growth as a result of Spain's structural reform efforts since 2010, which have proved successful to supporting the country's economic progress.

Preliminary data suggest the Spanish economy grew at a faster pace in 2014 Q2, supported by the recovery of private demand. The release of positive figures on Spain's economy has led to an upward revision of growth estimates for 2014 and 2015.

*Table 1 EC's forecast of selected indicators of Albania's trading partners, EC May 2014 (The arrows next to the forecast indicate the direction of change from EC's February 2014 forecast)\**

Annual changes, %	GDP		Inflation		Unemployment		Exports		Imports	
	2013	2014	2013	2014	2013	2014	2013	2014	2013	2014
Euro area	0.1	1.5↑	1.4	1.0↑	12.1	12.0↑	1.3	4.2	0.2	4.1↑
Italy	-1.9	0.6	1.3	0.9↑	12.2	12.6↑	0.1	3.3↑	-2.9	3.0↑
Greece	-3.7	0.6	-0.9	-0.6↑	27.3	26.0	2.5	4.6	-6.8	-1.3
Germany	0.5	1.7	1.7	1.7	5.4	5.3	0.3	4.6	1.0	5.7
Spain	-1.2	1.0↑	1.5	0.3↑	26.4	25.7↑	4.9	5.4↑	0.2	3.3↑
China	7.7	7.5	2.6	3.0	4.1	4.1	8.6	6.8	10.6	7.1
Turkey	4.0	2.5↑	7.5	8.7↑	9.8	10.5↑	0.7	7.4↑	6.9	0.7↑
Macedonia	3.1	2.5	2.8	3.3↑	28.9	27.8↑	3.7	6.4↑	-0.8	6.1↑
Serbia	2.5	1.3↑	7.9	4.3↑	22.1	22.3↑	15.9	4.9↑	2.1	2.6↑

*\*For the euro area countries, inflation is measured based on the change in the Harmonised Consumer Price Index.*

*IMF's April 2014 forecast for China.*



## CHINA

Guided by the stimulus packages run by the Chinese authorities, China's GDP expanded by an annualised rate of 7.5% in 2014 Q2, from 7.4% in Q1. The cut in taxes on small-sized enterprises, and the increase in Government investments in railway and construction of residential buildings were among the primary factors behind the higher economic growth. For the same period, exports performed positively, whereas the increase in real estate market investments slowed in 2014 H1. Inflation averaged 2.2% in 2014 Q2, from 2.4% in Q1, remaining below the target of 3.5% set for 2014.

The inflationary pressures will remain well anchored for the rest of the year, creating adequate conditions for monetary policy easing to support the Chinese economy.

## TURKEY

Turkey's GDP grew 4.3% y-o-y in 2014 Q1, remaining in line with the last four quarters' rates. Unlike the previous quarter, when GDP growth was mainly driven by the increased domestic demand, in 2014 Q1, the positive contribution of net exports to total GDP growth<sup>3</sup>, by 2.7 percentage points, made major impact. Private consumption increased at a slower pace (2.9%, from 5.3% in 2013 Q4), reflecting the higher bank lending rates and political uncertainty ahead of the elections in March. Preliminary indicators on 2014 Q2 suggest a slightly slower GDP performance. Industrial production increased 3.0% (y-o-y) during April and May, from 5.4% (y-o-y) in Q1, due to weakening domestic demand triggered by the tighter monetary conditions in early 2014.

In June, annual inflation changed the uptrend begun since November 2013, falling to 9.2%, providing evidence for a weaker effect of the considerable depreciation of the Turkish lira on domestic prices.

## MACEDONIA

Macedonia's economy recorded the highest growth in the South East Europe in 2014 Q1, expanding by 3.9% y-o-y. The expanded services sector activity by 4.0%, in annual terms, and its support to domestic demand made major contribution to GDP, by 2.7 percentage points. The industrial sector also made a positive contribution by 0.5 percentage points. This sector's dynamics was mainly supported by the improved external demand, geographical diversification of exports, and higher production capacities in some industrial areas. In the meantime, the construction and agricultural sectors slowed their growth pace, contributing by 0.6 and 0.1 percentage points, respectively, to total growth. In June, annual inflation was -1.1%, from -0.6% in May. The fall in food prices in line with their international performance was the driving factor of domestic deflationary pressures.

<sup>3</sup> For 2013, net exports made a negative contribution of 2.3 percentage points to total GDP growth.

## SERBIA

Serbia's GDP grew only 0.1% y-o-y, in 2014 Q1. The moderation in economic activity resulted from the contracted agricultural production and weak performance of industrial and services sectors. After the impressive growth of the production sector in 2013 Q4 (+17.8% in annual terms), it shrank by 3.0% (y-o-y), contributing by -0.2 percentage points to annual GDP rate. The deceleration in the industrial sector was driven by the lower energy production and high comparative base for 2013.<sup>4</sup> The weaker domestic demand, the sluggish lending and Serbian authorities' fiscal consolidation were among the factors driving the performance of the services sector.

In June, annual inflation was 1.3%, standing below the central bank's target ( $4 \pm 1.5\%$ ). In the absence of inflationary pressures and weak GDP growth, the National Bank of Serbia cut the key policy rate by 0.5 percentage points, to 8.5%, in June.

<sup>4</sup> The expanding activity in the industrial sector throughout 2013 was driven by the increased production of FIAT vehicles.

## ANALYSIS OF DEVELOPMENTS IN THE EXTERNAL SECTOR OF THE ECONOMY, 2014 Q1

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MONETARY POLICY DEPARTMENT, JULY 2014

### 1. BALANCE OF PAYMENTS HIGHLIGHTS<sup>1</sup>

Albania's net current account balance recorded a deficit of EUR 299.5 million in 2014 Q1. It maintained a widening tendency for the second consecutive quarter, deepening by around 31%, on an annual level, during 2014 Q1, compared to the same quarter a year earlier. The current account deficit was estimated at 12.9% of nominal GDP. All current account items contributed to deficit widening, but the worsened trade deficit in goods and services had a major impact. The stable demand from Albania's traditional trading partners and slight widening of the export base contributed to maintaining an upward trend in exports of goods. Imports also showed a growing tendency for the second consecutive quarter, being mainly concentrated in investment or intermediate goods. The services' account displayed a similar performance, with both imports and exports increasing, y-o-y. Hence, nominal net exports deficit deepened compared to the same period a year earlier. The primary income balance returned to negative territory after two quarters of positive net flows. The maturing immigration cycle, the unfavourable labour market conditions in countries where Albanian immigrants reside, and the repatriation of a considerable number of migrants have led to continued decline in remittances.

Net capital inflows increased to EUR 22.5 million, from EUR 9.7 million in 2013 Q1. Net financial flows recorded an annualised increase of about 29.8%, financing 89.5% of the current account deficit. Dividing the current deficit financing as debt creating inflows and non-debt creating inflows, a more pronounced support to the second type of financing during the quarter under review is noted. Non-debt creating inflows were estimated at 10.3% to nominal GDP, about 1.2 percentage points higher in annual terms. Conversely, financing current account through debt-creating inflows was estimated at about 0.7% of nominal GDP. This ratio is 0.8 percentage points lower compared to

<sup>1</sup> The latest data on the balance of payments are as of 2014 Q1. From 2014 Q1, Financial Stability and Statistics Department at the Bank of Albania prepares the Balance of Payments Statistics, in compliance with the International Standards laid down in sixth edition of the Balance of Payments and International Investment Manual, released by the International Monetary Fund (BPM6.) Earlier, they were published based on the Balance of Payments Manual, fifth edition - IMF. The main differences between two methodologies are synthesised in the guideline "Publication of Financial Statements of statistics of external sector, in accordance with BPM6-IMF", published by the Bank of Albania at: [http://www.bankofalbania.org/web/pub/commentary/for\\_changes\\_in\\_the\\_publication\\_of\\_external\\_sector\\_statistics\\_according\\_to\\_BPM\\_6\\_June\\_2014\\_2014\\_2\\_6688\\_1.pdf](http://www.bankofalbania.org/web/pub/commentary/for_changes_in_the_publication_of_external_sector_statistics_according_to_BPM_6_June_2014_2014_2_6688_1.pdf) For the purposes of internal analysis, the Balance of Payments data from 2002 to 2013 are reclassified in accordance with the new methodology by the Monetary Policy Department.

the first quarter of previous year. The overall balance of payments shows that, in 2014 Q1, foreign exchange reserve assets fell, by about EUR 40.3 million. As of end-March 2014, the foreign exchange reserve stock totalled EUR 1, 98 billion, sufficient to cover 4.4 months of imports of goods and services.

Table 1 Balance of Payments indicators

	Q1 '12	Q2 '12	Q3 '12	Q4 '12	Q1 '13	Q2 '13	Q3 '13	Q4 '13	Q1 '14
Current account (in EUR million)	-272.5	-251.9	-247.8	-205.8	-228.6	-300.8	-214.1	-282.7	-299.5
y-o-y	22.4%	-31.0%	-4.7%	-45.5%	-16.1%	19.4%	-13.6%	37.4%	31.0%
/ GDP	-12.7%	-9.9%	-10.2%	-8.3%	-10.2%	-11.3%	-9.0%	-11.0%	-12.9%
Goods and services	-456.8	-447.1	-401.6	-480.3	-380.3	-436.1	-392.3	-511.0	-408.6
Exports, f.o.b.	619.7	777.5	986.8	814.8	661.6	805.7	981.2	937.9	738.2
Imports, f.o.b.	1076.5	1224.7	1388.4	1295.1	1041.9	1241.8	1373.6	1448.9	1146.7
Travel - net	4.3	6.2	119.7	12.3	-34.6	-31.5	26.1	34.0	-21.8
Primary income	-24.0	-33.0	-36.5	21.8	-9.8	-21.8	15.6	7.5	-31.3
Credit	45.2	39.3	53.7	50.2	42.2	47.1	52.2	51.8	29.1
Debit	69.2	72.3	90.2	28.5	51.9	68.9	36.6	44.3	60.4
Net FDI income	-35.3	-31.3	-53.7	0.4	-33.5	-45.1	-14.7	-22.1	-40.1
Secondary income	208.4	228.2	190.3	252.7	161.5	157.1	162.6	220.8	140.3
Credit	245.0	268.1	228.7	284.6	194.1	189.2	196.9	252.3	167.6
Debit	36.7	39.9	38.4	31.9	32.6	32.0	34.2	31.6	27.3
Net remittances	166.5	171.6	140.8	196.3	120.9	99.8	117.6	159.0	115.9
Capital account	12.9	43.0	9.8	15.6	9.7	4.8	15.0	18.2	22.5
Net borrowing/net lending	-259.5	-208.9	-238.0	-190.2	-219.0	-296.0	-199.1	-264.5	-277.0
Financial account	-228.4	-83.6	-39.7	-269.6	-206.6	-235.4	-31.8	-189.5	-268.1
y-o-y	-29.1%	-52.2%	-77.6%	19.9%	-9.6%	181.5%	-20.0%	-29.7%	29.8%
/ GDP	-10.6%	-3.3%	-1.6%	-10.8%	-9.2%	-8.9%	-1.3%	-7.4%	-11.6%
Direct investment	-191.7	-141.8	-125.2	-189.1	-194.0	-239.3	-266.4	-193.3	-216.7
Portfolio investment	49.4	-26.5	21.6	-10.9	22.4	100.2	4.2	-23.1	3.1
Financial derivatives	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other investment	-89.3	77.2	-25.8	-46.4	-11.3	-182.7	195.9	19.9	-14.1
Reserve assets	3.2	7.5	89.7	-23.1	-23.6	86.4	34.5	7.1	-40.3
Errors and omissions	31.5	125.8	197.8	-78.8	12.4	60.5	167.3	75.1	8.9
Net borrowing/net lending	-259.9	-209.4	-237.5	-190.7	-219.0	-296.0	-199.1	-264.5	-277.0

Source: Bank of Albania.

## 2. CURRENT ACCOUNT<sup>2</sup>

Albania's net current account balance recorded a deficit of EUR 299.5 million in 2014 Q1. Current deficit widened for the second successive quarter, increasing by 31.0% in annual terms, during the first quarter. The current deficit accounted for about 12.9% of nominal GDP, or about 2.7 percentage points higher than in the same period a year earlier. Excluding income from official transfers, the current account deficit was estimated at about 13.0% of nominal GDP, from 10.5% in the same period a year earlier.

Current account dynamic, during 2014 Q1, continued to be broadly affected for the second successive quarter by the development of net exports balance

<sup>2</sup> Overall, the shift to the international standards laid down in Sixth Edition of the Balance of Payments Manual does not reveal any change in the general view of the current account, compared to the previous standards. The most significant changes consist in the goods and services account. Their composing sub-items are reclassified, renamed and further detailed.

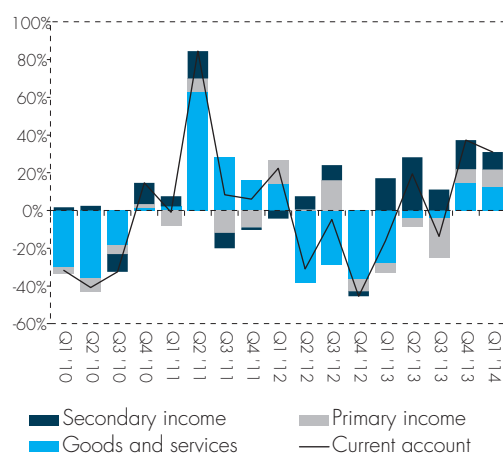
in goods and services. Imports of goods and services grew by about 10.1% in annual terms. On the other side, the 11.6% y-o-y increase of goods and services exports was not sufficient to offset the increase of such imports. In 2014 Q1, nominal deficit in exports increased by about 7.4% in annual terms, contributing to the deepening of the current deficit. The worsened net position of primary<sup>3</sup> and secondary income account<sup>4</sup> provided the same impact.

While the resulted current deficit in 2014 Q1 is considered in the light of gap performance between public savings and national investments, a further strengthening of private sector impact on the creation of current account deficit<sup>5</sup> is noted. Such a trend started in 2013 Q3, while in the three first quarters of 2013, the public sector had the main share in the creation of current deficit. Due to the need for a continuing accumulation of capital stock in Albania, and maintaining the stability of the external sector, the increase in the private sector share in creating the current deficit is welcomed<sup>6</sup>.

In 2014 Q1, the gap between savings and public investments narrowed more rapidly in annual terms. The increase in public savings and the decrease in public investments at annual level contributed to the same side.

Moreover, the gap between savings and private investments increased faster in annual terms. Private sector share in the creation of current account deficit averaged 95.7%, about 36.7 percentage points higher than its historical average. More concretely, in the annual expansion of the current account deficit by about 31%, the public sector contributed negatively (-40.6 percentage points), whereas the private sector contributed positively (+71.6 percentage points).

Chart 1 Contribution to current account deficit by item (in percentage points)



Source: Bank of Albania.

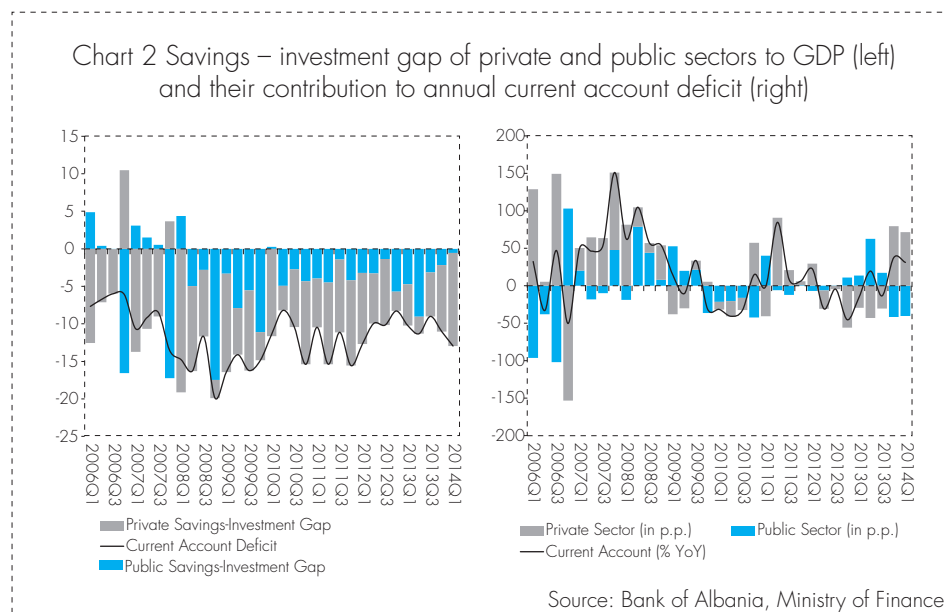
<sup>3</sup> In accordance with the standards set forth in the Sixth Edition of the IMF's Balance of Payments and International Investment Position Manual, "primary income" corresponds to "income" in the Fifth IMF's Balance of Payments Manual.

<sup>4</sup> In accordance with the standards set forth in the Sixth Edition of the IMF's Balance of Payments and International Investment Position Manual, "secondary income" corresponds to "current transfers" in the Fifth IMF's Balance of Payments Manual.

<sup>5</sup> An alternative but equivalent measuring of current account net position for a definite period is the method of gap between savings and national investments. Thus, the net realised position of current account is equal to the amount of gap realised between savings and public and private investments in period  $t$ .

$$CA_t = (S_{\text{public}} - I_{\text{public}})_t + (S_{\text{private}} - I_{\text{private}})_t$$

<sup>6</sup> Various studies conclude that when the current deficit is created by the private sector, in an economy that is accumulating capital, the latter becomes more tolerant against persistently high current deficit rates, than when the current deficit is created mostly by the public sector. See: Milesi-Ferretti & Razin (1996), 'Sustainability of Persistent Current Account Deficits', NBER, WP5467. Cusolito & Nedeljkovic (2013), 'Toolkit for the Analysis of Current Account Imbalances', WB, WP83248.



In 2014 Q1, net financial flows from the combined position of primary income account, secondary income account and services account recorded a considerable fall. Thus, the net flows of these three accounts financed about 15.9% of trade deficit recorded during this period.

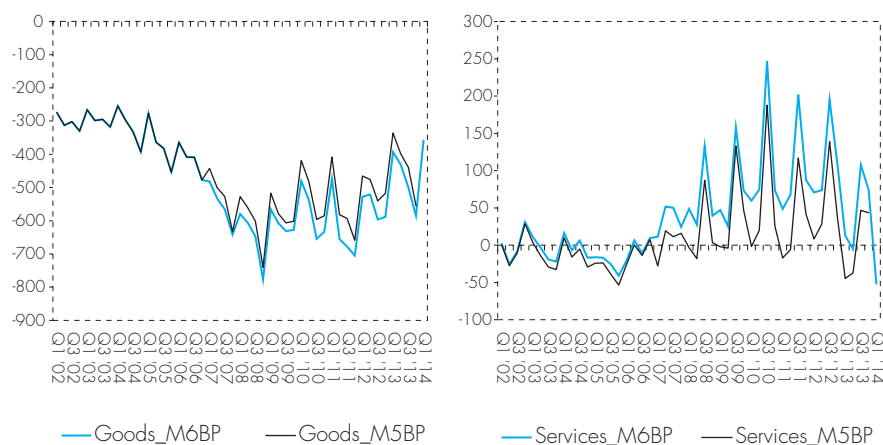
Albania's trade openness stood at 81.5% in 2014 Q1, around 5.4 percentage points higher than in the same period a year earlier.

#### Other current account items

In the framework of adopting the international standards of the Sixth Edition of the IMF's Balance of Payments and International Investment Position Manual, the constituent sub-items of services account were subject of a series of re-classifications and re-nominations in the light of an increasing importance of cross-border transactions in services. Thus, the most important changes relate to the sub-items of services account "processing services on physical inputs owned by others" (Manufacturing services on physical inputs owned by others BPM5) and "services for maintenance and repair" ("manufacturing goods in BPM5 and "services for maintenance and repair" ("merchandise for repair" in BPM5), which are reclassified from "goods" to "services". "Merchanting" (net exports of goods under trading intermediation) and other services related to trade are re-classified from "services" to "goods". Due to methodical changes, net balance of goods and services account reveals changes, particularly sensitive in the case of services account.

During 2014 Q1, services account performed weakly. Net income balance of this account recorded a net deficit of EUR 52.4 million, mainly due to the decrease in foreign currency flows in this account. Net income balance from services continuous to be considerably affected by the development in the sub-items with the highest share in this account: "manufacturing services on physical

Chart 3 Trade balance and services account balance (net flows, in EUR million)



Source: Bank of Albania.

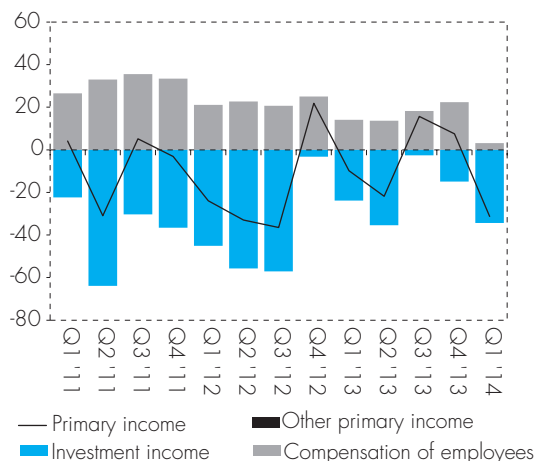
inputs owned by others", "transport services", "travel services (personal and business)", "insurance and pension services", "telecommunication, computer and information services". Net income of these sub-items of services account decreased during the considered period, providing contribution to the deepening of net services account deficit.

Net income from "travel services" for tourism and personal purposes, recorded a negative balance after two positive quarters. Net income deficit from travelling for business and personal purposes narrowed by 36.9%, compared to the same period a year earlier, standing at EUR 21.8 million. Foreign currency inflows from travel services of non-residents to Albania increased by 35.2%, in annual terms. Foreign currency outflows in the form of Albanian residents' expenses for personal and business travel services abroad increased by 23.1%, albeit they did not completely cancel out the positive effect of inflows.

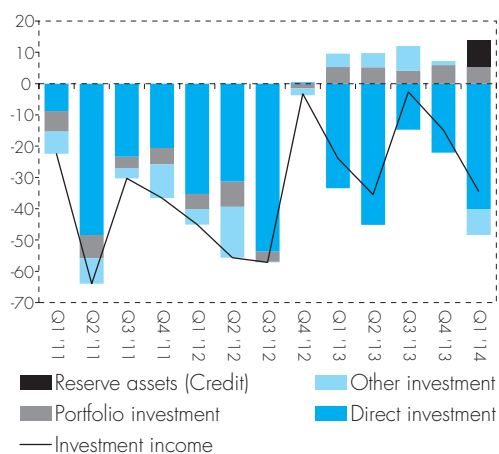
Net balance of primary income account closed in negative territory in 2014 Q1. Net foreign-currency inflows in this account resulted in deficit by about EUR 31.3 million, from about Euro 9.8 million deficit in the same period a year earlier. The widening of deficit in "investment income" determined the direction of developments in this account during the considered period. Net "income from work" resulted considerably lower, compared to a year earlier, providing a negative contribution to the total balance of this account.

"Investment income" sub-item recorded a considerable widening of deficit in 2014 Q1, by EUR 34.4 million, from EUR 23.9 million in the same

Chart 4 Income balance (net flows, in EUR million)



Source: Bank of Albania.

Chart 5 Balance of Investment income  
(net flows, in EUR million)

Source: Bank of Albania.

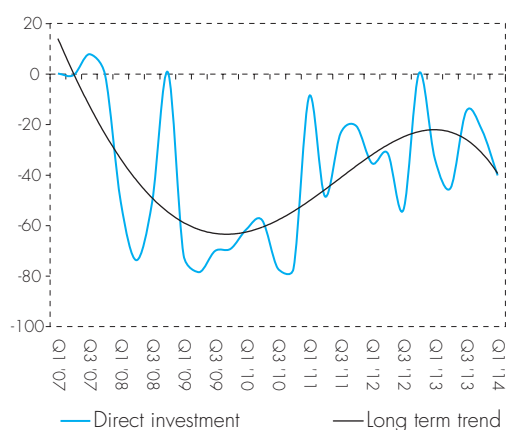
period a year earlier. The increase in FDI income outflows determined the direction of developments in this account during the period under review.

In 2014 Q1, net income from "foreign direct investment" decreased by 19.9% in annual terms, standing at about EUR 40.1 million, mainly due to income repatriation from investments in capital and equities in investments funds. Interest income recorded a net negative balance of EUR 0.3 million, from the surplus of EUR 1.6 million in the same period a year earlier.

The balance of "Portfolio investment" income continued to record positive values for the fifth successive quarter, at about EUR 5.6 million during the period under review. In this sub-item of income account, income represents mainly interests arising from debt instruments. By contrast, net income balance from "other investment" recorded a deficit of about EUR 8.3 million, from a surplus of about EUR 4.3 million in the same period a year earlier. Income from the investment in foreign exchange reserve assets<sup>7</sup> stood at EUR 8.4 million in 2014 Q1.

Net balance of secondary income account, similarly to the previous year, continued to record shrinkage in financial flows in 2014 Q1. The total net balance of this account, during the period under review, recorded a surplus of about EUR 140.3 million, down by about 13.1% in annual terms. Foreign-currency flows in the secondary income accounted for about 6.1% of nominal GDP. This ratio is about 1.1 percentage points lower compared to the same period a year earlier.

Chart 6 FDI income (net flows, in EUR million)



Source: Bank of Albania.

The main sub-item of this account, net secondary income from "financial and non-financial corporates, households, and non-profit institutions serving households", recorded a surplus of about EUR 141.8 million, down by about 11.3% in annual terms.

<sup>7</sup> In accordance with standards laid down in Sixth IMF's Balance of Payments Manual in the primary income account, the item "investment income" includes the income from "foreign currency reserve" investment.



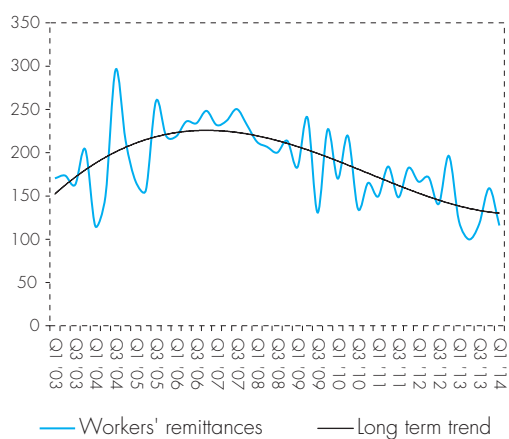
The sub-item with the largest share in secondary flow income from "financial and non-financial corporates, households and NPISH"<sup>8</sup>, "remittances"<sup>9</sup>, pursued the downward trend even during the beginning of 2014. Remittances stood at EUR 115.9 million, down by 4.1% in annual terms. They were estimated at about 5.0% of nominal GDP, or 0.4 percentage points lower than the corresponding quarter in 2013.

### 3. CAPITAL ACCOUNT

Capital account debits and credits all the transactions on the acquisition and disposal of non-produced, non-financial assets/goods<sup>10</sup> and the capital transfers<sup>11</sup> between residents and non-residents (on which there is no economic value in the exchange). In 2014 Q1, capital account recorded a surplus of about EUR 22.5 million, up about EUR 9.7 million, compared to the same period a year earlier. This account's net capital flows accounted for about 1.0% of nominal GDP during the period under review. Incoming capital transfers were EUR 49.0 million, from EUR 9.7 million in the same period a year earlier, whereas capital outflow transfers amounted about EUR 26.4 million in 2014 Q1. Net capital transfer for the account of "central government" were EUR 19.6 million, while those in "financial and non-financial corporates", "households and non-profit institutions serving households" were about EUR 3.0 million.

The combination of net non-financial transactions of current account and capital account provides the net position of the domestic economy, as net lender (surplus) and net borrower (deficit) versus the non-resident economies. Conceptually, this result is equal to the net balance of the financial account, which reflects how the net lending or net borrowing by non-residents is being financed. In quantitative terms, our economy reveals a net borrowing position, about EUR 277.0 million, which is financed by the income in the financial account (minus errors and omissions).

Chart 7 Remittances (net flows, in EUR million)



Source: Bank of Albania.

<sup>8</sup> Non-profit institutions serving households.

<sup>9</sup> From 2014 Q1, remittances are calculated based on the survey on remittances carried out by the Bank of Albania, and data on remittances transmitted through formal channels (money transfer operators and banking system).

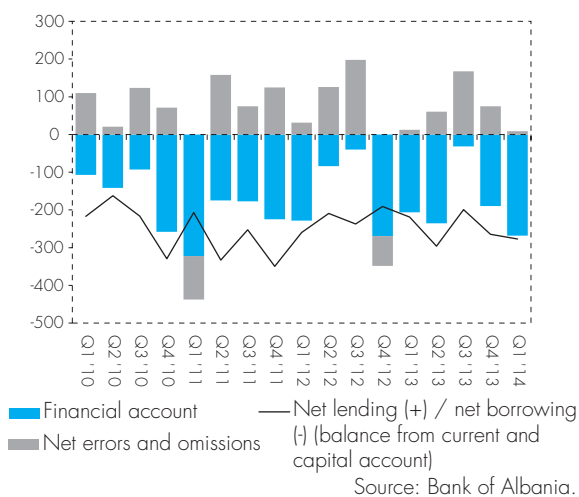
<sup>10</sup> Acquisition and disposal of non-produced, non-financial asset include: 1. Natural resources (land, mineral rights, forestry rights, water, fishing rights, air space, and electromagnetic spectrum); 2. Contracts, leases, and licenses covers those contracts, leases, and licenses that are recognized as economic assets; 3. Marketing assets (brand names, mastheads, trademarks, logos, and domain names).

<sup>11</sup> Capital transfers consist in: 1. debt forgiveness; 2. Nonlife insurance claims; 3. grants; 4. guarantees; 5. taxes (inheritance taxes, gifts, etc.); 6. Other capital transfers.

4. FINANCIAL ACCOUNT<sup>12</sup>

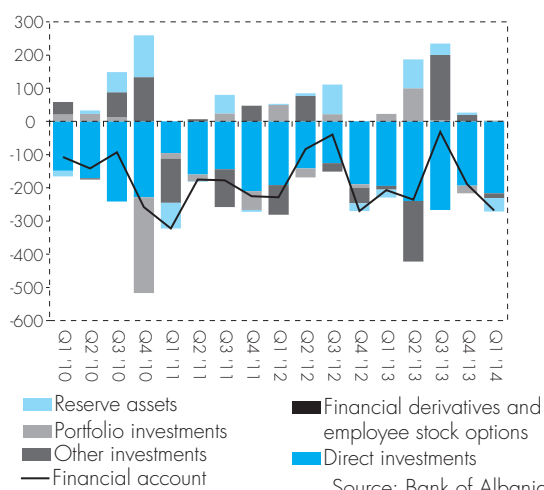
Net flows in the financial account recorded a positive balance of EUR 268.1 million in 2014 Q1, financing 89.5% of the current account deficit recorded in this period. Financial flows rose about 29.8%, accounting for about 11.6% of nominal GDP, relative to the same period a year ago. The increase in annual terms in foreign currency flows in this account was mainly attributable to the increase in net flows by about 11.7% in annual terms, in the form of direct investments. Net borrowing in domestic economy grew by 26.5% in annual terms in 2014 Q1.

Chart 8 Financial account, errors and omissions (net flows, in EUR million)



Residents' financial liabilities to non-residents increased by 43.8% in annual terms, due to higher FDI and other investment inflows. Albanian assets invested in non-resident economies increased by about EUR 38.6 million during the period under review<sup>13</sup>. Increase in assets in the form of other investment was the main determinant of developments in Albanian assets invested abroad.

Chart 9 Financial account components (net flows, in EUR million)



Net FDI increased by about 11.7% from 2013 Q1. Inflows in net foreign direct investment determined the direction in their development, amounting about EUR 221.3 million, in 2014 Q1. Domestic assets as foreign direct investment increased, albeit their level remains low (only EUR 4.5 million at the beginning of 2014). Net FDI was estimated at about 9.4% of nominal GDP, or 0.7 percentage points higher, compared to the same period a year earlier. As an important financing source of the external sector deficit, in 2014 Q1 FDI inflows financed about 73.9% of the current deficit recorded during this period.

In accordance with the instruments used for investments<sup>14</sup>, net direct investments as "capital and stocks as investments fund" increased by

<sup>12</sup> In accordance with standards laid down in the Sixth Edition of the IMF's Balance of Payments and International Investment Position Manual, increase in assets and liabilities is shown with a positive sign; decrease in assets and liabilities with a negative sign. Net financial account balance is calculated as a difference between assets and liabilities. Also, main items in financial account are: 1. Direct investment; 2. Portfolio investment; 3. Other investment; 4. Financial derivatives and employee stock options; 5. Reserve assets.

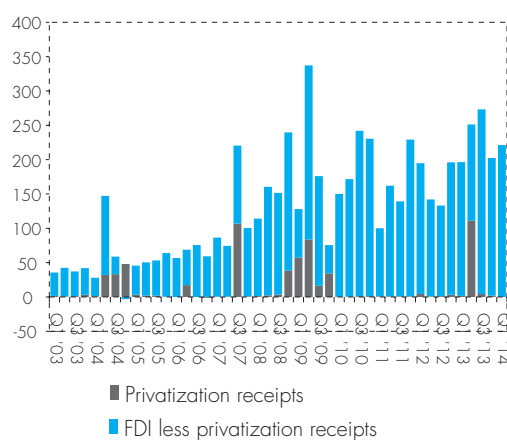
<sup>13</sup> In addition to methodical amendments stipulated in BPM6, total domestic financial assets invested in foreign economies include also the foreign assets (reserve assets).

<sup>14</sup> In accordance with standards laid down in BPM6, direct investments are realised through three main instruments: 1. Capital and shares in investment fund; 2. New invested profit; 3. Debt instruments.

about 16.7% in annual terms. Net FDI as “re-invested” profits” in Albania increased by about EUR 17.6 million at the beginning of 2014. The increase in investments in the form of both instruments is a positive signal in relation to forming foreign investors’ expectations on the performance of the domestic economy and profit investment in future. At the same time, foreign investors reduced their net investments as “debt instruments” in undertaking direct investments, about EUR 21.8 million. In the quarter under review, privatisation receipts<sup>15</sup> with foreign capital provided a modest contribution to total foreign direct investments.

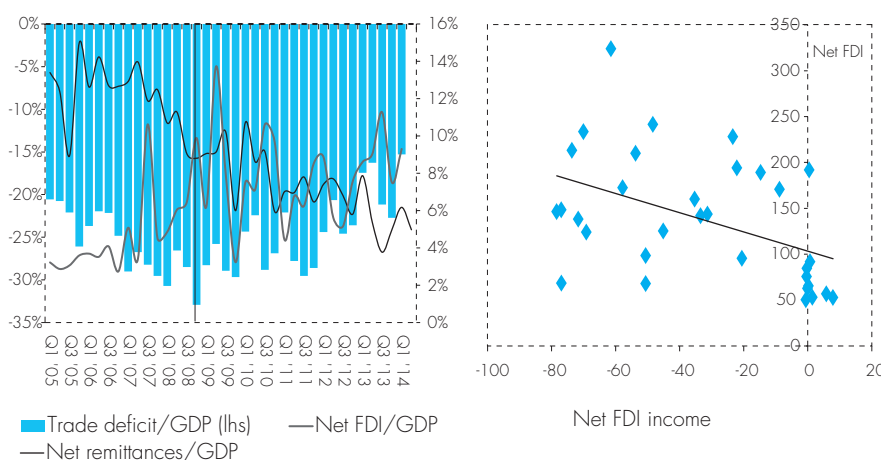
In the long run, FDIs are an important foreign-currency inflow in financing trade and current deficit in Albania. This trend was dominant especially at beginning of 2009, when the importance of other foreign-currency flows in the form of remittances, begun to progressively contract. Similarly to the economies in other countries, in Albania, the attraction of foreign-direct investment is an important element for the long-term stability of the current account deficit and of the stable economic development. In addition to the benefit of creating new jobs, and transferring technology, new management practices and know-how, FDI is considered as non-debt creating foreign-currency flows, difficult and costly to be withdrawn. Since 2013, FDI has been the main financing source of external sector deficit in Albania. In 2014 Q1, the ratio of net FDI flows to recorded current deficit was estimated at 72.4%.

Chart 10 FDI components (flows, in EUR million)



Source: Bank of Albania.

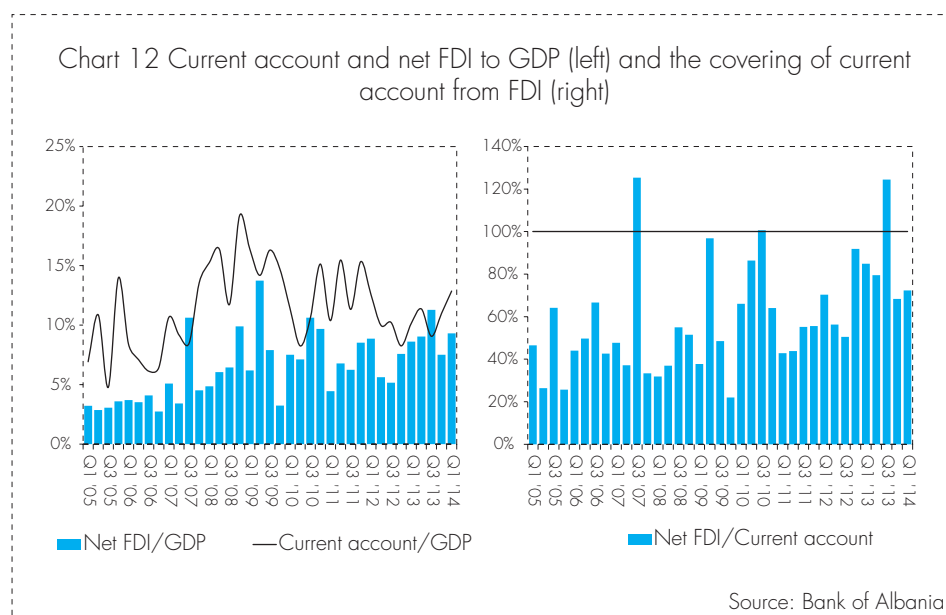
Chart 11 Financing sources of trade deficit (left) and FDI income to net FDI (right)



Source: Bank of Albania.

<sup>15</sup> Based on the Ministry of Finance data.

Related to their profitability, the presence of a considerable and stable outflow in FDI income following the accomplishment of the initial investments and the beginning of profit realisation, serves as a signal for other foreign investors and for a positive and increasing development in future (See Chart 11 (right)). In certain periods (year 2009 and the second quarter in 2013), direct investments increased considerably, due to the realised privatisation receipts of public assets and enterprises (See Chart 11).



Net portfolio investments in 2014 Q1 recorded a positive balance of EUR 3.1 million. Residents' assets (depositing corporates, excluding the Bank of Albania) invested abroad increased by about EUR 8.6 million, mainly in the form of debt securities. Liabilities as portfolio investments stood at EUR 5.5 million, during the period under review, from EUR 6.2 million in the same period a year earlier.

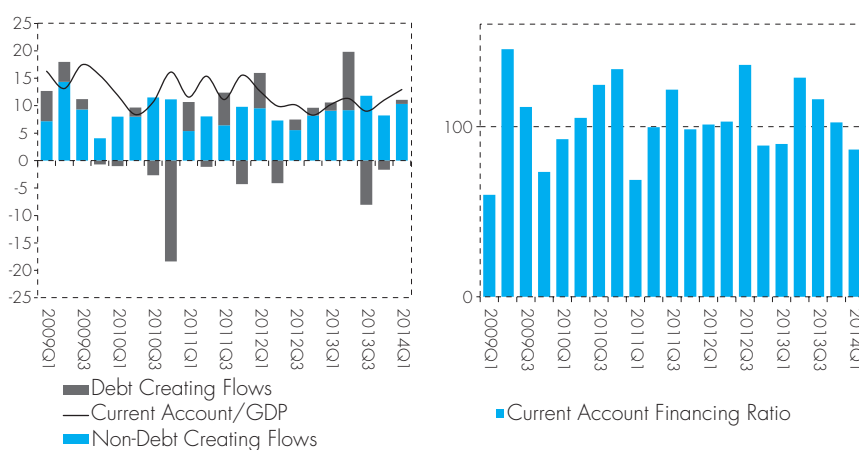
In 2014 Q1, other investment account closed with an increase in liabilities of the domestic economy to non-residents, about EUR 14.1 million. In other investment account, Albanian assets invested abroad increased by about EUR 65.9 million, from the decrease by EUR 0.6 million in the same period a year earlier. On the side of liabilities, non-residents invested in our country about EUR 80 million, from 10.8 million a year earlier. Volatilities in assets and liabilities determined a net negative balance of EUR 14.1 million.

Loans were the main contributors to the performance of net other investments. The main borrower was "other sectors"<sup>16</sup>, followed by "general government" and "depositing corporates". The good liquidity situation in the domestic banking sector was reflected in a net positive balance in "currency and deposits". In net terms, banking system invested about EUR 89.5 million in the form of currencies and deposits abroad.

<sup>16</sup> Here are included the liabilities in non-financial private or public companies (including the debt guaranteed by the Government), non-bank financial institutions, and household's liabilities.

As regards the profile of external debt financing, it is important to monitor the reliance on debt-creating inflows versus more desirable non debt-creating inflows<sup>17</sup>. Thus, in 2014 Q1, non-debt-creating inflows accounted for 10.3% of nominal GDP, about 1.2 percentage points higher than in the same period a year earlier. On the other hand, net debt-creating inflows provided a low impact on financing the current deficit, about 0.7% of nominal GDP. This ratio is about 0.8 percentage point lower, compared to 2013 Q1. The overall financing of the current account deficit is estimated by adding net errors and omissions to net debt-creating and non-debt creating foreign-currency flows. After a complete covering of current account deficit, during the quarter under review, the ratio of current account financing stood at 86.5%, implying a decrease in foreign exchange reserve stock.

Chart 13 Financial debt-creating and non-debt creating flows (to nominal GDP (left)) and the financing of current account deficit (right)



Source: Bank of Albania.

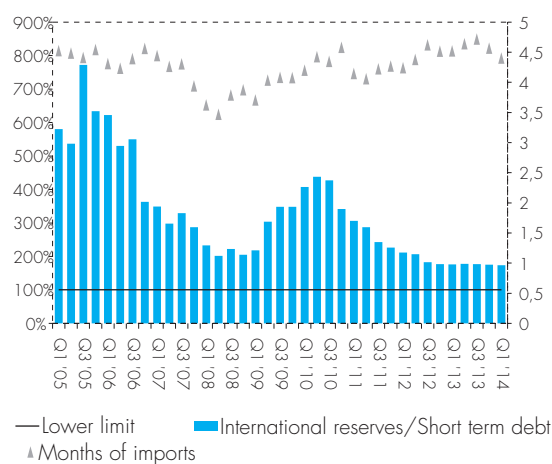
Foreign exchange reserve assets dropped by about EUR 40.3 million at the end of 2014 Q1. This fall was mainly due to the withdrawal of assets placed as “surplus reserves” by commercial banks with the Bank of Albania and partially to the appreciation in the exchange rate. As of end-March 2014, the foreign exchange reserve stock was about EUR 1,98 million, sufficient to cover 4.4<sup>18</sup> months of imports of goods and services. In terms of Guidotti - Greenspan rule<sup>19</sup>, the current foreign exchange reserve stock covers about 173.5% of the short-term debt in Albania.

<sup>17</sup> This breakdown serves to monitor the impact of financial and capital flows on Albanian's external debt. FDI and capital inflows are classified as non-debt-creating flows. Portfolio investment and other net investment are included in debt-creating flows.

<sup>18</sup> Based on “Monetary Policy Document for the period 2012-2014”, as a guarantee to cope with the severe shocks on the real sector of the economy, and in order to safeguard the country's financial stability, the sufficient level of foreign reserve is based on the concurrent observance of these two quantitative criteria: (i) the maintenance, in the medium run, of foreign reserve levels sufficient to cover at least 4 months of imports of goods and services; and (ii) the maintenance, in the medium run, of foreign reserve levels sufficient to cover the short-term foreign debt of the Albanian economy. Source: Bank of Albania.  
[http://www.bankofalbania.org/web/Monetary\\_Policy\\_Document\\_for\\_the\\_period\\_2012\\_2014\\_6346\\_1.php?kc=0,2,9,0,0](http://www.bankofalbania.org/web/Monetary_Policy_Document_for_the_period_2012_2014_6346_1.php?kc=0,2,9,0,0)

<sup>19</sup> The Guidotti-Greenspan rule states that a country's reserves should maintain a foreign exchange reserve sufficient to cover the respective short-term debt. This implies this ratio should be 1:1 or 100%, to face a massive potential withdrawal of the short-term capital. For more about this rule visit: <http://www.imf.org/external/np/pp/eng/2011/021411b.pdf>

Chart 14 Foreign exchange reserve adequacy

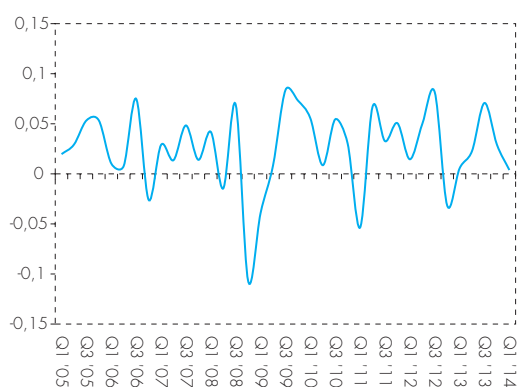


Source: Bank of Albania.

## 5. ERRORS AND OMISSIONS

Due to the problems that may be faced in information sources and during the preparation of statistics in external sector, the balance of payments may have discrepancies. Thus, in the balance of payment statistics, they are summarised in the omissions and errors item, that is calculated as "the rest" (difference between the balance in financial account and the balance in current account plus the balance in capital account). Thus, In 2014 Q1 "omissions and errors" was EUR 8.9 million, about 0.4% of nominal GDP.

Chart 15 Errors and omissions



Source: Bank of Albania.

## GROSS EXTERNAL DEBT ANALYSIS, 2014 Q1

EGLENT KIKA, MERITA BOKA, OLTİ MITRE

MONETARY POLICY DEPARTMENT, JULY 2014

### MAIN CONCLUSIONS

- At the end of the first quarter of 2014, Albania's gross external debt stock amounted to EUR 5,724.5 million. In annual terms, it increased by 2.9% to around 57.7% of nominal GDP.
- By sectoral breakdown, the external debt stock shows an unchanged profile, with the general government accounting for around 40.5%, the deposit-taking corporations 20.7%, other sectors 20.2%, FDIs 17.3%, and the monetary authority 1.3%.
- By investment instruments, 'Other investments' dominate the external debt stock, accounting for around 72.4%, or 0.9 percentage point higher year-over-year.
- By maturity composition, around 80.1% of the external debt stock is long-term debt, remaining at a similar level to the corresponding quarter in 2013.
- By currency composition, around 57% of the external debt is denominated in euro and 14% in U.S. dollar, with the respective shares of the two currencies increasing by around 1 percentage point year-over-year.
- Albania's net external debt is relatively low, estimated at 17.8% of nominal GDP, primarily due to the increase in foreign exchange reserves at a faster pace than the external debt.
- External debt sustainability, as measured by several indicators of long-term repayment capacity, points to increased weaknesses since 2008.
- The ratio of long-term gross external debt to annual exports of goods and services has been higher than the hypothetical optimal benchmark of 150%, since the fourth quarter of 2011.
- Both the net external debt and the foreign exchange reserve-to-short-term external debt ratio do not point to added pressures arising from expected external debt service obligations.
- There is, however, a slight increasing tendency in the funds necessary to service the external debt.

## 1. A DETAILED ANALYSIS OF GROSS EXTERNAL DEBT<sup>1</sup>

At the end of 2014 Q1, Albania's gross external debt totalled EUR 5,724.5 million, up around EUR 70.5 million quarter-over-quarter, and around EUR 161.4 million year-over-year. In annual terms, it increased by around 2.9%, to 57.7% of nominal GDP.<sup>2</sup> At the end of 2013 Q4, this ratio stood at 57.4% of nominal GDP.

The central government has the largest share in total external debt stock, at around 40.5%. Its share in the total external debt stock fell by around 0.4 percentage point from the corresponding quarter in 2013. The central government's external debt stock amounted to around EUR 2,319.6 million, or nearly 23.4% of nominal GDP.

At the end of 2014 Q1, the gross external debt stock of the deposit-taking corporations (except the central bank) amounted to around EUR 1,182.2 million, up around EUR 90.6 million from 2013 Q1.

Other sectors' external debt stock totalled around EUR 1,155.1 million, up around EUR 76.7 million from 2013 Q1, and EUR 74.6 million from 2013 Q4. Its share in the total external debt stock was around 20.2%, increasing by around 0.8 percentage point from 2013 Q1.

The stock of FDIs – intercompany loans amounted to around EUR 991.5 million, down around EUR 37.2 million from 2013 Q1.

At the end of 2014 Q1, around 62.7% of the debt stock (excluding FDIs – intercompany loans) was long-term debt, mainly in the form of loans. For the same period, short-term debt accounted for around 19.9% of total debt stock, mainly in the form of currency and deposits from the deposit-taking corporations (except the central bank). General government and the monetary authority hold only long-term debt, whereas the deposit-taking corporations and other sectors hold a composite portfolio of long and short-term debt.

<sup>1</sup> The latest external debt data are as of 2014 Q1. The previous year's data have also been revised. Starting from 2014 Q1, Financial Stability and Statistics Department at the Bank of Albania compiles the External Sector Statistics in compliance with the international standards laid down in the sixth edition of the IMF's Balance of Payments Manual. Earlier, they were compiled in compliance with the fifth edition (BPM5). The main differences between the two methodologies are synthesised in the guideline "Publication of external sector tables according to BPM6", published by the Bank of Albania at: [http://www.bankofalbania.org/web/pub/01\\_commentary\\_for\\_changes\\_in\\_the\\_publication\\_of\\_external\\_sector\\_statistics\\_according\\_to\\_bpm6\\_june\\_2014\\_6689\\_1.pdf](http://www.bankofalbania.org/web/pub/01_commentary_for_changes_in_the_publication_of_external_sector_statistics_according_to_bpm6_june_2014_6689_1.pdf)

<sup>2</sup> Four-quarter rolling sum of GDP.

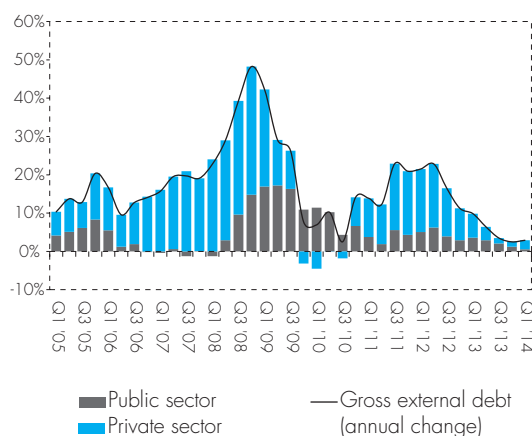


## A) EXTERNAL DEBT BY SECTORS OF ECONOMY<sup>3</sup>

The increase in the gross external debt stock during 2014 Q1 continued to be driven by the deepening total borrowing from the private sector of the economy (deposit-taking corporations, other sectors and direct investments). In nominal terms, the private sector's debt stock totalled around EUR 3.3 billion, up 4.1% year-over-year.

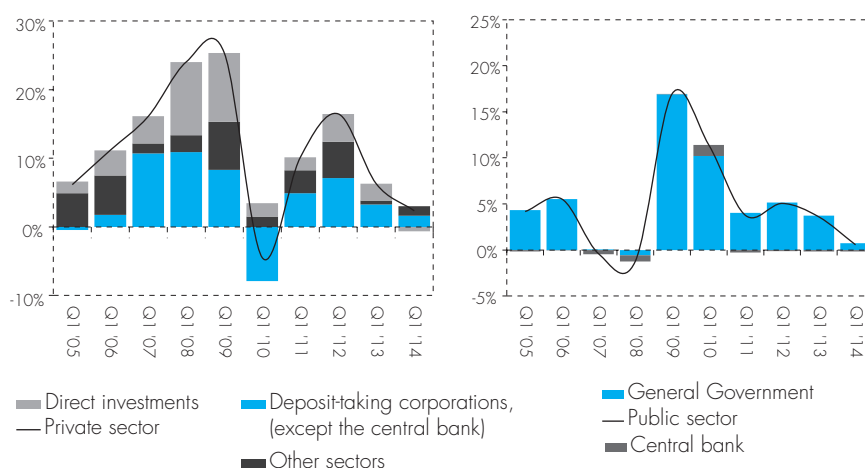
Over the years, the private sector has played a dominant role in the dynamics of Albania's gross external debt stock, except 2009-2010. The three categories within this sector - deposit-taking corporations, other sectors and direct investments - have progressively increased their share in total debt stock and nominal GDP over the years. In 2014 Q1, the deposit-taking corporations and other sectors of the economy made increasing contribution to total gross external debt. Conversely, direct investments made a negative contribution. The public sector's (general government and central bank) contribution to the increase in total external debt stock has been on a downward trajectory since end-2009. In the beginning of 2014, the public sector contributed by around 0.6 percentage point to the increase in total gross external debt. The increased debt in the public sector was driven by the general government, whereas the central bank continued to reduce its exposure to the external debt.

Chart 1 Gross external debt by sector (contribution in percentage points)



Source: Bank of Albania.

Chart 2 Private and public sector debt (contribution in percentage points)

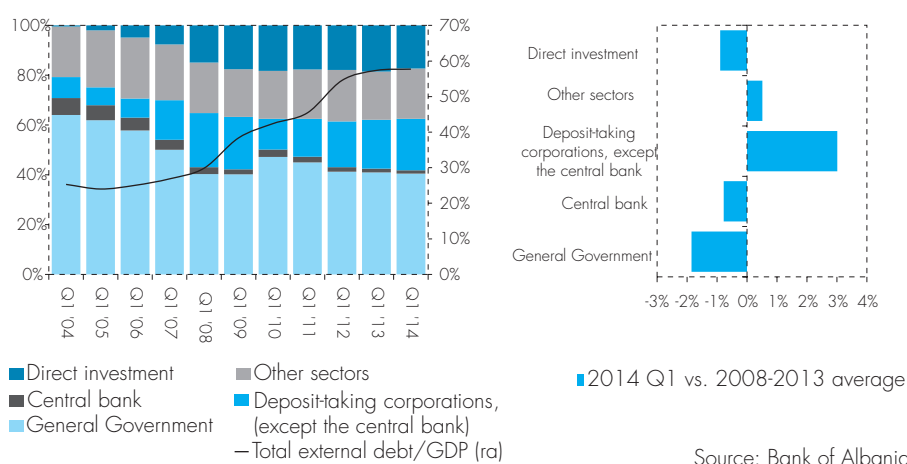


Source: Bank of Albania.

<sup>3</sup> According to BPM6, the sectors of the economy include: 1. general government; 2. central bank; 3. deposit-taking corporations except the central bank; 4. other sectors; 5. foreign direct investments.

In its sectoral breakdown, the external debt stock shows an unchanged profile, with the general government historically having a major share in the total debt stock and nominal GDP. At the end of 2014 Q1, the general government accounted for around 40.5% of the total external debt stock. The rest of the debt stock has been allocated to the deposit-taking corporations (except the central bank) 20.7%, other sectors of the economy 20.2%, FDIs 17.3%, and the central bank 1.3%.

Chart 3 Share of sectors in total external debt stock (left chart); debt stock changes in 2014 Q1 vs 2008-2013 average (in p.p., right chart)



During the last three years, the share of the general government debt in the total debt stock has been estimated at an average of 40.9%, ranging between 40.3% and 41.7%. At the end of 2014 Q1, the general government's external debt stock amounted to ALL 2.3 billion, up around ALL 41.4 million from end-2013 Q1 or around 1.8% year-over-year. It was estimated at around 23.4% of nominal GDP, or 0.1 percentage point lower year-over-year. By maturity composition, the general government continued to hold long-term external debt, mainly in the form of loans, notes and bonds.

The deposit-taking corporations (except the central bank) are the second largest sector in terms of share in total debt stock. The trend of their share in total debt was upward during 2011-12, settling at around 19.0% at the end of 2013. In the beginning of 2014, this sector's debt increased again by around EUR 90.6 million from end-2013, and around EUR 106.8 million from 2013 Q1. The deposit-taking corporations' external debt stock was estimated at around 11.9% of nominal GDP, up 0.7 percentage point year-over-year. Broken down by maturity, the deposit-taking corporations show a clear orientation towards short-term debt. At the end of 2014 Q1, the short-term debt held by the deposit-taking corporations accounted for around 85.3% of this sector's total debt stock.

Other sectors' debt stock accounted for around 20.2% of the total gross external debt stock. Their debt stock has been falling progressively since

2012, to later rise again in the beginning of 2014. At the end of 2014 Q1, the external debt of other sectors of the economy was estimated at around 11.6% of nominal GDP. Broken down by maturity, 88.5% of other sectors' debt stock was long-term debt and the rest, 11.5%, short-term debt.

The external debt stock in the form of FDIs – intercompany loans accounts for around 17.3% of the total external debt stock, and around 10.0% of nominal GDP. During the quarter under review, FDIs' external debt stock fell by around 3.6% in annual terms, or around EUR 37.2 million.

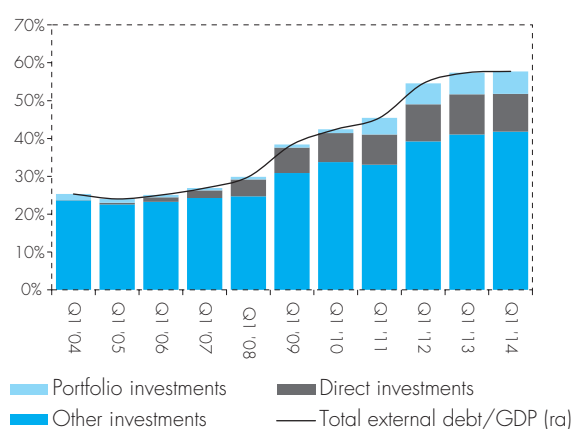
The central bank's gross external debt stock has the lowest share in the total stock compared to the other sectors under review. The monetary authority's liabilities in the form of debt have shrunk continuously across the years. At the end of 2014 Q1, they accounted for around 1.3% of total external debt stock, and 0.8% of nominal GDP. The monetary authority holds only long-term debt, mainly in the form of other debt liabilities and long-term loans.

## B) EXTERNAL DEBT BY INSTRUMENTS

Broken down by instruments, investments in the form of other investments<sup>4</sup> have a major share in total external debt stock, around 72.4%. Within this item, long and short-term loans have the main share (around 72.4% in total other investment stock).

Since early 2008, the share of this instrument in total other investments has been declining in favour of other investment instruments, settling at an average of 71.1% during 2013. Starting from 2010, the share of investments in the form of currency and deposits in total other investments has increased at an accelerated rate. Currently, investments in currency and deposits account for around 17.0% of total external debt stock. Investment instruments, such as trade credits and other debt liabilities, continue to have a small share in total other investments.

Chart 4. Classification of debt stock by investment instruments



Source: Bank of Albania.

The share of FDIs – intercompany loans in total gross external debt has maintained a sustained growing rate across the years. At the end of 2014 Q1, the stock of FDIs – intercompany loans was estimated at around 17.3% of the total debt stock, and around 10.0% of nominal GDP.

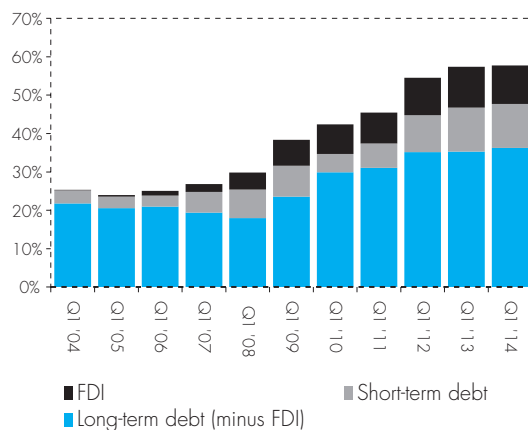
Investments in the form of portfolio investments accounted for around 10.3% of the total gross external debt and were estimated at around 5.9% of nominal GDP.

<sup>4</sup> Other investments include: long and short-term loans, currency and deposits, trade credits and other unspecified liabilities.

## C) EXTERNAL DEBT BY MATURITY

Broken down by maturity, the largest portion of the external debt stock is long-term debt. At the end of 2014 Q1, the long-term debt stock (which also includes FDIs methodologically) accounted for around 80.1% of the total gross external debt stock and was estimated at around 46.2% of nominal GDP. The share of long-term debt, minus FDIs, was estimated at around 62.7% of the total external debt stock.

Chart 5 Debt stock by maturity  
(as a percentage of nominal GDP)



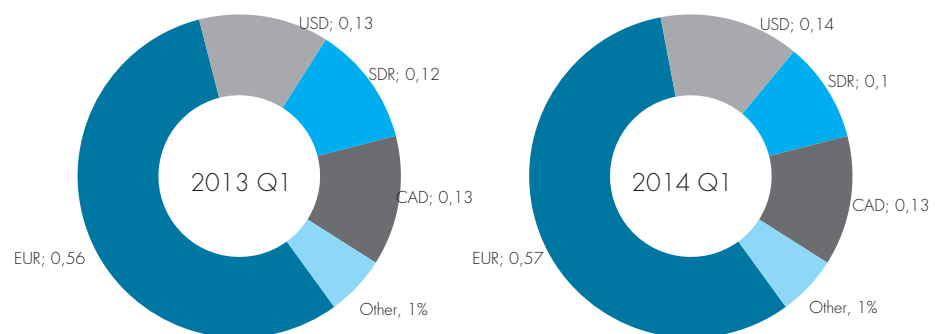
Source: Bank of Albania.

At the end of 2014 Q1, the short-term debt amounted to around EUR 1.14 billion, against around EUR 1.11 billion at the end of 2013 Q1. The share of short-term debt in total gross external debt reached 19.9%. The general government and the central bank hold only long-term debt. The investment instruments used by the central government include loans, notes and bonds. The deposit-taking corporations and other sectors of the economy have a more diversified portfolio, consisting of both long and short-term debt. These two sectors' short-term debt consists largely of currency and deposits, and trade credits and advances.

## D) EXTERNAL DEBT BY CURRENCY

Most of Albania's external debt is denominated in euro, accounting for around 57.0% of the total at the end of 2014 Q1. The share of debt denominated in SDRs<sup>5</sup> in the total stock has been falling progressively in the past three

Chart 6 Gross external debt by currency



Source: Bank of Albania.

<sup>5</sup> Special Drawing Rights (SDRs) are international reserve assets, created by the International Monetary Fund to supplement its member countries' other official reserves. The International Monetary Fund may periodically allocate SDRs to member countries in proportion to their quotas.

years. On the other hand, the stock of debt denominated in U.S. dollar rose substantially during 2013-14, to around 14.0% at end-2014 Q1, from 6.0% at end-2012 Q4.

## E) GROSS EXTERNAL DEBT SERVICE BY SECTOR

During 2014 Q1, total external debt service (principal plus interest payments) amounted to EUR 58.8 million. Of this, around 84.1% was paid in principal and 15.9% in interest. In debt service by sector, principal payments make up the largest portion of payments.

Table 1 Gross external debt service by sector

	Q1 '13	Q2 '13	Q3 '13	Q4 '13	Q1 '14
General government					
Principal	11,7	34,2	13,9	36,8	14,1
Interest	6,1	9,1	6,5	8,8	7,8
New debt	58	86,1	21	18,8	26,6
Private (long and short-term)					
Principal	27	15	11	24,6	22,1
Interest	0,1	1,3	0,3	0,2	0,8
New debt	14,1	6,5	5,3	59,1	104,4
Banks (long and short-term)					
Principal	13,5	16,8	5,7	25,6	10,1
Interest	0,5	0,4	0,4	0,5	0,7
New debt	3	4,4	7	0,4	23,5
Total debt service	62,9	76,9	41,5	96,8	58,8
Total new debt	75,1	97	33,4	78,3	154,6

Source: Bank of Albania.

New external debt disbursements for the entire economy amounted to around EUR 154.6 million in 2014 Q1. Private debt (mostly long-term debt) dominated the new debt disbursements, accounting for around 67.1% of the total new debt disbursements. The general government's new (long-term) debt hit a considerably low level compared to the previous three years, accounting for around 17.2% of the total new debt.

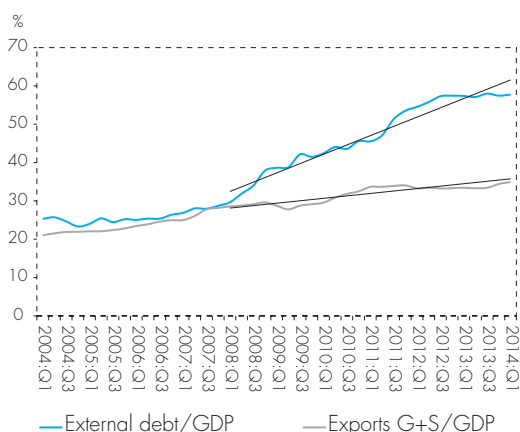
## 2. EXTERNAL DEBT SUSTAINABILITY INDICATORS

The analysis of gross external debt based on the performance over time of its main sub-items by sector, instruments and maturity shows a vertical overview of its profile and evolution, without reaching any substantial conclusions on its dynamics and sustainability. For this purpose, we need to compare the performance of gross external debt against other closely-related economic variables. The indicators used to evaluate the external debt sustainability are generally classified into two categories: (a) indicators that measure a country's continuous and uninterrupted repayment capacity against its international lenders, (b) indicators that measure the adequacy of liquidity in case of obligation to repay immediate liabilities.

## A) INDICATORS OF REPAYMENT CAPACITY

The export of goods and services represents a direct and continuous source of foreign currency inflows into an economy. If viewed in a comparative approach against the gross external debt denominated in foreign currency, it may serve as an analytical indicator that approximates a country's long-term repayment potential and capacity.

Chart 7 Gross external debt stock and exports of goods and services as a percentage of nominal GDP

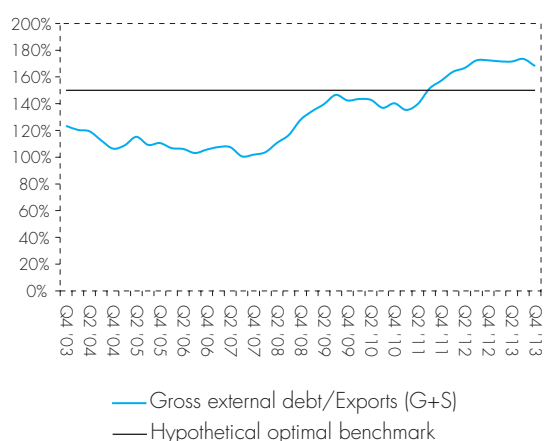


Source: Bank of Albania.

The gross external debt growth at a more accelerated pace than total exports of goods and services signals a country's weaker long-term repayment capacity, which may, in turn, cause a country to face difficulties in meeting contractual external debt obligations in the long run. As of 2008 Q1, the performance of external debt and exports of goods and services as a percentage of nominal GDP<sup>6</sup> for Albania has shown a similar tendency. Beyond this quarter, the gross external debt stock-to-GDP ratio has increased at a more accelerated pace than the exports-to-GDP ratio, providing evidence of the deterioration of this indicator. However, in 2013 Q4 and 2014 Q1, it improved slightly due to the lower gross external debt-to-GDP ratio and, vice-versa, the increased exports-to-GDP ratio.

The relative ratio of gross external debt to exports of goods and services reconfirms the divergence in the above-mentioned trends in the beginning of 2008. This ratio stands higher than the hypothetical optimal benchmark proposed through empirical analysis by the international financial institutions,

Chart 8 Gross external debt to exports of goods and services



Source: Bank of Albania.

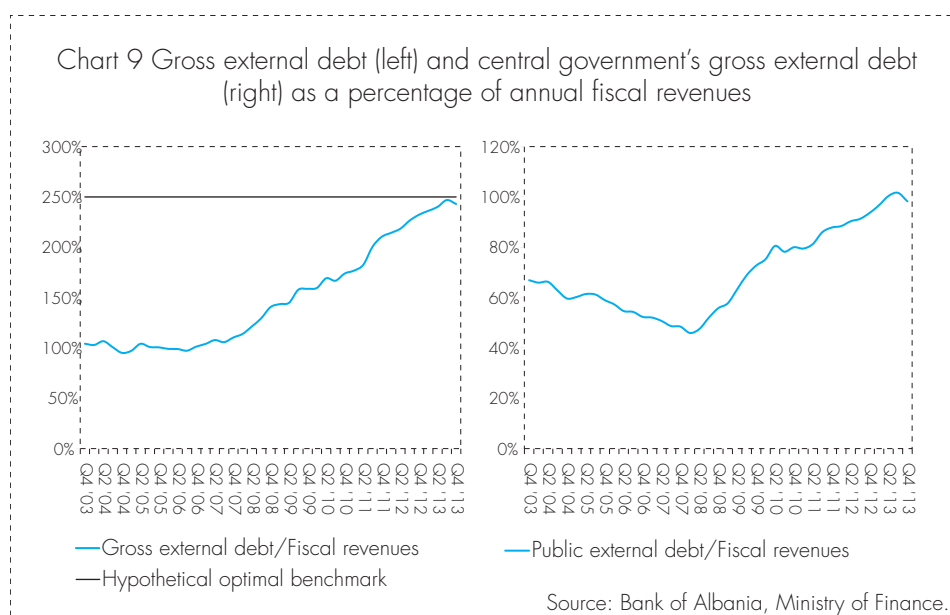
which varies depending on a country's institutional development.<sup>7</sup> The ratio of gross external debt to the exports of goods and services was around 165.3% at the end of 2014 Q1, down by around 6.4 percentage points annually. After reaching a record high at the end of 2013 Q3, this ratio showed a declining trend for the second consecutive quarter, mainly due to increased exports of goods and services.

Paralelly, a country's repayment capacity can be also measured by estimating whether the intake of fiscal revenues is sufficient to cover a certain ratio of the total gross external debt or of the central government's external debt stock. The first ratio serves to signal the central government's capacity to intervene in times of crisis and prevent the country's

<sup>6</sup> The inflows of exports of goods and services and the quarterly nominal GDP have been annualised to ensure that end-of-period ratios to the external debt stock are comparable and consistent. The three variables are denominated in euro.

<sup>7</sup> According to the International Monetary Fund and the World Bank.

loss of credibility across international lenders. Meanwhile the second ratio facilitates the monitoring of the stability of the government's external debt level, which, if too high, may affect the transfer of fiscal revenues from the more efficient expenditures with an effect on the economic performance to external debt amortization. As of the end of 2014 Q1<sup>8</sup>, the ratio of gross external debt to fiscal revenues for Albania was estimated at 240%. After reaching a record high in 2013 Q3, this ratio showed a declining trend in the next two quarters, standing around 10.2 percentage points below the hypothetical optimal benchmark proposed by international institutions.<sup>9</sup> The ratio of the central government's gross external debt to fiscal revenues has also shown a similar performance, reducing from the peak level of 101.7% in 2013 Q3 to 97.2% at the end of 2014 Q1.

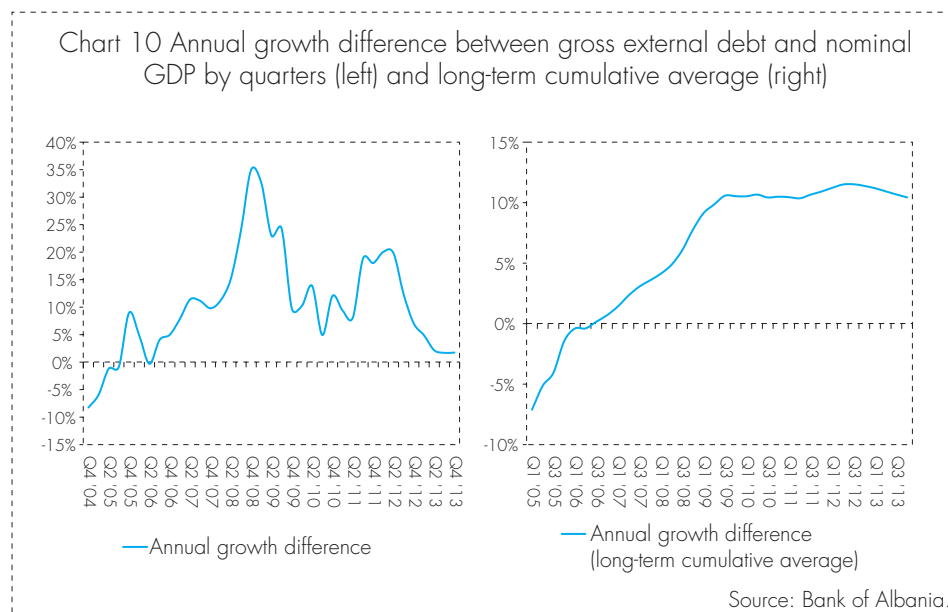


Theoretically, the accumulated external debt may be followed by an accelerated economic growth if its flows are channelled into efficient investment activities and produce value added in the economy. As of 2014 Q1, the difference between the annual gross external debt and nominal GDP does not yet confirm this performance. During 2008 Q1-2009 Q3 and 2011 Q3-2012 Q3, this indicator reached the peak. In the last two quarters, this indicator provided evidence of a difference of less than 1 percentage point between the increase in gross external debt and nominal GDP. At the same time, the long-term cumulative average<sup>10</sup> of the difference between the annual performance of the gross external debt and nominal GDP was estimated at around 10.5 percentage points at the end of 2014 Q1. This average is nearly 1.1 percentage point lower year-over-year.

<sup>8</sup> Quarterly fiscal revenues have been annualised through a four-quarter rolling sum.

<sup>9</sup> IMF (2000), 'Debt- and Reserve-Related Indicators of External Vulnerability', International Monetary Fund, Washington D.C.

<sup>10</sup> This indicator is constructed using the annual growth for each period in time "T" and before that, as a cumulative average. Suppose that there are 12 periods of time in period  $T_{12}$ . Their average provides the cumulative average of the period until  $T_{12}$ . The move to  $T_{13}$  is achieved by adding the value of  $T_{13}$  and averaging it again.



Despite the slight worsening in Albania's long-term repayment capacity since 2008, its performance for the period ahead has been closely linked to both the performance of the domestic economy and the distribution of external debt service over time.<sup>11</sup> Under optimal conditions, external debt servicing should not have a direct negative impact on the economy, which may arise from the allocation of financial resources to this function. At the same time, in order to avoid such a phenomenon, an economy should, at any time, be capable to meet its immediate obligations with respect to the external debt principal and interest payments. The accumulation of arrears on external debt service obligations or continuous payment rescheduling may increase the risk premiums in the economy and exert pressure on economic activity at a later time.

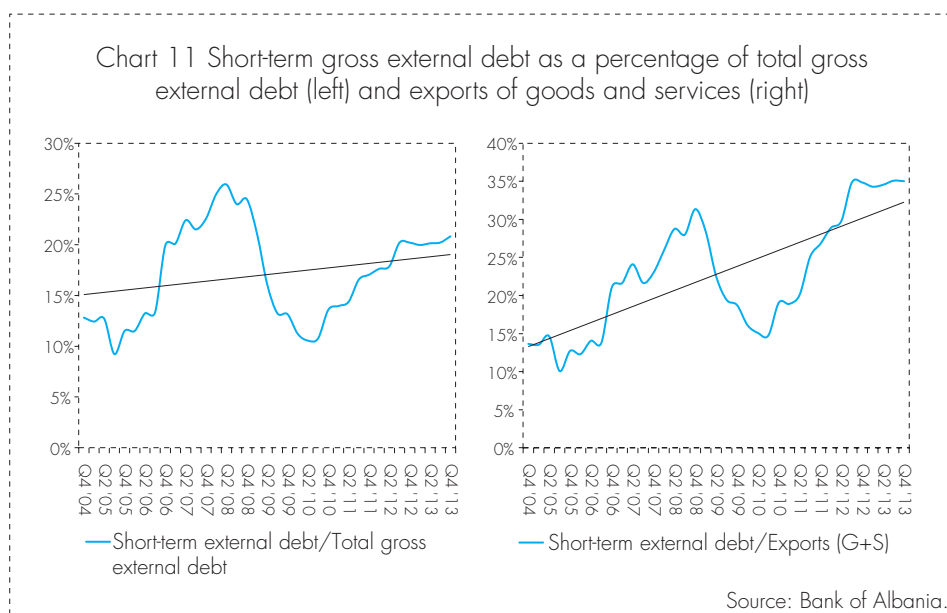
## B) LIQUIDITY ADEQUACY INDICATORS

An economy's liquidity adequacy, which serves to repay external debt obligations, is largely affected by the reliance on short-term external financing. That is, if the use of this form of external financing with a maximum maturity of one year is disproportionately concentrated, the immediate obligations towards the external debt are considered to be high for the year ahead. Albania's external financing profile has been mainly oriented towards long-term debt. The short-term debt has ranged between 9% and 26% of the total external debt stock. During the quarter under review, the share of short-term external debt stock fell slightly to 19.9% of the total stock. The annual inflows from the exports of goods and services managed to cover the short-term external debt entirely. The total short-term external debt as a percentage of total exports of goods and services was estimated at 33% during 2014 Q1.

<sup>11</sup> The country's long-term repayment capacity improves if the economy grows at a fast pace in the future and the distribution of external debt servicing is uniform over time. In the opposite case, a country's long-term repayment capacity indicators deteriorate.

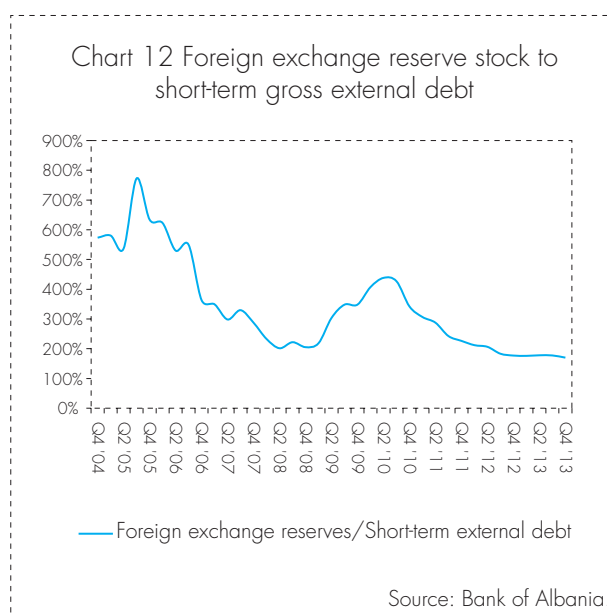


Despite the slight deterioration since 2010 Q4, this indicator provides evidence of the availability of regular foreign currency inflows in covering the short-term external debt.



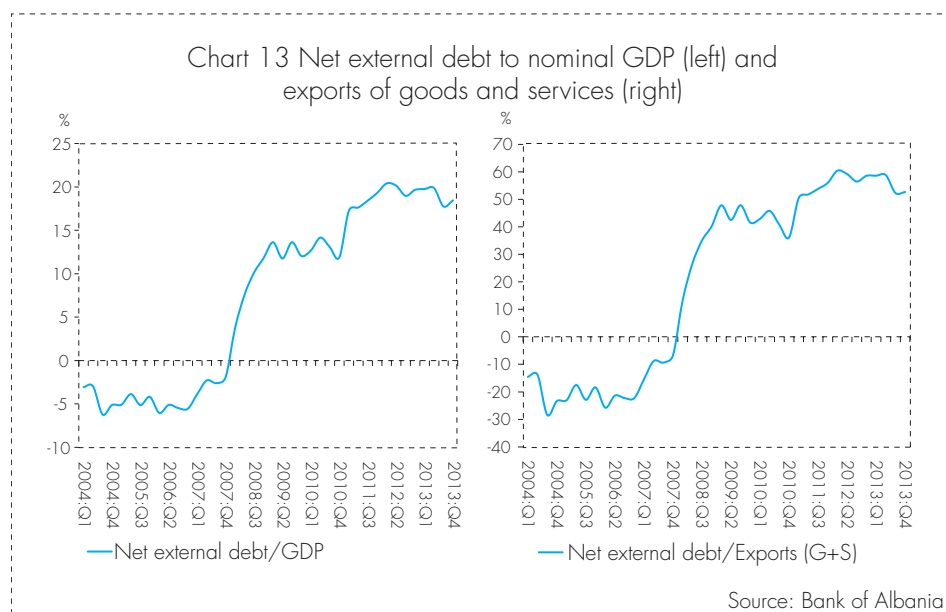
Foreign exchange reserves availability in covering short-term external debt is another important indicator of liquidity adequacy. Against an imperfect access to international capital markets, the adequacy of foreign exchange reserves may help cover short-term external debt obligations. Albania's current foreign exchange reserve level is sufficient to withstand external negative shocks, which may hinder the country's routine capacity to repay its short-term external debt. The critical benchmark of foreign exchange reserve cover of short-term external debt is 100%, and the ratios below this benchmark provide evidence of insufficient foreign exchange reserve stock.<sup>12</sup> In Albania's case, this ratio has never been less than 100%, albeit showing a downward trend. At the end of 2014 Q1, the foreign exchange reserve stock covered around 174% of the short-term external debt, around 2.4 percentage points less than in the corresponding quarter of 2013.

The measurement of the external debt level with a view to identifying the short-term pressures arising from the expected liabilities is achieved by deriving and monitoring the net external debt. The cumulative sum of banks' net foreign assets and foreign exchange reserves is subtracted from the gross external debt. Albania's net external debt is



<sup>12</sup> According to Guidotti-Greenspan rule. For more information: IMF, "Assessing reserve adequacy", 2011.

relatively low, fluctuating below 20% of nominal GDP<sup>13</sup>, mainly due to banks' net foreign assets and foreign exchange reserves increasing faster than the gross external debt. At the end of 2014 Q1, net external debt-to-nominal GDP ratio was 17.8%, around 1.8 percentage points lower year-over-year. Net external debt-to-exports of goods and services maintained a downward trend for three consecutive quarters, being estimated at 50.8% at the end of 2014 Q1.



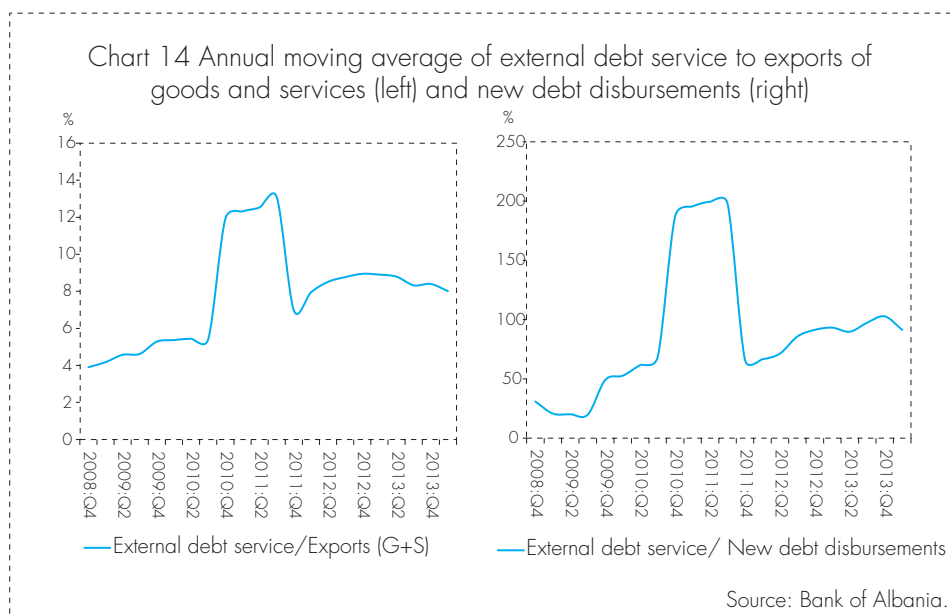
The indicators based on principal and interest payments provide an evaluation of the foreign exchange resources in the economy, which are commonly used to service the gross external debt. They are important in monitoring short-term pressures of external debt servicing and in avoiding the unexpected movement of financial flows from productive activities in the economy to expected amortization disbursements on the external debt. The level of amortization is closely linked to the allocation of new debt in the previous periods but also to the time of disbursement, where lenders may have agreed to a grace period with regards to contractual obligations of principal and interest payments. An important indicator in monitoring the significance and the relative size of external debt servicing is the ratio of the latter to foreign currency inflows from the exports of goods and services. In the case of Albania, this ratio ranges between 2.8% and 10.3%, with 2010 Q4 acting as an outlier, a quarter when the central government carried out high principal payments. This indicator's ratio stands well below the critical benchmark of 20% as suggested by the international organisations.<sup>14</sup>

On the other hand, the ratio of external debt amortization to new debt disbursements measures the extent of debt rollover. A ratio below 100%

<sup>13</sup> By the end of 2012, Albania's net external debt-to-GDP ratio of 19.5% was below the regional countries' average. Net external debt-to-GDP ratio for the countries in the region averaged 30.4% in 2012, ranging from the minimum ratio of -1.3% and 11.5% in Kosovo and Macedonia, to the peak ratio of 59.8% and 50.6% in Croatia and Montenegro.

<sup>14</sup> IMF (2003), "External Debt Statistics: Guide for Compilers and Users", International Monetary Fund, Washington D.C.

indicates larger new external debt disbursements than repayments of old debt. In the case of Albania, the ratio of external debt rollover has averaged 85.8% since 2008 Q1. If we exclude 2010 Q4, which is an outlier, the average falls to 64%. For the entire period since 2008 Q1, this indicator points to a cumulative value of the new external debt disbursements 1.6 times higher than the amortization of previous disbursements. During 2014 Q1, the external debt amortization was 6.5% lower on an annual level, whereas the ratio of external debt rollover was 38%.





## RESEARCH PAPERS\*

*\* The views expressed in these papers are those of the authors and do not necessarily reflect the views of the Bank of Albania.*

## ECONOMIC ACTIVITY AND LENDING: IS THERE EVIDENCE OF DECOUPLING AFTER THE FINANCIAL CRISIS?

OLTA MANJANI

MONETARY POLICY DEPARTMENT

One of the effects of the global economic and financial crisis in Albania and in the countries of the region has been the progressive credit slowdown. Given the long-term positive correlation between lending and economic growth<sup>1</sup>, the gradual slowdown and reduction of credit to the economy eventually became a concern.

In the case of Albania, rates of credit to the private sector have rapidly decelerated. Yet, economic activity recorded positive, though low, growth rates. A similar behaviour has been noted in other economies of Central, Eastern and South Eastern Europe (CESEE). In these countries, re-emerging from one of the most severe recessions in the last decades, the recovery of the economic activity was not accompanied by a recovery in lending activity (EIB, January 2013).<sup>2</sup> In literature, this is known as the decoupling effect. The recovery of economic activity, without a rebound in credit, is also known as creditless growth<sup>3</sup>, suggesting recovery and expansion of economic activity immediately or a few years after a crisis, in the absence of credit.<sup>4</sup> This paper presents some theoretical grounds and evidence of such developments in the world, while trying to research and explain the presence of this phenomenon in the case of Albania.

### Decoupling in world practice

While lending and economic activity are unquestionably positively correlated in the long run, this correlation is not as strong in the short run, especially during the recovery of economic activity after a strong economic and financial crisis. There are at least two reasons for this development. First, from a macroeconomic perspective, lending supports investments and private consumption; however, in the short run, these components of aggregate demand may grow even in the absence of credit. Economic growth, in such a case, may be also driven by other components of aggregate demand - public spending and export growth. On a microeconomic perspective, the outstanding stock of credit may record stagnation or decline, but the dynamics of its flows may be more complex. In the economy and in the banking system, funds may shift from the matured

<sup>1</sup> A detailed overview of the impact of financial development (and credit growth lending) on economic developments, in a cross-country study of 150 countries may be found in the publication of *Financial Structure and Economic Growth*.

<sup>2</sup> European Investment Bank (EIB), *Banking in Central and Eastern Europe and Turkey: Challenges and Opportunities*.

<sup>3</sup> The term *creditless recovery* was first coined by Calvo, Izquierdo and Talvi (2006).

<sup>4</sup> Calvo, Izquierdo and Talvi (2006); Biggs, Mayer and Pick (2009); Bech et al (2012); Takats & Upper (2013).

sectors or those with not-so-good growth prospect towards more productive sectors. In a more micro analysis, the correlation between the credit flow by sector and economic recovery in these sectors is more difficult to be identified and there are often time lags.

European Investment Bank analyses (2013) note that decoupling of these indicators and credit-less recoveries are not rare events, as financial cycles caused by credit shocks tend to last twice longer than economic recessions, whereas economic activity expands even when credit falls. Some empirical studies (Calvo et al. 2006; Biggs et al. 2009; Aghion et al. 2009) show that, in post-crisis periods, the correlation between bank lending and the pace of economic activity recovery loosens. In a study with data from 39 financial crisis preceded by credit booms in advanced and emerging economies, Takats and Upper (2013) also find results at odds with the general consensus that deleveraging hinders economic growth.

Calvo et al. (2006) explains this phenomenon as the output "rising from its own ashes", implying a process where domestic businesses and private enterprises, in the presence of a credit shock, generate liquidity and investment funds not only through credit, but also from alternative sources. In the absence of bank lending, businesses use their own funds, accumulated profit, informal borrowing, or other types of funding. In a study examining data from 25 financial crises, they show that businesses facing liquidity and working capital shortfalls cut on their spending and investments. However, from recession to recovery of economic activity, the capital stock remains unchanged, despite the reduction in investments. A credit-less recovery of economic activity may be sustained through other channels such as fiscal stimulus, expansion of foreign direct investments or export growth. According to Takats dhe Upper (2013), economic recovery is mostly related to improvements of the trade balance. Findings by Calvo et al (2006) suggest that, in periods affected by financial crises, economic activity recovers faster than credit - within three years from peak to trough. Empirical results of Bech et al (2012) confirm that deleveraging is followed by higher growth of economic activity after financial crises. Their main argument lies on the benefits of restructuring and consolidating balance sheets in the post-crisis period. Biggs et al (2009) find also that the GDP growth in the credit recovery phase can exceed GDP growth in the earlier high credit growth phase, even if it takes many years for credit growth to reach its pre-crisis levels. Another argument favouring this economic recovery pattern seems to be the fact that implementing a monetary policy easing favours positively and disproportionately - compared to periods of high interest rates - those sectors of the economy that are most prone to being liquidity/credit constrained (Aghion et al, 2012).

An alternative argument proposed by Biggs et al (2009) suggests that a rebound in the flow of credit has closer relationship with economic activity recovery than a rebound in the stock of credit, especially in post-crisis periods. Although the stock of credit is related to the stock of capital and, subsequently, an important determinant of the level of potential GDP in the economy, developments in the stock of credit "hide" useful information on new flows of credit, which is crucial for understanding business cycles.

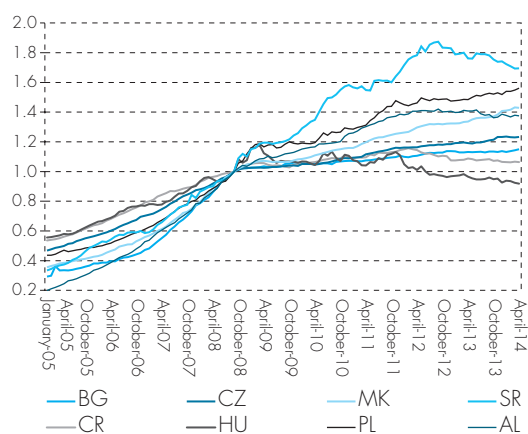
However, the above-mentioned findings and theories present short-term correlations, which are more valid in post-crisis periods. This should not imply that lending is insignificant (Calvo et al, 2006). Abundant literature shows that in the longer term, developments in the banking sector and real sector influence one another.

### Credit-less recovery in the case of Albania

In the pre-crisis years, the rapid credit growth has broadly sustained the expansion of economic activity.<sup>5</sup> In addition, Dushku (2010) finds that there is a positive long-term correlation between economic growth and some indicators measuring financial development in Albania. They include, among others, the ratio of private sector credit to the gross domestic product or to total credit to the economy. However, credit developments in Albania seem to be more complex, and have apparently gone through certain development cycles, which may be grouped in two main phases: pre- and post-global financial crisis. The rapid credit growth in the economy from early 2000s until the outbreak of the global financial crisis at the end of 2008 seems to

be related to the typical boost in credit demand of a fast growing transition/emerging economy, the low financial leverage - typical of a new banking system - and the high presence of European banking groups meeting such growing demand for credit. The same trend has been noticed in most countries of the region. The accelerated credit growth until the end of 2008 and beginning of 2009, at the height of the financial crisis, was followed by slowdown and decline of credit to the economy (see Chart 1).

Chart 1. Credit to the private sector in Albania and some CESEE countries



Source: Bank of Albania and respective central banks.

The rapid credit growth in Albania, more pronounced during 2004-2008, recorded annual growth rates of 50%, on average, during this time. As the global financial crisis effects were spreading, like in most countries in the region and the world, lending in Albania entered a new stage. The Albanian banking system was not

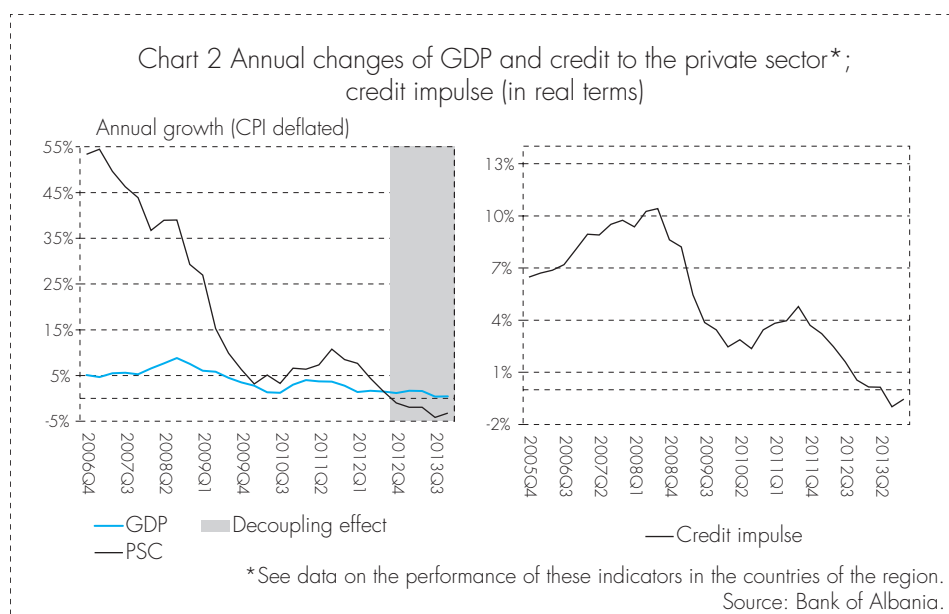
directly affected by the global financial crisis, because it was not directly exposed to toxic financial products, which caused this crisis. However, an immediate consequence of the global financial crisis and its spillover effects on the Albanian economy was the slowdown of bank lending, driven by both supply and demand-side factors.<sup>6</sup> While well capitalised and liquid, banks in Albania significantly reduced their credit to the private sector. Their reluctance to finance economic agents' projects is constrained by uncertainties related to the economic outlook, factorisation of high risk premiums and/or rapid

<sup>5</sup> For an overview and detailed analysis of crediting and growth model during this period in Albania see "Growth in Albania and Southeast Europe: The Way Ahead", Chapter I (Fullani, 2012).

<sup>6</sup> Quarterly and annual reports of the Bank of Albania, non-periodic analyses and research papers.



growth of non-performing loans. Most of the countries in the region have had similar experiences, where changes in operations policies by branches of foreign banks, dictated by parent banks, austerity measures in the regulatory framework and other country-specific factors have contributed to reducing the credit to the economy.



Despite new credit, the stock of credit has steadily slowed down, to be later reduced. Deleveraging has mainly reflected the write-off of non-performing loans and/or other loan and balance sheet restructuring. The quality of credit extended massively during the credit boom period allegedly counts as an additional reason for the lack of correlation between the credit performance and economic activity after the financial crisis. The growth of credit to the private sector - assumedly "good" debt - contributes positively to economic growth. However, the same may not be said about non-performing and inefficiently distributed loans, thus "bad" debt (Takats and Upper, 2013). Hence, the reduction of the outstanding stock of credit to the private sector during this period reflects, in part, the restructuring of balance sheets through the write-offs of non-performing loans - mainly during 2013 - in spite of considerable new credit.

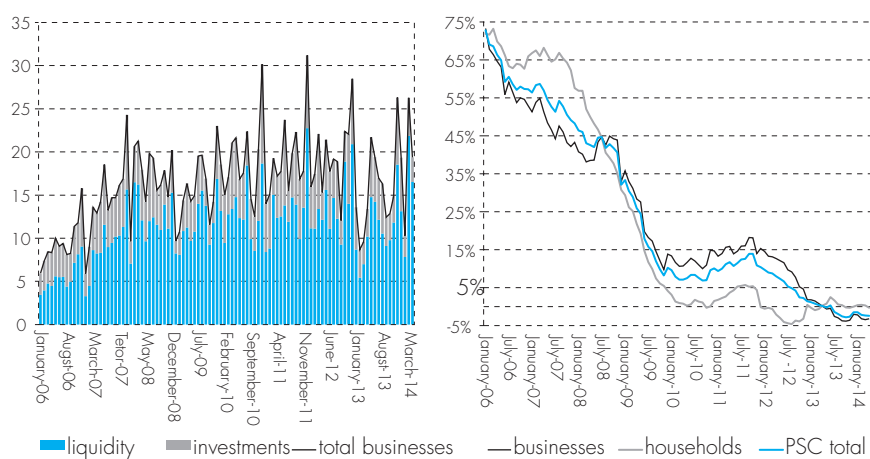
Economic growth in Albania has been sustained by recent fiscal stimuli, as well as growth of exports and foreign direct investments. Economic growth rates remained in positive territory in 2013, whereas the stock of credit to the private sector was down from a year earlier. As shown by empirical studies in literature, financial crises preceded by periods of credit boom lead to faster recovery of the economy

Analysis of economic activity and credit to the private sector by sector

In order to better understand the decoupling of economic growth from private sector credit growth, we may have to take a closer look at the developments in

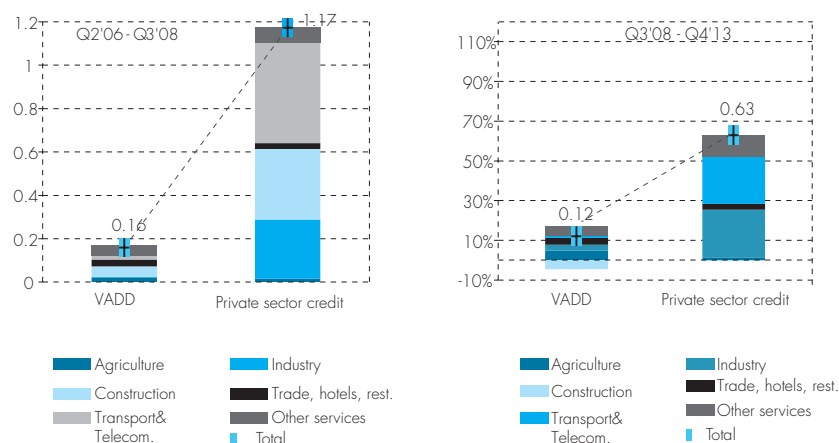
these indicators by sectors of the economy, before and during/after the global financial crisis. New credit flows in Albania have been considerable; mainly as short-term credit to private enterprises for liquidity purposes (see Chart 3).

Chart 3 New credit flows; annual changes in credit stock



In addition, Chart 4 presents an analysis of cumulative developments in two periods; the first one refers to the period prior to the global financial crisis, from 2006 Q2 until the end of 2008 Q3, whereas the second one refers to developments in the subsequent period.

Chart 4 Contribution to value added and credit growth by sector



Economic activity during 2006-2008 was broadly sustained by the banking sector, which financed various sectors of the economy. A structural analysis of economic and financial activity shows that, in general, during this period, the banking sector has financed the fast-growing sectors. Such financing has mainly focused on transport & telecommunications, construction and industry

sectors, contributing 2.0, 4.7, and 0.3 percentage points, respectively, to economic growth for the period 2006Q2-2008Q3, cumulatively. The second period, which refers to the period when global financial crisis began to spread until the end of 2013, experienced structural changes in the economic activity as well as bank lending. These developments are in line with the economic recovery practices in periods of post-financial crisis, in the absence of credit rebound and in line with the new macroeconomic framework. The efficiency in using credit growth to engineer the economic activity growth varies across the sectors. In addition, businesses generate liquidity in times of economic prosperity, which may help them to cope with the lack of bank lending during periods of financial crises.

The industrial sector shows signs of decoupling of the value added from the credit growth to this sector. Despite this sector's high absorption of funds from the banking system in the first period, it has provided marginal contribution to the expansion economic activity for this period. While, in the second period, financing of this sector has been somewhat lower than in the pre-crisis period, its value added to economic activity has been significantly higher. Such performance may be attributed to the specific developments in this sector, related to the credit boom in the pre-financial crisis period. When investments in machinery and equipment financed by a credit occur in period "t", that is in the high credit growth period for the private sector, the benefits of their operating and producing may materialise with a time lag, thus in "t+1". Despite the positive effects of lending to this sector with a time lag, the contribution of this sector to economic growth has been steady and consistent over a long time span of more than five years, such as the second period taken into consideration. The high contribution of the industry sector to economic growth, in the absence of credit rebound, shows that this sector, among others, may have exploited alternative sources of funding.

The agricultural sector has significantly increased its contribution to economic activity compared to the pre-crisis period, given the relatively unchanged funding received by the banking system. Bank lending to this sector has been traditionally low, reflecting problems of informality and its dependence on weather conditions, i.e. overall high risks related to operating in this sector. Against this backdrop, this sector must have expanded using alternative funding sources. Such channels of funding for this sector include the use of own funds, informal borrowing and, to a lesser extent, the use of micro-finance instruments, which remains low in Albania.

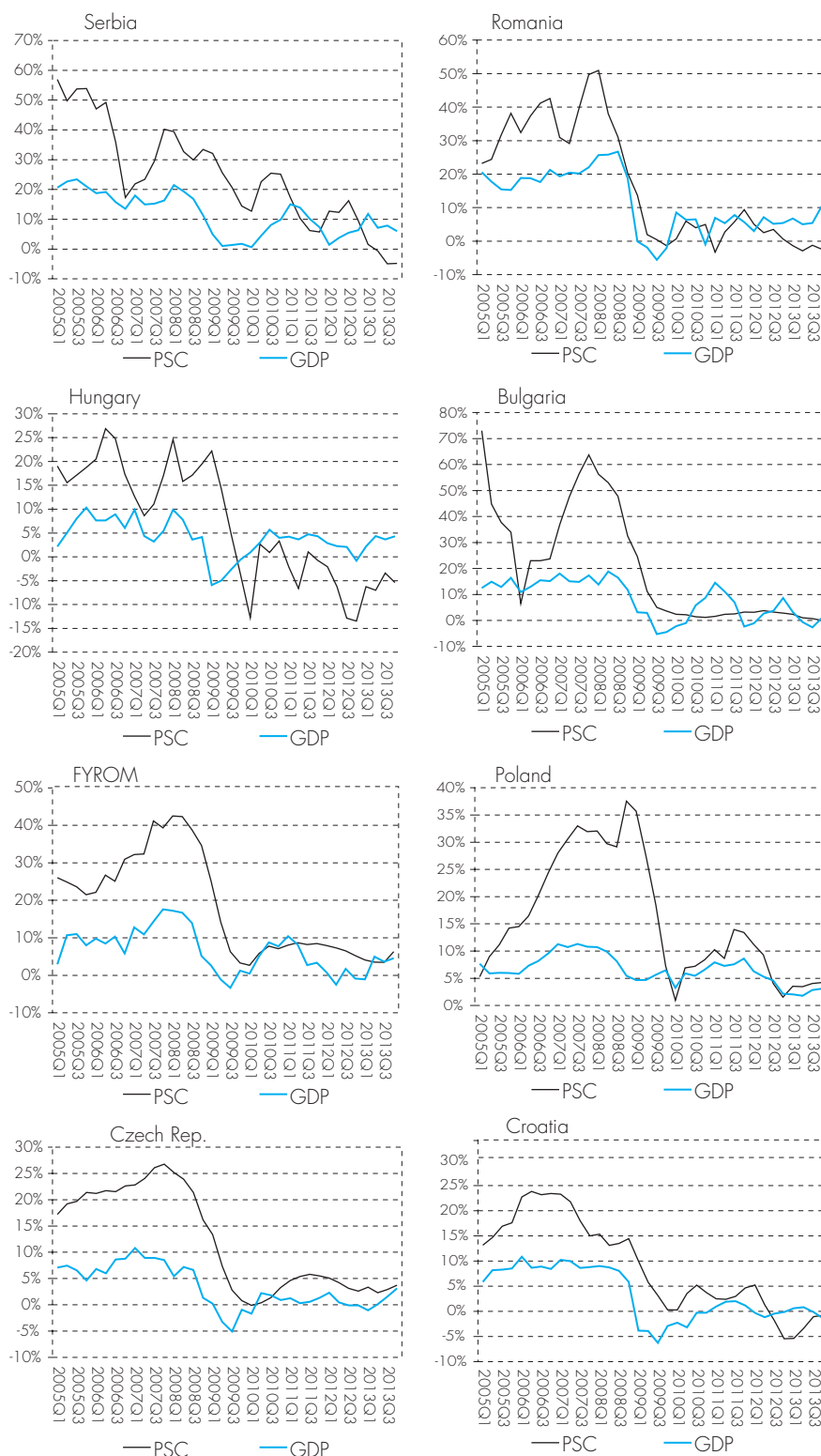
The performance of the transport and post-telecommunication sector also shows a trend of decoupling of the value added from funding through credit. Although lending to this sector has reduced by a half, compared to the pre-crisis period, its contribution to economic activity growth remains significant. In the meantime, developments in the construction sector have changed drastically from the pre-crisis period, recording reduction of the value added and lending to this sector.

### Concluding remarks

Economic theory and illustrations in practice suggest that credit and economic growth have a sustainable positive relationship in the long run, but their correlation in the short run is more complex. Numerous studies have illustrated and explained the phenomenon of their decoupling in the short run, especially in post-financial crisis periods. This paper summarized a part of the most recent world literature that studies this phenomenon and illustrated its presence in the case of Albania. In brief, we may conclude that this phenomenon is present in the Albanian economy: economic growth in Albania is taking place without a rebound in credit and it may continue to do so in the near future. In the long run, eventually, economic growth may and should take place only in the framework of credit growth, despite the degree of capital markets development.

## ANNEX

Chart: Annual GDP and private sector credit growth in some CESEE countries



Note: Growth rates in the chart represent y-o-y growth of the outstanding stock of credit and economic activity, in nominal terms.

Source: Central banks of respective countries.

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# MEASURING FINANCIAL SYSTEMIC STRESS IN THE CASE OF DEVELOPING AND EMERGING EUROPEAN ECONOMIES

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## ABSTRACT

*This article develops a financial systemic stress index and examines episodes of financial stress for developing and emerging economies in the Central, Eastern and South- Eastern European Countries during 2001 – 2013. The financial stress index is built to gauge financial stress in four main markets: banking market, money market, exchange market and real estate market. The obtained index is used to determine the threshold of the financial systemic stress for these countries.*

*Keywords: Financial stress index, financial crises, principal components analysis*

*JEL Classification: C02, C43, G01, G15*

## 1. INTRODUCTION

Systemic Financial Stress (SFS) is defined as a period when the financial system is under strain and its ability to intermediate is impaired.<sup>1</sup> During this period, the SFS episodes tend to be associated with at least four fundamental characteristics: large shifts in asset prices, an abrupt increase in risk and/or uncertainty, liquidity droughts, and concerns about the health of the banking system. The global financial crisis that swept in advanced economies rapidly spread to markets with no apparent vulnerabilities, mostly via the financial and trade linkages. A combination of bank balance sheet fragilities, slowdown in private capital inflows and sharp and huge currency depreciation have been among many negative effects. At the same time, unsustainable macroeconomic policies were accompanied by significant withdrawals in equity and debt funds in emerging economies, while lending by advanced economies' banks dropped, reflecting both a weakened outlook and the need for banks to deleverage. The consequences of these patterns led to an increase in financial stress in developing and emerging markets, followed by a deterioration of the balance of payments and downward economic growth, even recession. These developments prompted calls for mechanisms to avert highly probable events that would interrupt the normal functioning of financial markets.<sup>2</sup>

This article aims to construct an aggregate Systemic Financial Stress Index (SFSI) in the case of Central, Eastern and South-Eastern (CESEE) markets that would be able to identify episodes of deteriorating conditions. Thus, the construction and measurement of SFSI is based on the approach by Holló, Kremer and Lo

<sup>1</sup> Balakrishnan, et. al., (2009).

<sup>2</sup> See also Laeven and Valencia (2008) and Kota and Saxe (2013)

Duca (2012), developed further by Kota and Saxe (2013). This approach is a consistent measure for a wide range of countries. At the same time, this indicator is comprehensive enough to track various events associated with the SFS.<sup>3</sup> Then the threshold on SFSI is calculated as in Balakrishnan, et. al., (2009). The methodology is replicated for 10 developing and emerging market economies in the Central, Eastern and South-Eastern Europe. This index would provide valuable information for policymakers, particularly as a heightened index warrants special attention to a broad part of a country's financial system, which changes with time.

The rest of this article is organised as follows: Section 2 discusses the methodology to construct the ISFS and the threshold level. Section 3 presents the results. The last section summarizes the concluding remarks of the article.

## 2. METHODOLOGY AND THE DATA

This article follows the approach by Holló, et. al., (2012), developed further by Kota and Saxe, (2013), who represent a composite indicator for countries in the euro area and those outside it. The constructed SFSI contains four main components, which are aggregated into a single index to capture the state of the market condition through various financial market segments related to the banking sector, money market, foreign exchange rates and the housing market, expressed as follow:

- Banking-related sub-index components: deviation of the banking system's total loan and deposits from the HP filter; deviation of the net interest margin from the HP filter. The aggregated index is calculated as the principal component of the standardised deviations.
- Securities-market related sub-index components: short-term yield spread (difference between the Albanian 3-month T-bill and the German 3-month T-bill rate); overnight spread (difference between the Albanian overnight spread and the EONIA); volatility of the short-term yield spread and volatility of overnight spread based on EGARCH approach. The aggregated index is calculated as the principal component of these four standardised components.
- Foreign exchange related sub-index components: ratio of CMAX over two years of both the euro and the dollar to domestic currency; volatility of both euro and the dollar to domestic currency exchange rate estimated based on EGARCH approach. The aggregated index is calculated as the principal component of these four standardised components.
- Real estate related sub-index components: deviation of house price index (HPI) from the HP filter and volatility of this deviation based on EGARCH approach. The aggregated index is calculated as the principal component of these two standardised components.

<sup>3</sup> This article does not intend to address the types of events that cause systemic financial stress, but based on Balakrishnan, et. al., (2009), the main purpose is rather to obtain a comprehensive indicator covering a wide part of a country's financial system.



The advantage of using the composition of sub-indexes is threefold. First, the definition of the SFSI is not limited to only a particular type of unstable event, while it allows analysis of central bank reaction associated with various stress sub-components [Baxa, et. al., (2011)]. Second, the sub-indexes are relatively uncorrelated [Cardarrelli, Elekdag and Llal, (2009)]. Third, adding different variables does not affect the final outcome path of the estimated SFSI [Afonso, et. al., (2011)].

The results of the sub-indexes are standardized and aggregated as a sum of normalised value into a single SFSI, using variance-equal weighting for each country and period. This approach adjusts the sub-index stress for differences in volatility [Balakrishnan, et. al., (2009)], while it performs as accurately in signalling stress episodes as in weighting based on economic fundamentals [Illing and Liu, (2006)].

Furthermore, as in the case of Afonso, et. al., (2011), the study is based on a binary variable approach to identify periods that signal rising systemic financial stress episodes corresponding to all the periods. These episodes are considered moments, during which the value of the actual stress is higher than the threshold level. The binary variable takes the value of 1, if the actual value of the estimated SFSI exceeds a threshold level of 1.5 standard deviation, and 0 otherwise.<sup>4</sup> The sample data represent the systemic financial stress patterns during 2000 Q1 – 2013 Q4. This is linked to the willingness to study a relatively consistent time period linked to the introduction of the euro currency, as well as to take into account the constraints related to the availability of data for some countries included in the study. The SFSI is constructed for 10 developing and emerging countries in CESEE, namely Albania, Bulgaria, Croatia, Hungary, Latvia, Lithuania, Macedonia, Poland, Serbia, and Turkey, according to the IMF 2013 classification. The data are taken from the national institutions among which the Institute of Statistic, Central Bank and Ministry of Finance, as explained in Table 1 in the Appendix.

### 3. THE FINANCIAL STRESS ANALYSIS

The estimated SFSI data for the sample countries are shown in charts 1 and 2 in the Appendix. The results suggest a relatively strong visual link between the global financial crises and the rising stress represented by SFSI, starting from the end of 2008, compared with the previous periods in all countries. This is evidenced in the case of identification of episodes related to local factors in each country. Results distinguish between countries that have a high level of financial integration and are part of the European Union (EU) and those that are less integrated. For this reason, the first group includes Bulgaria, Hungary, Latvia, Lithuania and Poland. The rest is included in the second group. Results indicate that the effects of global financial crisis have been more evident and last longer in the first group of countries, except Poland.<sup>5</sup>

<sup>4</sup> See also Balakrishnan, et. al., (2009).

<sup>5</sup> According to Balcerowicz (2000), the Russian crisis and the economic slowdown in the EU dampened demand for Polish exports during the period 1999–2000 and contributed to the growth of Poland's current account deficit. Further to that, Poland experiences a high public indebtedness mainly in the next two years, which as shown is reflected through raising money market stress.

This is related mainly to developments in the banking sector, as a result of the easy credit bubble that began building up during 2004, absorbing record-high losses as well as increasing the capital adequacy level to an all-time-high.<sup>6</sup> The high stress level is observed in the money market and relatively through currency devaluation pressure. Adverse effects associated with the balance sheet of the banking sector anticipate developments in other sectors, while the effects are more evident in countries like Latvia, Lithuania and Hungary.<sup>7</sup>

Countries with less integrated financial markets are affected rather less. This is also seen by the short persistence and smaller magnitude levels of the systemic financial stress presented, even though the dynamics in these countries is less homogeneous compared to the common factors observed in the previous group. Among these countries, Albania did not experience any banking system deteriorating conditions at the early stage of the global financial crises, but faced with increasing negative pressure immediately afterwards. On the one hand, data analysis suggests that stress increase mainly reflects the negative pressures in the money market and foreign exchange. On the other hand, stress persistency has lasted longer in time, although its magnitude has been relatively low compared to other countries.<sup>8</sup> The data show that Albania has experienced negative growth pressures in terms of the systemic financial stress during 2001 - 2002 and 2011 Q3 - 2012 Q1. The former period relates to the uncertainty in the domestic banking system as a consequence of the massive deposit withdrawals from the system after the privatization of the Savings Bank.<sup>9</sup> The latter relates to the worsening of non-performing loan indicators, demand shortage in housing market by households and firms and fiscal patterns.

In the case of Turkey, the index seizes the rising systemic stress moments after the 2001 Turkish economic and financial crisis<sup>10</sup> and after the global financial crises. The effects of the recent crisis appear to be relatively low and less persistent, mainly due to the rapid recovery and economic growth after the crisis in 2001 until the global financial crisis in 2008. Results of ISFS notify that increased systemic financial stress is mainly caused through negative pressures in the money market and stress in the exchange rate market, while the effects of the global financial crisis is materialised in the rising stress in the housing market.<sup>11</sup>

In Croatia, financial market stressful episodes are reflected mainly in the banking sector and the money market, for two reasons.<sup>12</sup> First, the Croatian economy was badly hit by the global financial crisis, reflecting increased

<sup>6</sup> The bubble burst lead to a rapidly weakening economy, resulting in a budget, wage and unemployment crisis.

<sup>7</sup> Data analysing suggest that in the first group bank balance sheet effects have prior rising stress in other counterparts. All the countries entered a phase of fiscal contraction during the second half of 2008 after an extended period of credit-based speculation and unrealistic inflation of real estate values. This might be the reason to the reduction in financial stress.

<sup>8</sup> In the case of Albania, banks were not exposed to toxic assets. The banking system was well capitalized and the Bank of Albania took macro-prudential measures on time to avert negative effects from the crisis and foreign currency lending. See also Shijaku (2014).

<sup>9</sup> Kote and Saze 2013 found the same stress patterns in the case of Albania.

<sup>10</sup> During 2001 crises most of the banks in Turkey relied on high-yield bonds as a primary investment instruments. See also Özatay and Sak (2002).

<sup>11</sup> Such behaviour is also found by Cevik, Dibooglu and Kenc, (2013).

<sup>12</sup> See also Boka, Grgurić, Krznar, and Lang, (2009).

stress as a result of job cuts in the manufacturing sector, the construction sector and the trade sector. Public debt rose continuously, placing more cost to debt servicing, which was immediately transmitted to bank balance sheet effects, as a result of the cessation of lending. Second, the spread of panic over potential problems in parent banks, in the last quarter of 2008, led to a massive deposit withdrawal from the Croatian banks.<sup>13</sup>

Compared with other countries, the systemic financial stress in Macedonia has been relatively low. However, as shown by the respective ISFS's dynamics, the local economy has experienced two moments of deteriorating economic conditions, one during the 2000s and the other during 2008 Q3 - 2009 Q2. The first moment coincides with the Kosovo crisis and internal conflicts.<sup>14</sup> Negative pressures emerged primarily in the money market and the market exchange rate, which are related specifically to higher government spending and the outflow of foreign capital. The second moment is related to the adverse effects of the global financial crises. While the economy was found in good macroeconomic condition<sup>15</sup>, it was not able to avoid the strong adverse effect that came as a result of lower domestic exports and declining capital inflows, as well as deteriorating economic agents' expectations.<sup>16</sup>

Serbia has experienced two moments of rising systemic financial stress, which, as in the case of Macedonia, coincide with the period of the Kosovo conflict and the internal political instability during the early 2000s and the effects of the global financial crisis. During the second period, negative pressures appeared in the domestic currency depreciation, even though their persistence was low due to the strong capitalization and solid liquidity positions of the banking sector, which was further supported by the policies offered by the government in collaboration with central bank.<sup>17</sup> In the following years, particularly in 2010, the credit risk remained the potential risk to the banking system, due to indirect credit risk in foreign currency and high level of exchange rate indexation of banks' portfolios.<sup>18</sup>

Furthermore, the critical threshold values to identify SFS episodes appear in Chart 3 in Appendix. Found results indicate the threshold level varies from 2.7 in the case of Croatia to 4.4 in the case of Hungary. Critical values are higher than the threshold value 2 proposed by Cardarelli, et. al., (2009) and values

<sup>13</sup> As the authors reveal, the stress seems to have been under control, as banks have quickly managed to borrow from their owners (mother banks) to obtain needed funds, especially during the deposit withdrawal in the last quarter of 2008. Further to that, the Croatian National Bank abolished the marginal reserve requirement, which has presented a heavy tax on banks' foreign borrowing during the previous few years, thereby encouraging foreign borrowing by commercial banks as a way of providing necessary foreign liquidity.

<sup>14</sup> See also Bexheti, (2010).

<sup>15</sup> After the two-year period of deterioration of the loan portfolio, at the end of 2010, certain indicators of credit risk noted improvement. See also the NBRM (2009), NBRM (2010) and NBRM (2011) on the Financial Stability Report for the Republic of Macedonia.

<sup>16</sup> The persistence of the financial stress seems to have been short mostly due to the early measures taken by the Macedonian government and the support of the IMF. See also NBRM (2008), NBRM (2009), NBRM (2010), NBRM (2011) on Annual Reports on Financial Stability.

<sup>17</sup> Government subsidies to corporate and household sectors have played an important role in mitigating the crisis that spilt over from advanced world markets

<sup>18</sup> See also the National Bank of Serbia, (2009) and (2010).

estimated in the case of advanced economies by Afonso, et. al., (2011). However, the threshold value is lower if housing market-related components are excluded. In this case, the value ranges from 2.1 in the case of Croatia to 3.6 in the case of Hungary. Data analysis notes that countries like Albania, along with Croatia and Turkey have experienced a lower number of episodes that highlight a higher rate of systemic financial stress versus the threshold level, while countries such as Latvia, Lithuania, Poland and Serbia are the ones that account for a greater number of these episodes. However, their number decreases if housing market-related components are excluded from the overall index, with the exception of Croatia. Further, results suggest that the maximum SFS value was reached over the period of the global financial crisis. Its magnitude varies from 4.4 in the case of Albania to 11.7 in the case of Hungary. Even in this case, the critical value is lower if the housing market data are excluded.

#### 4. CONCLUSION

This article presents a single index able to seize the systemic financial stress in developing and emerging countries in Central, Eastern and South-Eastern Europe. The methodology follows a two-step procedure. First, a comprehensive aggregated index is built based on different time-depending patterns in the banking sector, money market, foreign exchange rates and the housing market, able to capture time events that have high probability of interrupting the normal functioning of financial markets. Secondly, after assessing a threshold value, a binary approach is used to identify systemic financial stress episodes that constitute a high risk to normal market functioning.

Results suggest that the estimated ISFS significantly reflects pressures in the form of systemic financial stress as a result of domestic and global episodes. This index shows a strong visual link between the global financial crisis episode and increasing systemic financial stress at the end of 2008, compared with previous periods for each country that is affected by it. This index can also be appraised in terms of identifying to a great extent for each country high stress episodes that relate to the market interaction with local and regional factors.

The SFSI could be further decomposed by classifying countries into two significant groups. On the one hand, we have those economies that have a closer relationship with the EU and have a better and deeper financial integration and on the other, those economies that are less integrated. With some exceptions, episodes and dynamics of rising systemic financial stress are more homogeneous in countries that are more integrated with the EU. Stress episodes are even more visible and longer lasting in these countries, while stressful moments that followed after the global financial crisis have been preceded in time by a higher increase of stress in the banking sector compared to other sectors. To some extent, this is also observed in the case of EU candidate countries. Among them, the systemic financial stress period has been spread in time in the case of Albania, but the magnitude was relatively low compared with other countries. The threshold level is higher than the level found in developed countries. This indicator is higher for countries in the first group.

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## APPENDIX

Table 1. Data sources.

## Albania

HPI is taken from the Albanian Institute of Statistics; 3-month T-bill rate is taken from the Ministry of Finance; banking system loan, deposit, NIM, overnight interest rate, EUR/ALL and USD/ALL exchange rate are taken from the Bank of Albania.

## Bulgaria

HPI is taken from the National Statistical Institute (NSI); 3-month T-bill rate is taken from the Bulgarian Ministry of Finance (BMF); banking system loan, deposit, NIM, overnight interest rate, EUR/BGN and YSD/BGN exchange rate are taken from the Bulgarian National Bank (BNB).

## Croatia

HPI is taken from the Croatian Bureau of Statistics; 3-month T-bill rate is taken from the Croatian Ministry of Finance; banking system loan, deposit, NIM, overnight interest rate, EUR/HRK and USD/HRK exchange rate are taken from the Croatian National Bank.

## Hungary

HPI is taken from the Hungarian Central Statistical Office; 3-month T-bill rate is taken from the Hungarian Ministry of Finance; banking system loan, deposit, NIM, overnight interest rate, EUR/HUF and USD/HUF exchange rate are taken from the Hungarian Central Bank.

## Latvia

HPI is taken from the Central Statistical Bureau of Latvia; 3-month T-bill rate is taken from the Latvian Ministry of Finance; banking system loan, deposit, NIM, overnight interest rate, EUR/LVL and USD/LVL exchange rate are taken from the Bank of Latvia.

## Lithuania

HPI is taken from the Lithuania Institute of Statistics; 3-month T-bill rate is taken from the Lithuanian Ministry of Finance; banking system loan, deposit, NIM, overnight interest rate, EUR/LTL and USD/LTL exchange rate are taken from the Bank of Lithuania.

## Macedonia

HPI is taken from the State Statistical Office of the Republic of Macedonia; 3-month T-bill rate is taken from the Macedonian Ministry of Finance; banking system loan, deposit, NIM, overnight interest rate, EUR/MKD and USD/MKD exchange rate are taken from the National Bank of the Republic of Macedonia.

## Poland

HPI is taken from the Polish National Statistical Office; 3-month T-bill rate is taken from the Polish Ministry of Finance; banking system loan, deposit, NIM, overnight interest rate, EUR/PLN and USD/PLN exchange rate are taken from the National Bank of Poland.

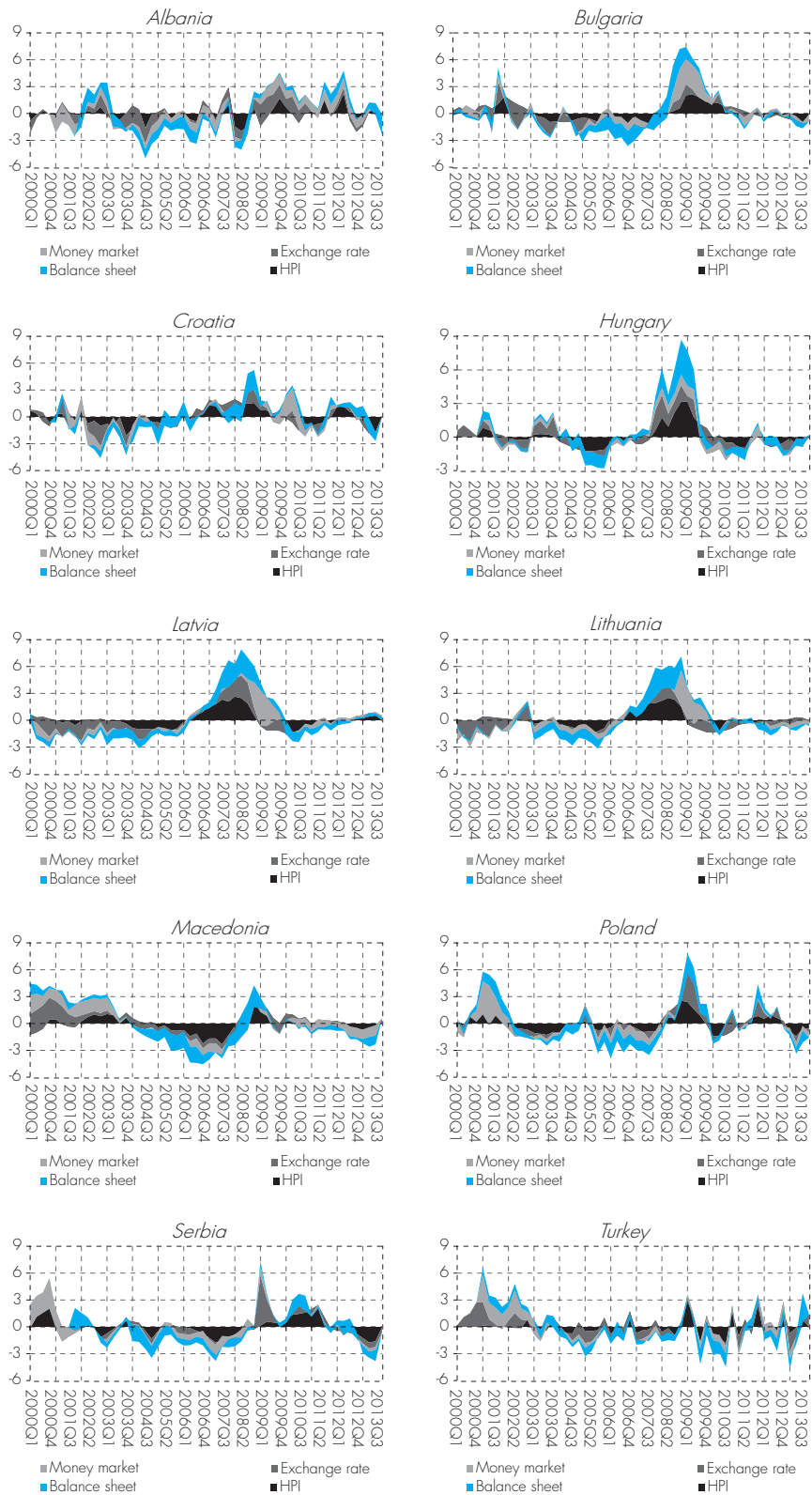
## Serbia

HPI is taken from the Serbian Office of National Statistics; 3-month T-bill rate is taken from the Serbian Ministry of Finance; banking system loan, deposit, NIM, overnight interest rate, EUR/RSD and USD/RSD exchange rate are taken from the National Bank of Serbia.

## Turkey

3-month T-bill rate and nominal public debt are taken from the Turkish Ministry of Finance; HPI, banking system loan, deposit, NIM, overnight interest rate, EUR/TRY and USD/TRY exchange rate are taken from the Central Bank of the Republic of Turkey.

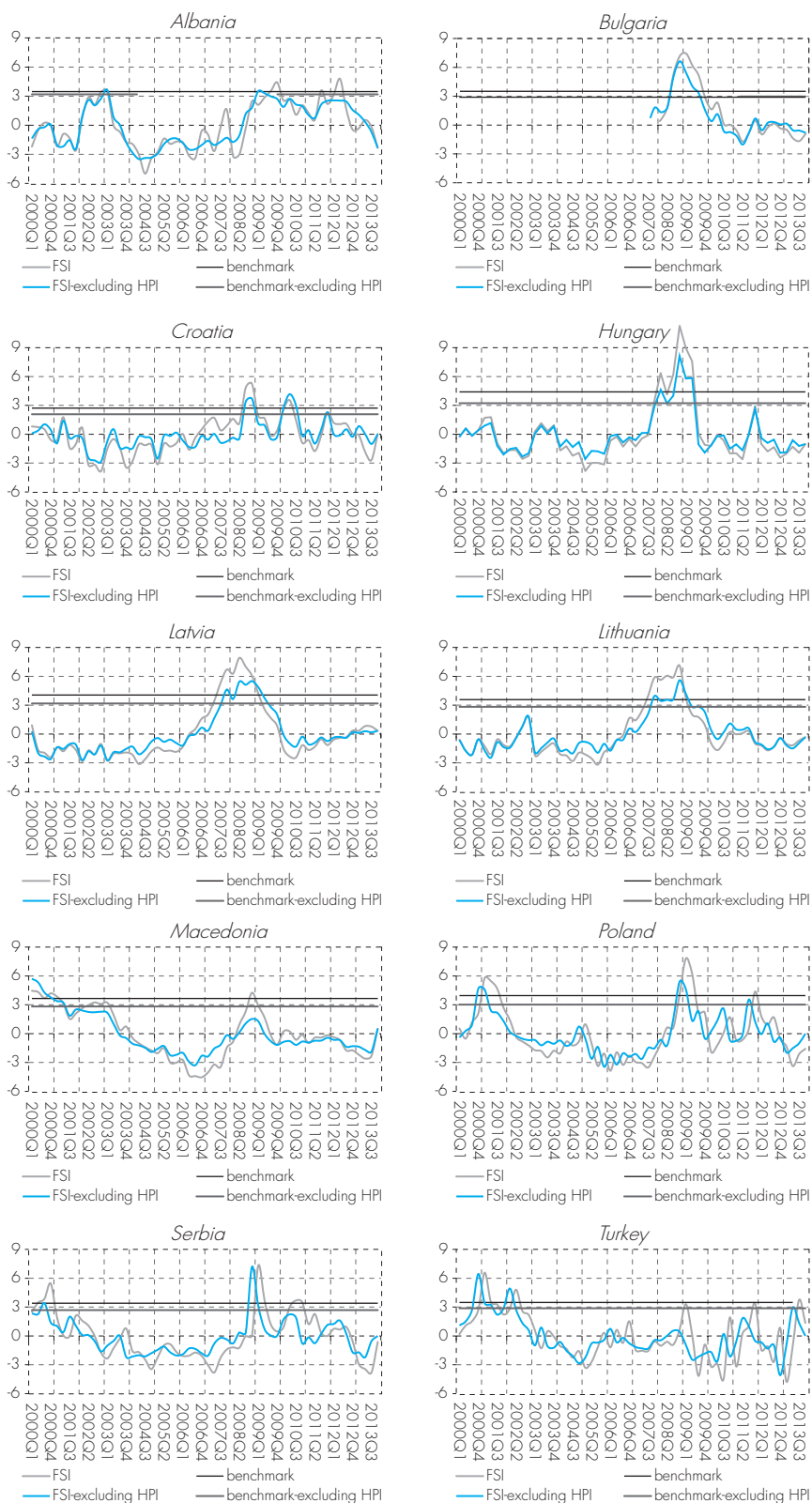
Graph 1 Composite-related Financial Stress Indicator



Source: Author's calculations.

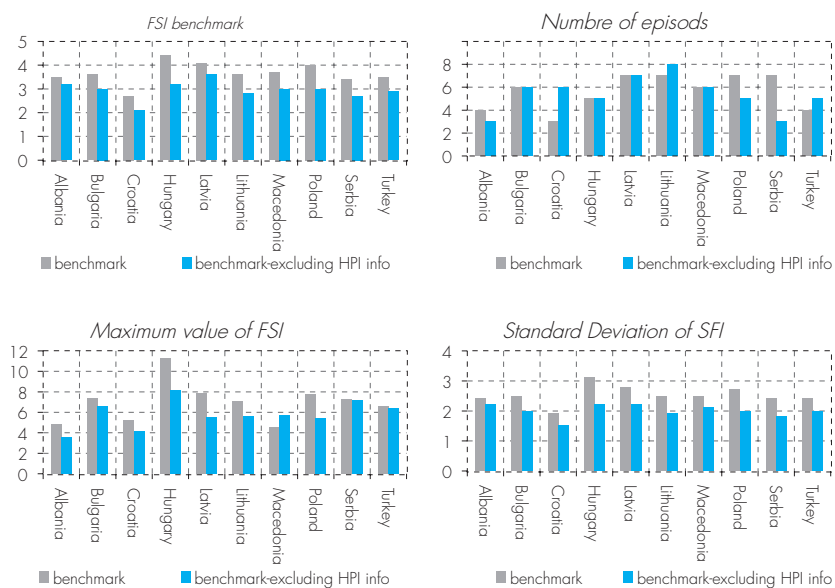


Graph 2 The Financial Stress Indicator and the Estimated Threshold



Source: Author's calculations.

Graph 3 Financial Stress Patterns during 2000 Q1 – 2013 Q4



Source: Author's calculations.

# EVALUATING THE CREDITING ACTIVITY OF MICROFINANCE INSTITUTIONS IN THE ALBANIAN ECONOMY

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## INTRODUCTION

In the context of discussions on the need for diversifying the financing sources and crediting channels for economic agents in the Albanian financial market, the importance of the financing activity of the microfinance institutions<sup>1</sup> has increased in the last years. The MFIs development has raised interest in knowing better and closer the factors and elements of the macroeconomic environment that have influenced this increase in due time. The sustainable development of these institutions and the important role of microfinance in creating access opportunities for financing to more individuals and small-medium enterprises, have constantly been in focus of decision-making at the Bank of Albania.

"The relationship between microfinance institutions and the banking sector, from the point of view of cooperating in financing the economy, is a delicate issue. Their co-existence is without doubts "peaceful", in the early stages of development of these institutions' groups, but while the economy grows and the competition increases, they have the tendency to converge more towards each-other" (A.Fullani, 2005).

But, what was the situation like in 2013? Which is the place taken by the loans disbursed by the microfinance institutions, in comparison with the total credit to the economy? Have these institutions continued to grow thanks to dedicated micro-financial crediting? Are there manifested tendencies for substituting bank crediting with non-bank one, in the circumstances when banks have slowed their crediting to some sectors of the economy?

To better understand the tendencies manifested by the MFIs activity in the economy, this analysis tends to describe and interpret the developments in the borrowing activity of microfinance institutions according to the statistical data they have reported to the Credit Registry of the Bank of Albania, for the period of time between the fourth quarter of 2010<sup>2</sup> and the first quarter of 2013. In order to understand the nature of MFIs crediting, the data are processed, taking as a diving limit the level of ALL 1.5 million<sup>3</sup>. The disbursed loans classification over and under this limit serves to the analysis to create a

<sup>1</sup> According to "Mix Market", the term "microfinance institutions" (MFI), is referred to the financial institutions specialized in microlending, such as non-bank financial subjects, savings-credit unions and licenced microlending institutions. This is also the meaning of the term used in this analysis.

<sup>2</sup> In the fourth quarter of 2010, the MFIs began to report to the Credit Registry.

<sup>3</sup> Referring to the official pages of MFIs operating in Albania, ALL 1.5 million is the highest amount of their financial products categorized as "microcredit" or small business loans.

clearer picture of MFIs borrowing activity features and their crediting focus in dynamics, where we should emphasize that of MFIs, only Non-bank Financial Institutions (NBFI) are licensed to borrow over ALL 1.5 million. The MIX Market database (Microfinance Information Exchange) has served as a complementary source of data on the financial performance of MFIs.

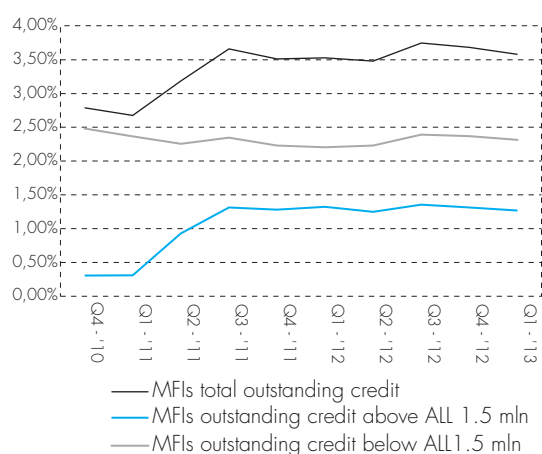
### Non-bank credit to credit outstanding in the economy

The crediting activity of microfinance institutions has followed the total crediting trend in the economy, but during certain time intervals, non-bank crediting has increased faster than bank one. As graph 1 shows, during the first quarter of 2011, total MFIs credit outstanding to credit outstanding in the economy

marked the lowest level (by 2.67%). Striking is the significant increase in the MFIs credit portfolio (by 47.8%) during the second and third quarters of 2011. This increase is reflected in a higher ratio of MFIs credit to total credit outstanding in the economy, to remain within 3.5% - 3.7% until the first quarter of 2013.

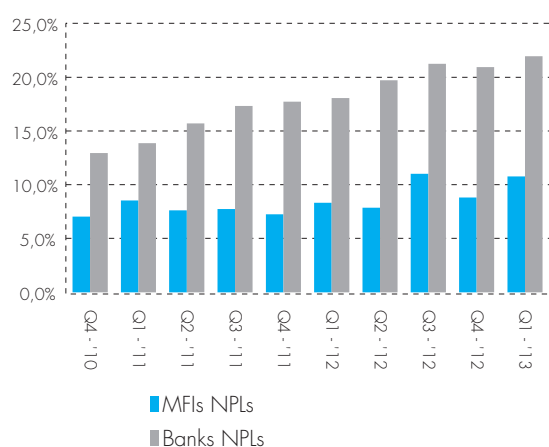
It seems that the new credit of over ALL 1.5 million, disbursed by the NBFIs during the second and third quarters of 2011, has determined the increase by 1 percentage point in the share of MFIs credit portfolio in the total credit portfolio to the economy. Meantime, for the period under review, the credit outstanding in amounts under ALL 1.5 million has decreased, staying at 2.2% - 2.4% to total credit to the economy.

Graph 1 MFIs outstanding credit to total banking system credit



Source: Bank of Albania, author's calculations

Graph 2 Non-performing loans



Source: Bank of Albania, author's calculations.

In terms of total loans, it is worth noting that the number of active loans in the MFIs portfolio was downward during the period under review, mainly due to the drop in the number of loans disbursed by them.

Non-bank credit has performed better than bank credit to the economy during the period under review. While bank non-performing loans have increased continuously, amounting to 21.9% of the total credit for the first quarter 2013, the non-bank non-performing loans have remained mainly in the 7%-8.5% values. It is worth noting that MFIs non-performing loans reached the highest level (11%) in the third quarter of 2012, which coincides with the highest value of credit outstanding in their portfolio (Graph 2).

## Credit by sector of the economy and purpose of use

Referring to microfinance institutions' credit portfolio statistics, trade, agriculture and construction are the most credited sectors of the economy for the period under review, with a share of 2.1%, 18.2% and 8.7%, respectively, in the total credit to the economy. Meanwhile, non-bank household credit has increased. For credits under ALL 1.5 million, the most credited sector is the services sector, while for credits over ALL 1.5 million, the most credited sectors, in value and in number, are transport and warehousing, and processing industry, in addition to construction and trade.

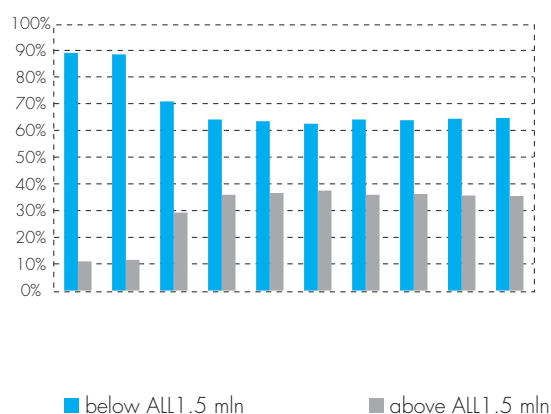
According to the MFI credit outstanding, three main purposes of credit use are investment for equipment purchase, borrowing for activity development and investment in real estate. These purposes also determine the loans of less than ALL 1.5 million.

Referring to the Credit Registry data on non-bank financial institutions, the main purposes of loans over ALL 1.5 million are consumption of long-term reserves and capital exchange, in addition to investment for equipment purchase

## Overview of Microfinance institutions credit portfolio

From the viewpoint of disbursed loans amount, since the second quarter of 2011, the share of credit over ALL 1.5 million has increased in the total MFIs credit portfolio. At the same time, the share of outstanding loans not exceeding this limit has decreased in the portfolio. The non-bank credit portfolio composition in the first quarter of 2013 consists of a share of 35.4% for loans over ALL 1.5 million and a share of 64.6% for loans under this amount, as first seen in the third quarter of 2011. The change in the share of loans over ALL 1.5 million in the total credit outstanding portfolio of MFIs, specifically from 11.5% for the first quarter of 2011 to 35.9% for the third quarter of 2011, mainly due to considerable disbursements of loans over ALL 1.5 million, during the second and third quarters of 2011, could be considered as an important indicator to understand that NBFIs have served as alternative financing sources for economic agents during this period of time, despite the comparatively high<sup>4</sup> interest rates they applied in the market. The total cumulative credit outstanding for loans over ALL 1.5 million disbursed by non-bank financial institutions almost quadruplicated during these two quarters.

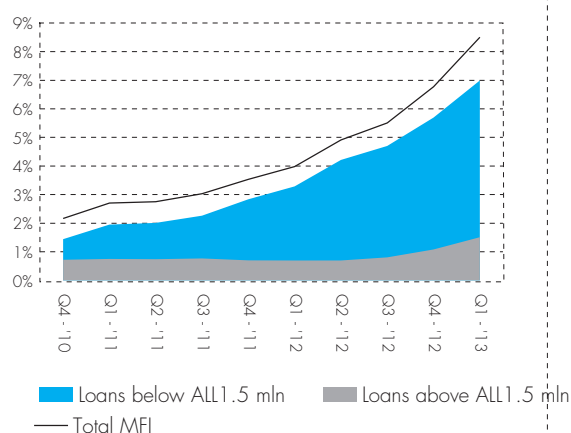
Graph 3 MFIs Credit Portfolio Structure



Source: Bank of Albania, author's calculations.

<sup>4</sup> Comparing the representative interest rates on loans of over ALL 1.5 million applied by a bank and a MFI, the rate applied by the bank varies between 11-18%, while the one applied by the MFI varies between 23-24% for loans with 48-84 month term.

Graph 4 Loans written off the balance sheet



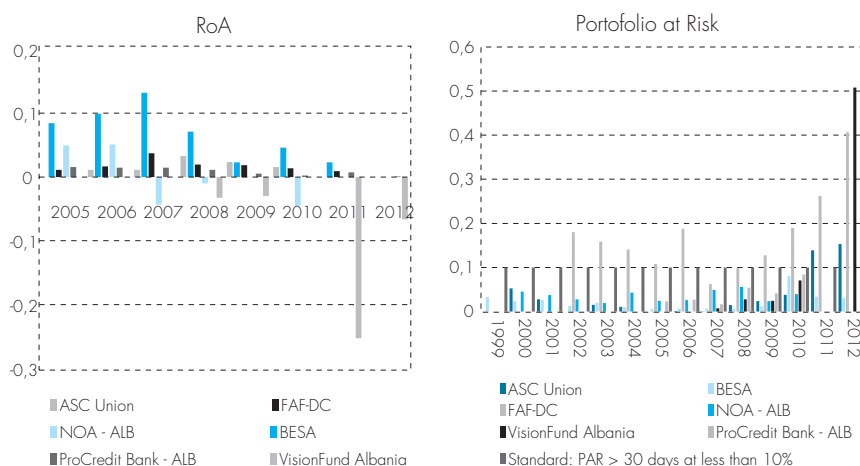
Source: Bank of Albania, author's calculations.

Total credit written off the MFIs balance sheets increased during the period under review. From the fourth quarter of 2010 until the first quarter of 2013, its share in total MFIs credit outstanding increased, mainly influenced in both the value and number by the written off loans under ALL 1.5 million. Considering such an increase as indicator of the disbursed credit quality, it is clear that there is room for added institutional attention to the quality of microlending and its importance in the financial health of microfinance institutions.

Furthermore, the performance of both important financial indicators of MFIs, the Return on Assets (RoA) and the Portfolio at Risk - 30 days, reflects such a situation. Based on annual MIX Market data on microfinance institutions for the period 2007-2012, it is noticed that RoA has been falling,

accompanied by an increase in the Portfolio at Risk -30-days. Though the non-bank credit has performed better than bank credit to the economy, the decline in the quality of non-bank credit in the conditions of rising market insecurity, followed by a deteriorated financial result, are indicators of the specific importance that MFIs' financial sustainability has for the long-term growth and development of microfinance in the economy.

Graph 5 Return on Assets and Portfolio at Risk - 30-days of MFIs, 2007-2012



Source: Mix market.

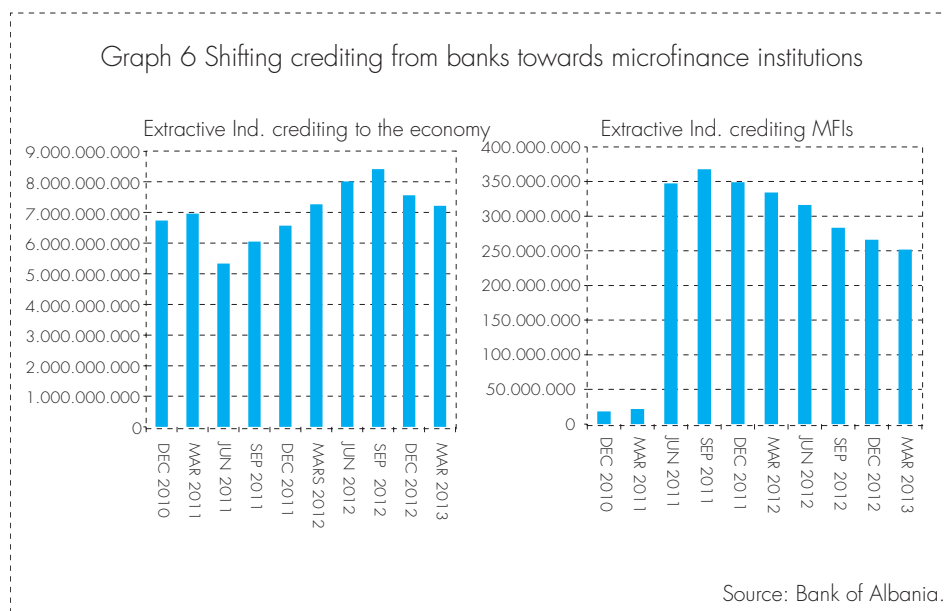
When Banks stop crediting ...  
(MFIs as an alternative for bank crediting)

Analysing non-bank crediting from the banking system point of view, developments in the microfinance market highlight a coincidence between

the slowdown of bank crediting to some sectors of the economy and the acceleration of non-bank crediting to these sectors, in amounts over ALL 1.5 million.

The analysis of crediting activity by the microfinance institutions highlights fast growth of outstanding loans of over ALL 1.5 million during the second and third quarters of 2011, due to crediting by NBFIs. During March - September 2011, this growth accounted for 1 percentage point of total credit to the economy or 47.8 percentage points of total MFI credit. The analysis of crediting by sector of the economy shows a negative correlation between bank and non-bank crediting to some sectors during this period. The decline in bank credit to certain sectors during a quarter is reflected in an increase in crediting to these sectors by microfinance institutions during the same quarter or next quarter. The credit disbursed by MFIs to these sectors has been mainly in the values over ALL 1.5 million.

One of the sectors experiencing such a phenomenon is the extractive industry. In the second quarter of 2011, bank crediting to extractive industry dropped, while the MFIs crediting to this sector quadruplicated and the number of active loans of over ALL 1.5 million for a 3-month term increased from 2 to 40. This period coincides with a considerable decline in Albanian exports of minerals and fuels to international markets and it seems that the deceleration of bank crediting to this sector reflects precisely this market situation.



Construction, transport-warehousing-telecommunication and processing Industry are other sectors, in which the deceleration of bank crediting is reflected into increase in NBFIs crediting in values considerably over ALL 1.5 million during the second and third quarters of 2011..

Table 1: Credit outstanding over ALL 1.5 million, in value and number, for sectors in focus

	March 2011		June 2011		September 2011	
Credit above ALL 1.5 mln	Credit outstanding	Nr. credits	Credit outstanding	Nr. credits	Credit outstanding <sup>ë</sup>	Nr. credits
Extractive industry	8,216,151.65	2	329,093,053.86	40	350,309,470.80	47
Construction	74,244,428.50	20	1,122,050,198.62	131	1,792,738,013.13	213
Transport, storage, telecommunication	26,784,938.32	11	560,572,576.99	66	785,886,521.44	86
Processing industry	80,928,249.67	20	545,655,967.12	94	568,198,539.43	109

Source: Bank of Albania.

A similar phenomenon occurred in the Agriculture sector during the third quarter of 2012, where in response to the deceleration of bank crediting to this sector, the next quarter saw sharp increase in NBFIs crediting to agriculture, in values over ALL 1.5 million, making MFIs credit outstanding reach its peak during the period under analysis.

For each of the abovementioned sectors, it is noted that when the banking system turns to its normal crediting, MFIs crediting to these sectors falls significantly. Hence, at different periods of time, microfinance institutions seems to have served as an alternative source of lending to economic agents, especially during the periods when the banking sector has limited crediting to specific sectors of the economy.

## CONCLUSIONS

The incremental role that microcredit is playing in financing the economic activity of households and small and medium-sized enterprises in different sectors of the economy requires increased attention of policymakers. At certain periods of time, microfinance institutions serve as smoothing mechanisms of misbalances between bank and non-bank crediting.

The Credit Registry data analysis on MFIs crediting to the economy highlights a significant increase in their crediting during the second and third quarters of 2011, as consequence of new credit disbursements in values over ALL 1.5 million. By sector of the economy, the data show a negative correlation between bank crediting and non-bank one in some sectors during both quarters. The decline in bank crediting to these sectors is followed by increase in crediting by non-bank financial institutions during the same quarter or in the next quarter. The data<sup>5</sup> show that NBFIs have financed the crediting activity by using bank loans, in addition to their capital, hence raising the costs of lending to the economy.

During both quarters under analysis, non-bank financial institutions have served as alternative channels of lending to households or businesses, which being unable to borrow from banks in amounts over ALL 1.5 million, have been ready to afford significantly higher costs to finance their economic activity.

<sup>5</sup> The new credit in values over ALL 1.5 million disbursed during the third quarter of 2011 by MFIs, complies with the new credit that the banking system has credited to financial institutions during this quarter.



Considering the declining quality of the financial health indicators of microfinance institutions and their importance for continuous crediting of households and small businesses that can hardly access alternative financing sources, prudential supervision of MFI-s crediting activity remains an important precondition to assure their long-term financial stability.

Therefore, the microfinance institutions should set a new balance between the social development approach and the pure commercial approach, so that microfinance continues to be considered a vital instrument for the development of our economy.

This article seeks to contribute modestly to further researches on understanding the microfinance sector developments in the Albanian economy and to profound analyses from the viewpoint of factors determining high non-bank crediting costs in the economy.

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## GDP, EXPENDITURE COMPONENTS AND DEFLATORS: NEW SERIES, STRUCTURAL BREAK AND QUARTERLY INTERPOLATION IN THE PERIOD 1996-2012

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### 1. OVERVIEW

On May 31st 2014, the National Institute of Statistics (Instat) published the new national account statistics for Gross Domestic Product (GDP) according to the production and expenditure approach for the years 2008-2012. The new series feature a new methodology previously not applied regarding the measurement of nominal values, real values and deflators. According to this new approach, production components reveal several changes compared to the previous data available until 2011. At the same time, expenditure statistics for year 2008 (formerly the last year with known statistics) are different compared to the previous publication. The presence of this new methodology produces a structural break not allowing for series continuity.

This material at first summarizes the differences existing between these new series and the former ones both from production and expenditure side. Next, we move to quarterly nominal and real figures for the period 1996-2012.

Upon generating nominal GDP series (quarterly data), expenditure components are deducted from the total until the moment we obtain the aggregate figure for Population Consumption and Private Investment (for the individual refer to Vika and Abazaj (2014)). Next, we begin the individual deflation of each component in order to obtain real figures (with previous year prices). After eliminating the structural break, series are turned in real terms based on 2010 prices.

Once again, it is important to emphasize that a new methodology has been applied to national account data in the years 2008-2012 (figures for year 2012 are preliminary). This creates a structural break compared to the previous period (1996-2007) and since real data are based on previous year prices, there are no such figures and deflators for year 2008. For this reason, calculation of nominal and real figures for year 2008 are first achieved using the former data (for nominal figures and deflators) and then the transformation based on new data is applied to eliminate the structural break and allow for data continuity.

## 2. NEW NATIONAL ACCOUNT SERIES AND DIFFERENCE FROM FORMER DATA

### 2A. PRODUCTION APPROACH

According to the production approach, GDP is calculated by adding product tax to and deducting subsidies from total sector Gross Value Added (GVA). As mentioned, former data were available until year 2011 whilst the new data cover the years 2008-2012 (with the application of the new methodology). Real figures in previous year prices cover the period 2009-2012 (no real data is available for year 2008). In nominal terms, differences in percentage between the old and new series are shown in Table 1:

Table 1: Changes of nominal terms according to the production method

Year	2008	2009	2010	2011
GVA	0.43%	0.47%	2.84%	1.54%
Tax	-7.94%	-5.32%	-7.13%	-1.71%
Subsidies	0.00%	0.00%	0.00%	-30.32%
GDP	-0.79%	-0.36%	1.41%	1.43%

Source: Instat and own calculations

In all cases, upward recalculations of GVA are associated with downward recalculation for product taxes. Nominal growth rates are shown in Table 2.

Table 2: Production components nominal growth rate (former growth rate in brackets)

Year	2009	2010	2011	2012
GVA	5.64% (5.6%)	8.86% (6.35%)	4.98% (6.32%)	2.32%
Tax	6.74% (3.78%)	5.12% (7.17%)	9.40% (3.37%)	0.14%
Subsidies	-22.77% (-22.8%)	-1.77% (-1.8%)	453.68% (694.6%)	-84.82%
GDP	5.85% (5.4%)	8.37% (6.48%)	4.92% (4.89%)	2.68%

Source: Instat.

According to the data, GVA and GDP nominal growth rates are substantially higher in 2010 (the difference is higher than 2 pp). Differences are also observable in year 2011. In the case of product tax, changes are much higher and that is a consequence of data recalculation. For the first time, the nominal growth rates are published for year 2012 and those are respectively 2.32% (GVA), 0.14% (Tax) and 2.68% (GDP). Sector GVA data also feature changes across the years.

Methodological changes are also applied on deflators. Differences between former and new deflators are shown in Table 3:

Table 3: Production component deflators (former deflators in brackets)

Year	2009	2010	2011	2012
GVA	1.87 (2.07)	4.92 (2.59)	1.75 (3.48)	1.31
Tax	6.04 (1.7)	1.25 (2.8)	5.90 (-1.6)	-0.63
Subsidies	3.21 (3.2)	-28.49 (4.0)	0.21 (766.1)	1.78
GDP	2.42 (2.02)	4.49 (2.61)	2.31 (1.75)	1.04

Source: Instat.

In the case of GVA and GDP, strong deflator differences are again present in year 2010 (differences for the two components are almost 2pp higher). In the year 2008, deflators are not published since calculation of real data with 2007 prices is not possible due to methodology differences. The presence of deflators enables the calculation of real growth rates which are reported in Table 4:

Table 4: Real growth rate of production components, in % (former growth rates in brackets)

Year	2009	2010	2011	2012
GVA	3.70 (3.5)	3.75 (3.7)	3.17 (2.7)	1.00 (1.17)
Tax	0.7 (2.0)	3.8 (4.3)	3.3 (5.0)	0.8
Subsidies	-25.2 (-25.2)	37.4 (-5.6)	452.5 (-8.3)	-85.1
GDP	3.35 (3.3)	3.71 (3.8)	2.55 (3.1)	1.62

Source: Instat.

High deflators for GVA and GDP in year 2010, strongly devalue the rapid nominal growth rate to produce a real growth rate which does not differ substantially from former data. Real GDP growth rate is reported for the first time for year 2012 and it is 1.62%.

## 2B. EXPENDITURE APPROACH

From the expenditure side, we can only mention differences for nominal figures in year 2008 (data was not available beyond this year according to the former statistics). In the case of capital formation, data reports overall figures encompassing both public and private investment. We have deducted public investment from central and local government (obtained from fiscal data of Ministry of Finance) in order to obtain private sector investment.

According to the new statistics, Population Consumption is reviewed upwards increasing by 3.5% compared to previous statistics. At the same time, Public Consumption is reported to be 1.12% higher. Exports and Imports of goods and service also feature changes due to improved conversion from foreign

currency. However, the mostly affected component is private investments which are reported to be 15% lower compared to the previous statistics. Expenditure components are shown in terms of contribution to GDP in the years 2008-2012 (Graph 1). The former structure of year 2008 is also reported (marked as 2008\*).

Due to methodological changes (in terms of overall GDP components), in year 2008, Population Consumption contribution increases by 3.5pp, whilst private investment contribution decreases by 4.3pp. Other components feature smaller differences. Domestic absorption components display reduction in terms of GDP contribution whilst exports and imports show higher shares. Nominal growth rates are shown in Table 5.

Graph 1: Nominal GDP in terms of expenditure components' shares (% to total)

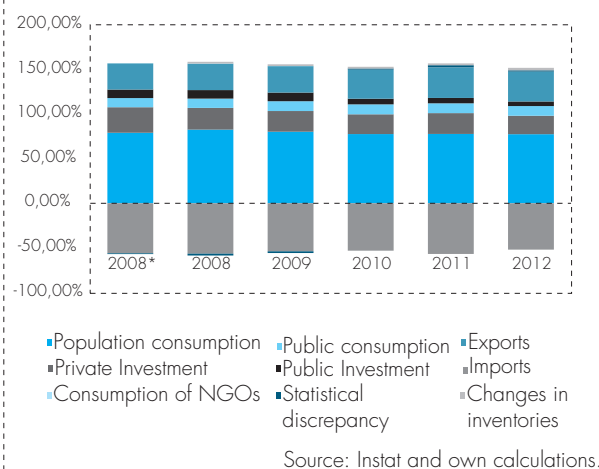


Table 5: Expenditure components' nominal growth rates

	2009	2010	2011	2012
Population Consumption	2.90%	4.71%	5.19%	2.25%
Private Investment	0.12%	3.79%	10.36%	-8.46%
Public Consumption	13.30%	8.83%	3.20%	1.70%
Public Investment	6.75%	-28.81%	1.48%	-14.23%
Exports	5.89%	18.76%	10.01%	0.48%
Imports	0.83%	6.89%	12.29%	-6.12%
Consumption of NGOs	12.96%	8.44%	2.97%	1.80%
Changes in inventories	7.00%	10.20%	14.25%	38.81%

Source: Instat and own calculations.

Table 6, shows real growth rates by component:

Table 6: Real growth rates of expenditure components

	2009	2010	2011	2012
Population Consumption	0.70%	1.66%	1.78%	0.72%
Private Investment	3.74%	3.97%	0.65%	0.53%
Public Consumption	0.98%	-8.47%	5.94%	-11.26%
Public Investment	4.35%	16.77%	7.41%	-0.64%
Exports	-1.32%	0.64%	6.13%	-6.58%
Imports	3.52%	3.60%	0.42%	0.62%
Consumption of NGOs	6.94%	10.20%	11.01%	37.68%

Source: Instat and own calculations.

The presence of the new methodology creates a structural break in year 2008. This does not allow for continuity. The availability of sufficiently long series is crucial for modeling. For these reason, beginning from the next section, we explain the entire interpolation approach for nominal, real and deflator data from the production and expenditure side in the years 1996-2012. Also, we explain the procedure followed in the elimination of the structural break. In the case of constant terms, the series are first generated based on previous

year prices and later transformed fixing a base year. As base year we have chosen year 2010 considering that Instat applies the same base in quarterly data (according to the last edition of quarterly data, 2010 is applied as base year for constant terms).

### 3. PRODUCTION SIDE GDP – NOMINAL AND REAL SERIES (PREVIOUS YEAR PRICES)

#### 3a. Data

According to the production formula, GDP is calculated as follows:

$$\text{GDP} = \text{GVA} + \text{product tax} - \text{subsidies}$$

The data employed in our calculations are shown in Table 7:

Table 7: Production side data

Data	Frequency	Nature	Period	Source
Nominal GVA	Yearly	Total and by sector	1996-2012	Instat
Real GVA	Yearly	Total and by sector	1997-2012	Instat
GVA deflators	Yearly	Total and by sector	1997-2012	Instat
Nominal tax and subsidy	Yearly	Total	1996-2012	Instat
Real Tax and Subsidy	Yearly	Total	1997-2012	Instat
Deflators for tax and subsidy	Yearly	Total	1997-2011	Instat
Real GVA	Quarterly	Total and by sector	2005Q1-	Instat
Nominal tax and subsidy	Quarterly	Total	1998Q1-	Ministry of Finance

Note: Real data based on previous year prices

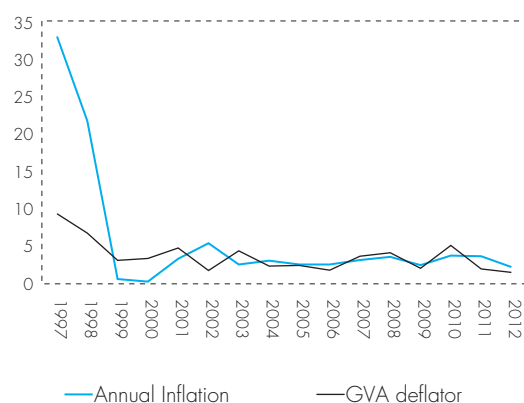
#### 3b. Nominal and real quarterly GDP – 2005-2012

In this part of the calculation we employ two sets of data. Quarterly nominal data for GVA is available in the years 2008-2012. Data in real (previous year) prices is available for 2009-2012. Real data is available in quarterly terms since 2005 but they are calculated based on the former methodology (quarterly nominal data is not available). Deflators are also available in annual terms according to the previous methodology. Therefore, we take quarterly data for the years 2009-2012 as they are published. Quarterly interpolation is applied on real data (based on the previous methodology) to obtain nominal figures in the years 2005-2008.

In the first step we calculate nominal quarterly GVA. Real term series are available in quarterly fashion whilst deflators are only available in annual terms. In this sense, it is required that we interpolate the GVA deflators. According to available statistics, we observe a close relationship between GVA deflator and annual inflation. This is illustrated in Graph 2.

The close relationship is better visible in the years 1999-2012 with certain deviations in the previous period. Based on this similarity, quarterly inflation series is employed to interpolate GVA deflators. Quarterly deviations of inflation figures from annual average are applied to achieve this process. Quarterly GVA deflators are applied on annual data to obtain nominal figures. Small correction are also committed to ensure the correspondence between aggregate quarterly data and annual total available from statistics (deviation are due to deflator rounding). Nominal quarterly product taxes are added and product subsidies are deducted from nominal GVA to obtain quarterly nominal GDP figures.

Graph 2: Average inflation and GVA deflator



Source: Instat.

Regarding real GDP data is necessary the quarterly interpolation of tax and subsidy deflators available only in annual terms. Since we have not encountered a proper index to achieve this, we have assumed that the real distribution is same as the nominal distribution (nominal tax and subsidy figures are available quarterly from fiscal bulletins). As in the case of nominal GDP, real GDP is calculated by adding real taxes and deducting real subsidies from real GVA.

### 3c. Nominal and real quarterly GDP – 1996-2004

Before 2005, quarterly real GVA is not available. Only annual total and sector data is available. Between 2005-2011, we observe a strong seasonality in sector GVA (almost for all sectors). Accordingly, we calculate an average annual distribution for each sector in the years 2005-2012 which is then applied to interpolate the respective GVA figures. In this way, sector figures in the years 1996-2004 display the same seasonality as in the years 2005-2012. Sector figures are added to obtain aggregate GVA.

In the following step the procedure is the same as the one applied in the years 2005-2012. Extra assumptions are associated with tax and subsidy distribution in the years 1996 and 1997 when data is unavailable. In these two years, we assume that data distribution was the same as in 1998. At the same time, real figures are assumed same as nominal figures in year 1996 (there is no real data for this year). Ultimately, up to this point we have obtained GDP nominal and real data (based on previous year prices).

## 4. EXPENDITURE SIDE GDP

## 4a. Data

Expenditure component calculation takes in consideration the overall GDP figures determined in the previous section. Available components are deducted from to the total until we obtain the combined aggregate of Population Consumption and Private Investment. Available data are shown in Table 8.

Table 8: Expenditure side data.

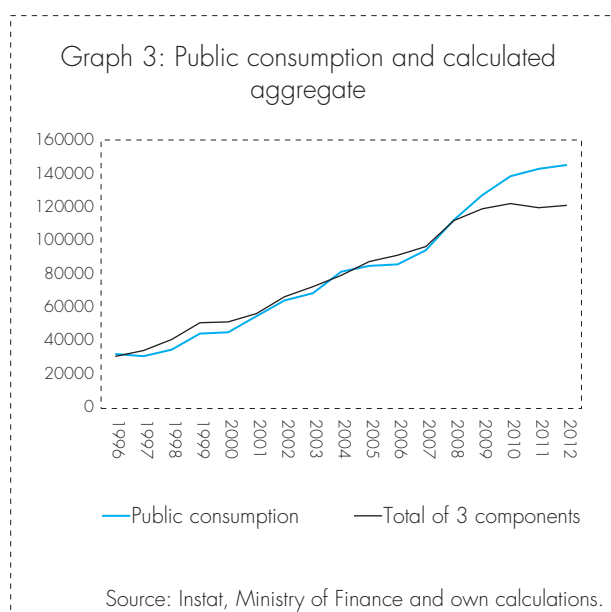
Item	Frequency	Period	Source
Nominal, real and deflator data for all components	Annual	1996-2012	Instat
Nominal central government capital expenditure	Quarterly	1998Q1-	Ministry of Finance
Exports of Goods (nominal)	Monthly	1996-	Instat and Bank of Albania – current account
Exports of services (nominal)	Monthly	1996-	Bank of Albania – current account
Imports of goods (nominal)	Monthly	1996-	Bank of Albania – current account
Imports of services (nominal)	Monthly	1996-	Bank of Albania – current account

Note: Real figure are on previous year prices

In those cases where quarterly data is not available we conduct individual interpolation for nominal figures. In the next step, we interpolate the respective deflators (if not available in quarterly terms). The next section explains the approach applied in generating nominal series for the expenditure components.

## 4b. Quarterly nominal figures for expenditure components

## 4b.1 Public Consumption



Instat data covers annual publications for the period 1996-2012. Public consumption consists of salaries and operational and maintenance expenditure at both central and local level. In the case of the central government, data is available in both annual and quarterly terms, whilst in the case of local government we only have overall expenditure data. Graph 3 shows published public consumption and the aggregate of salary, operational expenditure and local government expenditure.

There is a close relationship until year 2008. However, in the aftermath public consumption is substantially higher compared to the total of the three components from current expenditure. That



could be related to the structural break featuring the new national account statistics. Independently, the quarterly distribution of the aggregate is applied to interpolate the annual figures of nominal public consumption. In the years 1996 and 1997 (quarterly public expenditure data is unavailable), public consumption is interpolated as in year 1998.

#### 4b. 2 Public investment expenditure

Public sector capital formation consists of central government and local government contributions. Quarterly data are available for the central government (since 1998) but only annual data is available for the local government. Due to data unavailability, nominal capital expenditure figures from the local government are interpolated based on central government distributions across the years. Individual series are aggregate to obtain overall public capital expenditure data. As in the case of public consumption, the unavailability of quarterly data for the years 1996 and 1997, dictates the application of 1998's distributions to fulfill the interpolation.

#### 4b. 3 Exports

In the case of Exports of Goods, we use the statistics from Instat available in monthly terms for the years 2005-2012. Before 2005, we apply data from Bank of Albania available in terms of United States Dollars. Nominal figures are converted into Lek applying the average monthly exchange rate and data is aggregate to produce quarterly series.

In the case of imports of goods we only use monthly data from the current account which are once again converted by applying the lek/usd exchange rate. Instat figures are inapplicable due to the fact that they are reported in CIF format in contrast to the FOB format allowed in national accounts (trade of goods is only reported in FOB format in the current account data).

In the case of exports and imports of service, we apply data in US Dollars from the current account once again converting with the average monthly exchange rate. Individual nominal series are aggregated together to produce monthly and afterwards quarterly figures incorporating both goods and services. We also enable the necessary adjustments to coincide with annual data from Instat. Deviations are due to the differences between the applied average exchange rate (duly available) and the daily exchange rate applied in the original conversion at the moment of entrance (exit) of exports (imports). In the cases when we apply conversion, the adjustments are made so that aggregate quarterly data match the published annual nominal published data from national accounts.

#### 4b. 4 Consumption of NGOs and statistical discrepancy

The two components consist of a very small part of overall annual nominal GDP. In both cases, we apply linear interpolation for all years. In the years 2008-2012, statistical discrepancy is reported apart from changes in inventories. Also in these years we apply linear interpolation for each component separately.

#### 4b. 5 Population consumption and private investment

The quarterly series of the aggregate "Population consumption and private investment" is calculated by deducting the various components from the overall nominal GDP. For the method applied in obtaining the individual series, please consult Vika and Abazaj (2014). At this moment, we have obtained nominal quarterly series for all components. In the next section, we will explain the deflation procedure followed in obtaining real figures.

#### 4c. Real term series (with previous year prices) for the expenditure components

As we mentioned in the previous section, the deflation procedure is carried out individually for each component. In this case, the deflators and real term data is based on previous year prices. We emphasize once again that a structural break is present after year 2007 which also characterizes the deflators. According to the new statistics, there are no deflators reported in year 2008. For this reason, deflation is applied on nominal data of 2008 using the former deflators. Later on we are going to explain on the elimination of the structural break and the incorporation of the new latest statistics.

#### 4c. 1 Population Consumption

The reported deflators of Population Consumption are distributed according to quarterly inflation. We apply deviations of quarterly CPI index compared to the average of the previous year to interpolate annual deflators of Population Consumption for the entire period. Deflators are applied on nominal data to obtain real figures. In all cases, we make sure that aggregate quarterly data match the beforehand calculated annual figures

#### 4c. 2 Public Consumption

Data on public consumption deflators is available in annual terms in the period 1996-2008 (according to the former statistics) and 2009-2012 (according to the new statistics). In Graph 4, we observe a close relationship between the annual deflator and average annual inflation.

The relationship is closer in the period 2004-2012 with larger deviations in the years before. Once again, quarterly deviations of inflation figures from the

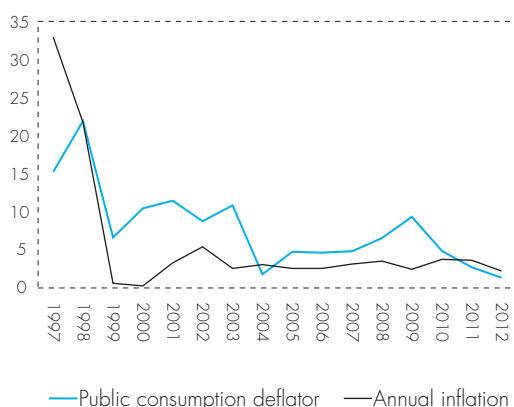
average annual figure are applied to interpolate public consumption deflators (as in the case of GVA deflators). Afterwards, quarterly deflators are applied on nominal figures to obtain real figures for public consumption (based on previous year prices). In 1996, since the deflator is not available, we assume nominal and real figures to be equal.

#### 4c. 3 Exports and imports of goods and services

Deflator interpolation is achieved according to two different approaches corresponding to two different periods. In the years 1997-2004, interpolation is carried out based on commodity indices constructed by the Statistic Department of the Bank of Albania. These indices are determined for 20 sections of goods and weighted. They are connected to a base year (1996) but also calculated with previous year prices in quarterly terms until 2004. Quarterly indices are applied to determine the quarterly interpolation of official deflators for goods and services.

In the years 2005-2012, interpolation is achieved based on goods' deflators calculated by the Macroeconomic Modeling of the Research Department. Deflators are derived from the goods data published in chapter form (99 chapters of goods) on monthly bases by Instat. Data is reported in nominal figures and also in terms of volume (kg) on which base we calculate price per unit kg for each of the 99 chapters. Annual changes are calculated in quarterly fashion and this series is then applied to achieve the interpolation of the official reported deflators.

Graph 4: Annual average inflation and Public Consumption deflator.



Source: Instat

#### 4c. 4 Consumption of NGOs and statistical discrepancy

As in the case of nominal figures, real consumption of NGOs and real statistical discrepancy (statistical discrepancy and changes in inventories in the years 2008-2012) is uniformly interpolated based on annual data.

#### 4c. 5 Real investment

Total capital formation (including both from public and private sector) is calculated as residual of real GDP after the deduction of the other expenditure components (imports are added). Nominal and real figures are applied to generate quarterly deflator series (investment deflator is common for both types). Deflators cannot be separately applied on nominal figures as this would require an identical composition between public, private and total investment. The presence of this structure cannot be determined since we do not possess data on investment by type and source. For this reason, real investment is reported as a common aggregate.

## 4d. Elimination of structural break

The presence of a structural break dividing the series according to the former 1996-2007) and new methodology (2008-2012) does not allow for continuity. In the case of research, structural breaks are to be eliminated in order to guarantee the matching of series between periods.

In order to eliminate the break, first we calculate nominal and real growth rates for GDP and each component in the years 1997-2008. We emphasize once again that in year 2008 we have applied the former statistics for nominal, real and deflator figures. Then, in year 2008 we fix the nominal figures based on the new methodology and the growth rates are applied in retrospection in order to "correct" the data in the years 1996-2007. The same is applied on real figures of GDP and expenditure components in year 2008. In this way, we have enabled the establishment of a connection between data before and after 2008.

## 4e. GDP and expenditure components in 2010 prices

Based on nominal and real series, we calculate real annual and quarterly growth rates for GDP and each expenditure component. The data for 2010 are fixed and real growth rates are applied to obtain statistics with 2010 prices (in 2010 nominal and real figures are same). The respective graphs showing nominal data, real data and deflators are available in Appendix A.

## 5. DISCUSSIONS AND POSSIBLE FUTURE IMPROVEMENTS

The material discusses the process of interpolation and extrapolation of GDP and expenditure components series in nominal and real terms. The approach is accounting based and covers the years 1996-2012. It begins with the construction of nominal and real GDP series from the production approach. It continues with the generation of nominal series for expenditure components. Each component and the GDP itself undergo the deflation process. In the third step, we eliminate the structural break resulting from the new series and in the last step we transform real data from previous year prices base to base year prices base (2010).

The approach features certain shortcoming which might be corrected in the future. One such shortcoming is related to the real GVA interpolation in the period 1997-2004. Quarterly sector GVA data is unavailable (only annual data is reported). Quarterly sector distributions in the years 2005-2012 is applied as model for generating real quarterly GVA in the period before and this assumption could be incorrect. Truly, sector GVA paths (for each sector) might have very well been different before 2005.

Another issue regards the quarterly distribution of real taxes and subsidies. Facing the inability to produce quarterly deflators, real distribution for each

component was assumed the same as nominal distribution. A possible improvement would be the identification of indices that can explain the behavior of tax and subsidy deflators.

Another limitation is related to the quarterly deflator for real GVA and public consumption. In both cases, quarterly inflation data was applied to interpolate the respective deflators. However, graphs 1 and 3 reveal that despite common behaviors in certain moments, GVA and public consumption deflator never match inflation and particularly before 2004 there are substantial differences. The practical solution would be the identification of particular deflators, however data unavailability prevents this step from being taken.

Further improvements relate to the real public and private investment. Facing the inability to calculate respective deflators, the aggregate is generated as residual to real GDP. A better future approach would be to identify the deflators and directly apply them on nominal data.

In the end, the approach undertaken in eliminating the structural break produces series that are different from the official ones. However, it must be emphasized that new method of calculation applied in the years 2008-2012 will also apply in the previous years. In this sense, data before 2008 can be considered temporary and subject to changes. When this data is available our series will have to be substituted.

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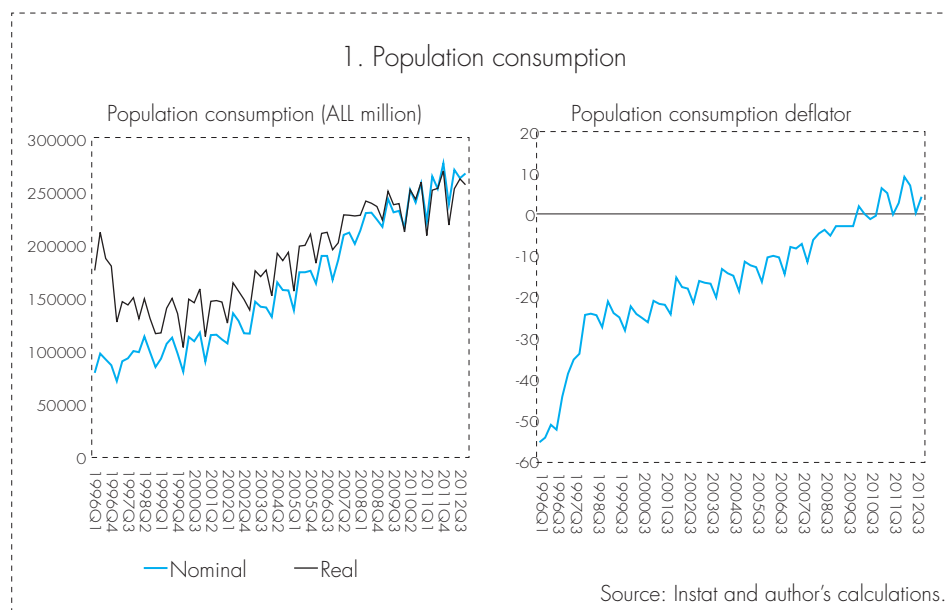
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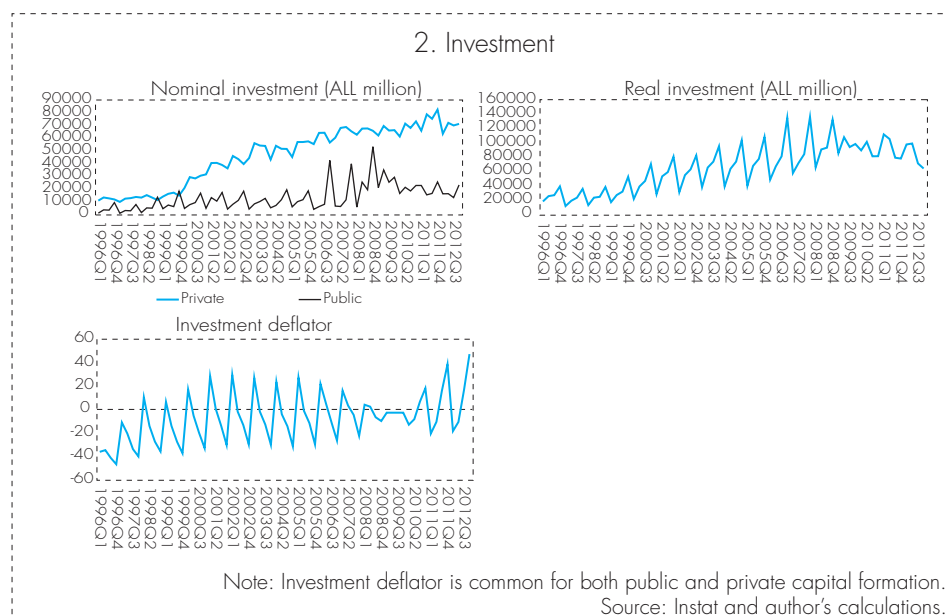
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## APPENDIX A NOMINAL, REAL (2010 PRICES) AND DEFLATOR SERIES

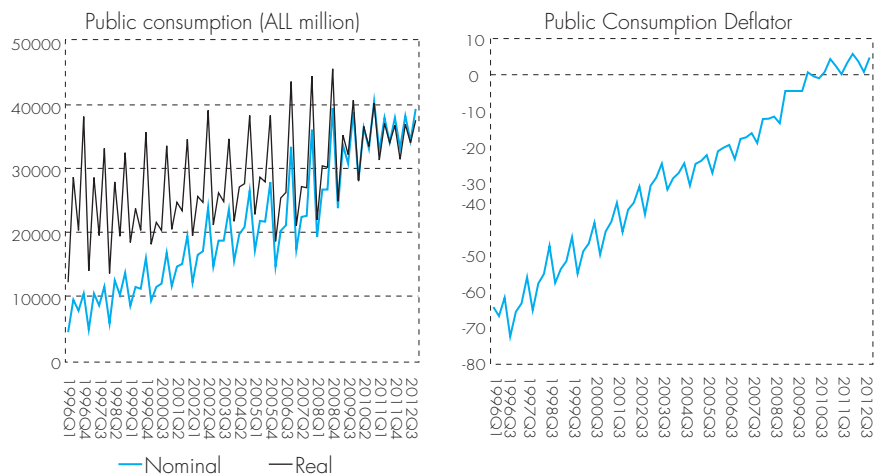
### 1. Population consumption



### 2. Investment

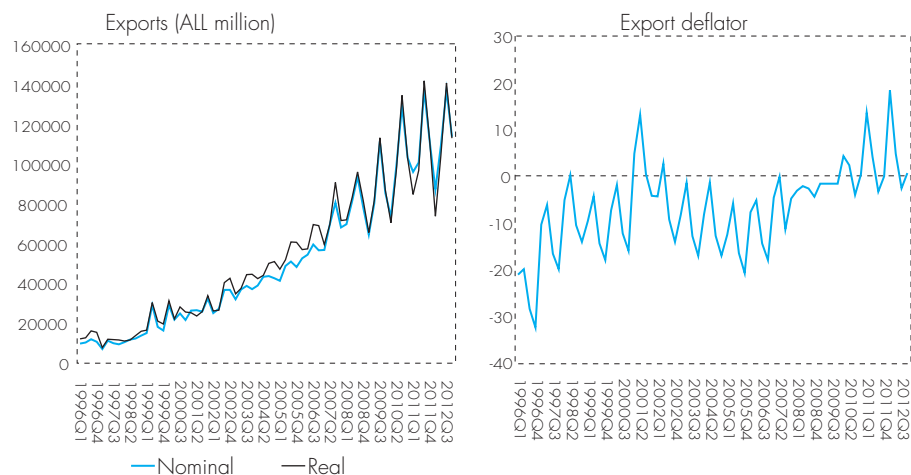


### 3. Public Consumption



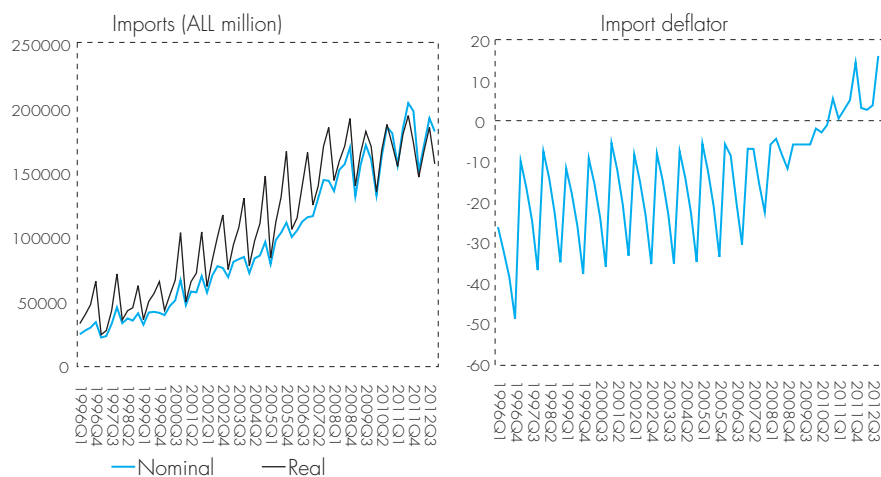
Source: Instat and author's calculations.

### 4. Exports of goods and services



Source: Instat and author's calculations.

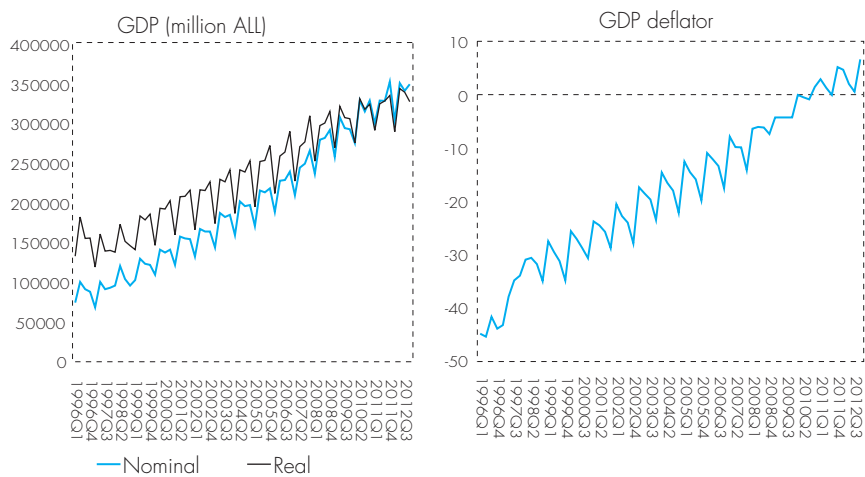
### 5. Imports of goods and services



Source: Instat and author's calculations.



### 6. Gross domestic product (GDP)



Source: Instat and Author's calculations.

## "EXPLORING THE MAIN DETERMINANTS OF THE POTENTIAL GROWTH TREND IN ALBANIA DURING 2003-2013"

EVELINA ÇELIKU

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### ABSTRACT

*The potential output plays a crucial role in the policy making process of the monetary policy and fiscal policy. Uncertainties surrounding the potential output assessment increase during times of crisis. Alternative methods of potential output estimation in the Albanian case presented in this article, provide us similar results, showing that potential growth after 2009, is almost halved compared to the previous periods. The study explores the performance of various economic indicators over the period 2003-2013, highlighting main developments that have caused the reduction of the potential output growth rates in medium terms.*

*Keywords: Potential Output, Output Gap, Trend, Filtering Methods, Production Function, NAIRU.*

*JEL-Classification: E23, E24, E50, C22.*

### 1. INTRODUCTION

Potential output is defined as the maximum level of real Gross Domestic Product (GDP) that an economy can achieve in a sustainable way without generating rise in inflation over medium to long term, exploiting the main recourses: labour; capital; and productivity [1]. Therefore the potential output and its growth rates depend on: (i) the number of people available to work and the hours they are willing to put in (labour); (ii) the amount of kilometres of constructed/re-constructed roads, the number of buildings and factories built, the number of machineries and the technological level used, the number and the generation of the computers used, in general the infrastructure invested and used (capital); (iii) and, the efficiency of the labour and capital utilisation separately and in combined way, in order to increase the production of goods and services for each unit of factors utilisation (productivity). Potential output in terms of levels, growth rates and gaps represent some of the most important information for assessing the current and future macroeconomic conditions of the country.

<sup>1</sup> The main results of this study have been presented in the Bank of Albania Monetary Policy Report, Q1-2014, Box: 2. Technical details, were also discussed in the 5th International Conference "Information Systems and Technology Innovations: Projecting Trends to a New Economy", June 6-7, 2014, Tirana. The author is grateful to Mr. Erald Themeli, Head of Monetary Policy Department (BoA), for his valuable suggestions and the discussions during the "Applied Statistics" Session of the abovementioned Conference, which contributed to present a more complete version of this article.

When output is above its potential level (positive output gap), the economy is experiencing an over-heating situation. This implies that an economy is experiencing excess demand. This, in turn, is associated with tighter labour markets conditions. Main tendencies that characterise the periods with positive output gaps consist of: lower unemployment rates; higher capacity utilisation; higher wage pressures; higher inflation expectations which can lead to higher inflation rates. This situation calls for appropriate policy responses, in order to reduce the aggregate demand, such as decreasing government expenditures and tightening monetary policy. In the reverse situation, when the actual output is below its potential level or when the negative output gap is present, it indicates excess capacity and may require easing of monetary conditions and other policies to stimulate demand.

From the growth theory point of view, the potential output is usually assessed from the supply side, that is, from the long-run/equilibrium values of the capital and labour inputs and their corresponding productivity levels. Meanwhile, from the non-mainstream growth theories, the demand factors are as well incorporated in the calculation of potential output through the impact of investment on capital accumulation and productivity. Evaluating the level of potential output and output gap in an economy are essential in identifying a sustainable non-inflationary growth and assessing appropriate macroeconomic policies. The estimation of potential output helps to determine the pace of sustainable growth, while the output gap estimates provide a key benchmark to assess inflationary or disinflationary pressures suggesting when to tighten or ease monetary policy.

Potential output and output gap also help to provide a gauge in determining the structural fiscal position of the government, since government revenues and expenditures are affected by the cyclical position of the economy [2]. In an upturn, the budget balance will be more positive, owing to higher revenues and lower growth of expenditure. In a downturn, the opposite holds. In this case, potential output and output gap can be used in determining the cyclically adjusted budget balance. A cyclically adjusted budget balance is equal to the actual budget balance corrected for divergences of actual from potential output, and thus provides a measure of the government structural fiscal position [3].

Measuring potential output and output gap is often associated with business cycle decomposition methods of separating the trend or permanent component of a series from its transitory or cyclical component [4]. In general, potential output corresponds to the trend or permanent component, while output gap is the transitory or cyclical component. However some authors argue that such gaps are not business cycle indicators, even though they are commonly labelled as such. Accordingly, a given level of an output gap is compatible with being in either an expansion or a contraction [5].

A number of techniques for measuring potential output and output gap have been developed [6]. However, many researchers believe that none is completely satisfactory. This is manifested from the results of many empirical

studies showing that different methodologies and assumptions for estimating a country's potential output and output gap might produce different results. The difficulty arises since the potential output and the output gap are unobservable or not directly measurable indicators [6]. The difficulty is compounded by the fact that there is increasing evidence suggesting that output series are best characterized as integrated series. Therefore, the presence of stochastic component does not allow the potential output to be treated as a simply deterministic component.

Based on the considerations discussed above, it is believed that measuring potential output and output gap is essential for the formulation of sound macroeconomic policies. Hence, this study attempts firstly to estimate Albanian's potential output trend over the period 2003-2013, based on different approaches. In a second step, it tries to reveal if there have been structural changes in the potential output trend and if the recent financial crisis has caused implications to the equilibrium levels of the main potential production factors, reducing the potential growth rates as well. In a third step, results from the application of different empirical methods are confronted with the performance of various economic indicators, in order to better understanding the developments in a wider economic framework. Based on these macroeconomic analyses, an assessment of the potential economic growth rates in a medium term prospective is presented in the concluding part of this article.

## 2. POTENTIAL OUTPUT IN TIME OF HIGH ECONOMIC UNCERTAINTIES

Assessing the potential output in terms of levels and growth rates is a challenge for economists, econometricians, and policy-makers, especially during the periods of high economic uncertainties, i.e. in times of global crisis. While acknowledging the importance of this indicator in long-term policymaking and decision-making, measuring potential output is not necessarily an easy task. It can be neither observed nor measured explicitly. It is evaluated implicitly by making use of time series variables of the latest available economic data, and statistical and econometric methods. The evaluation of this indicator is surrounded by numerous uncertainties, which are caused by several factors. It is subject to: the length and quality of the database; assessment on whether the economy converges towards a stable long-term equilibrium in its sources of growth or whether the latter have shifted to new levels. Uncertainties surrounding the measurement of potential output intensify, when there are implications in the economy stemming from structural changes, and regional and global economic crises. Policy-makers should re-conceptualise the future growth in potential output. In the meantime, the decision-making process should take into account the output gap, despite the limitation that potential output cannot be observed in real time.

There are a number of reasons why growth rates of potential output, and possibly even the level, might fall when the economic uncertainties increase

for a sufficiently long period of time. The most obvious is that investments generally contract, resulting in a permanently lower level of the capital stock, even if investments later recover to its pre-recession level. If technical changes are embodied in investments already reduced, then this situation is more likely to have negative impact on the technical progress performance. Productivity could also be impacted in other ways. To the extent that "necessity is the mother of invention", firms may be less likely to invest resources in innovation when demand is shrinking than when it is growing. Also, with fewer employees on payrolls, there is less learning-by-doing. In addition, there may be implications for the equilibrium rates of employment and/or labour force participation. If workers are unemployed long enough, their job skills may atrophy, while new entrants may never obtain them. If the recession results in a major shift in the distribution of employment by occupation, the skills of the labour force may not be as good a fit for demand immediately after the recession as they were before. Some workers may become discouraged and drop out of the labour force altogether.

The permanent loss also may be greater, the more synchronized the recession is across economies. If only one country is in recession while others remain at capacity, it might be possible for industries in that country to later catch up by importing technical innovation from the faster-growing economies. However, if all of the major economies are in recession at the same time, it may be more likely that the overall process of technical innovation will stall [7].

Referring to the 2008 financial crisis developments, the global economy experienced a prolonged weakening of cyclical conditions, slowing of productive capacities and, consequently, slower potential output. Uncertainties surrounding the fluctuations in potential output accelerated in the aftermath of the 2008 global financial crisis. Potential output and output gap deviated sharply from the levels perceived and evaluated before the crisis. A reduced growth rate in the production factors and a downward shift in their equilibriums levels primarily due to structural implications were evidenced in the subsequent years. Several academic studies from different authors and reports from international institutions concluded that the apparent decline in economic growth was not only due to a weakening of cyclical conditions in the respective economies, but also due to a slower growth in their productive capacities [7],[8],[9]. This performance had a negative and rapid effect on potential output, while risks for further reduction in the long-term increased substantially. The average rate of annual potential growth in Europe was estimated at around 1.9% during 2000-2007, against 0.9% during 2008-2010. For the same periods, the potential output growth in the United States fell from 2.5% to 1.8% [8]. In Central, Eastern, and South-eastern Europe (CESEE), the average rate of annual potential growth fell by almost 2/3. During 2003-2007, potential growth was estimated at around 5.2%, from 1.7% during 2008-2012[9]. Estimates show that the economic growth rate diminution in real terms in these economies in the aftermath of the crisis was only partially a consequence of a cyclical phenomenon. For the most part, it was driven by a slowdown of potential output itself, reflecting mostly the structural imbalances in the countries/regions already exposed to the financial crisis.

### 3. METHODS FOR ESTIMATING POTENTIAL OUTPUT: ALBANIAN CASE

To date, there has been another study which explains alternative methods of estimating the potential output in Albania over the period 1996-2006[10]. Numerous and new developments in the macroeconomic environment have occurred after 2006, besides those generated by the recent financial crisis. New economic variables have enriched our data base. Some of the existing ones have been revised as a result of methodological changes. Meanwhile, the history of the time series is covering longer periods, contributing to a better understanding of the potential sources of the Albanian economic growth. The Albanian economy was not hermetically shielded from the global tendencies of economic growth, although the effects of the last financial crisis on the slowdown of the real economic growth were reflected relatively later compared to other countries in the region. The performance of different economic indicators during 2009-2010 signalled the slowdown in economic growth rates in the medium-term, suggesting a re-examining of the productive sources of the potential growth. The need to revise down the potential growth, which by the end of 2009 was estimated at around 6%, appeared and was articulated from different national and international institutions, as well as from academics. Filtering estimates showed that potential growth hit below 5% after 2009.

#### 3.1 The linear method

The simplest way to estimate the output gap and potential output is to use a linear trend. This method is based on the assumption that potential output is a deterministic function of time and the output gap is a residual from the trend line. This method presumes that output is at its potential level on average, over the sample period. Hence trend in output, which represents potential output, may be estimated as:

$$Y^* = \alpha_0 + \alpha_1 * \text{Trend} \quad (1)$$

Where,  $Y$  is actual GDP.  $Y^*$  is measured as  $\text{Log}(Y)$ , and represents potential GPD.

The output gap (OG) is measured as:

$$\text{OG} = Y^* - Y \quad (2)$$

Based on our GDP data base for 2003 Q1- 2013 Q4 (INSTAT, April 2014), the estimation results based on the linear methods are as following:

$$\text{Log}(\text{GDP}) = 11.9 + 0.01 * @Trend$$

$$\text{Std. Error} \quad (0.03) \quad (0.001)$$

$$\text{t-Stat.} \quad [440.6] \quad [11.3] ; \text{Adj. } R^2 = 0.75 ; \text{D-W} = 2.3$$

In Kota's study (2007) the regression coefficient in the trend equation was higher (0.02), compared to actual estimates (0.01). It suggested an annual potential output growth of 8%, while later ones support a lower growth rate of this indicator (4.47%).

Chow Breakpoint Test indicates that starting from 2009 Q1, the coefficients are not stable across periods. For the period 2003-2008 the  $\alpha_1=0.015$ , and starting from 2009 the  $\alpha_1=0.005$ , showing that the potential GDP is decreasing in levels affecting the growth rates as well.

### 3.2. The filtering methods: Hodrick-Prescott & Kalman Filters

The Hodrick-Prescott method or HP filter [5] is one of the widely preferred statistical methods for estimating the potential GDP and the output gap components. It consists in a simple smoothing procedure. HP filter decomposes times series of the actual GDP (Y) in two components: growth component ( $Y^*$ ) which can be interpreted as potential output, and cyclical components (OG) which is the output gap:

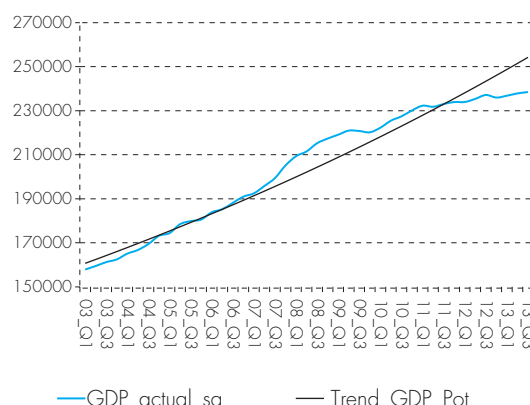
$$Y=Y^*+OG \quad (3)$$

The main assumption of this method is that there is a prior knowledge that growth component varies "smoothly" over time. Therefore, the average of the deviations of  $Y$  from  $Y^*$  is assumed to be near zero over a long period of time. HP filter minimizes variances according to a given  $\lambda$ 's weight expressed below:

$$\text{Min } L=\{\Sigma(OG)^2+\lambda\Sigma(\Delta Y)\} \quad (4)$$

The larger the value of  $\lambda$ , the smoother is the resulted series from HP filtering. In most empirical studies, when the quarterly data are used, the suggested value of  $\lambda$  is 1600<sup>2</sup>. Different values of  $\lambda$  are used in our study, and the filters results are averaged as simple arithmetic one. Also a Kalman filter approach is taken into consideration at this stage. Comparing HP filtering results and Kalman filter ones, a convergence to HP filter results with  $\lambda=900$  to 1600, is evidenced. The results do not indicate significant changes among different  $\lambda$ . For this reason, after seasonal adjustment of the quarterly GDP series, a HP filter for  $\lambda=1600$  is applied, due to its advantages (simple method) already treated in the literature.

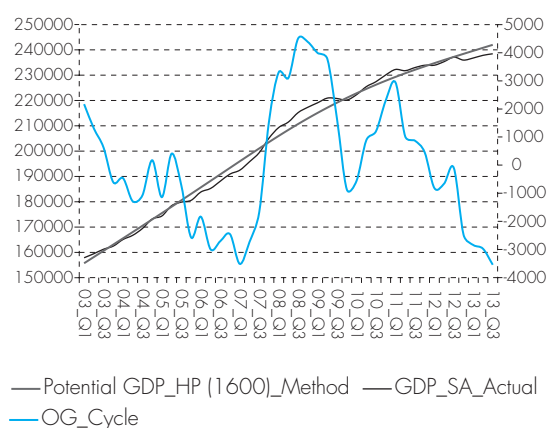
Figure 1. Potential Output: Linear Trend Method (2003-2013)



Source: Author's estimates.

<sup>2</sup> Moreover, as  $\lambda$  approaches infinity, the limit of the solutions for equation is the least squares of a linear time trend model. On the other hand, as the smoothing factor approaches zero, the function is minimized by eliminating the difference between actual and potential output that is making potential output equal to actual output.

Figure 2. Potential Output: HP\_Filter Method (2003-2013)



Source: Author's estimates.

Based on the HP filter method, the annual growth of the potential output obviously reduced in average terms after 2009: from 5.5% till 2008 to about 3.0% for 2009–2013. In the previous study, the potential output growth in average terms, for the same HP filtering approach, tends to be higher than in the current study<sup>3</sup>.

### 3.3. The Production Function Method

The Production Function Method (PF), beside the statistical filtering methods, also includes economic information from the factors of production: labour; capital stock; total factor of productivity (TFP); the respective elasticities. The production function approach enables using information from the economy to estimate its potential output, and can

be useful to different analyses. An alternative structural approach to estimate potential output and output gap is the use of aggregate production function. This approach relates potential output to the availability of the factors of production and technological change [11]. According to this method, the potential output is measured following the supply side approach. It gives the potential level of the economy, if all production factors are fully utilized. Cobb - Douglass is a simple functional form that uses data on employment and labour force, capital stock and elasticity of production factors, following the expression:

$$Y = TFP \cdot L^{\lambda} \cdot K^{1-\lambda} \quad (5)$$

Where, TFP is total factor productivity, L is labour production factor, K is capital stock and  $\lambda$  is labour elasticity of production (also labour share income). The characteristics of this production function are: production is proportional to employment of production factors; the production elasticity of labour and capital is positive and they sum up to one. Linearizing the function (5), we achieve:

$$\text{Log}(Y) = \text{Log}(TFP) + \lambda * \text{Log}(L) + (1-\lambda) * \text{Log}(K) \quad (6)$$

In the estimation of potential output using production function approach, several variables or data are needed. The basic ones are: the total factor productivity (TFP); potential employment ( $L^*$ ); and capital stock. The capital stock K is calculated starting from 2002 using Research Department (BoA), data and for mid-2012 to 2013 expert judgments are used for completing the series. For potential labour indicator ( $L^*$ ), a range of indicators are calculated and used: (i) NAIRU (author's calculations); (ii) actual labour force (INSTAT); (iii) the population in working age (INSTAT); (iv) participation labour indicator (author's calculations). The TFP is calculated as residual and represents the

<sup>3</sup> In Kota (2007), the potential output growth based on HP filter (1600), ranged from 5.3 till 1997, 9.3% from 1997-2002 and 7% from 2003-2006.



unexplained factor known as "Solow residual". Different alternatives of  $\lambda$  values [0.7/0.3 (Kota, 2007, classical Cobb-Douglas approach); 0.6/0.4 (higher share to capital- developed countries – European ones [11]); 0.8/0.2 (higher share to labour, dropping capital stock one – developing countries), are used to define all the terms of the expression 5 or 6. Various simulations have been conducted to decide on the values of elasticity coefficients, based on regressions of the log of output on log of capital and log total employment. In our case, the best proxies for elasticity coefficients to the production resulted  $\lambda$  (employment) = 0.8 and  $1 - \lambda$  (capital stock) = 0.2.

Potential output is obtained when production factors, labour and capital, are fully utilized, and when technological development follows its long-run trend, as presented below:

$$\text{Log}(Y^*) = \text{Log}(TFP^*) + \lambda * \text{Log}(L^*) + (1 - \lambda) * \text{Log}(K^*) \quad (7)$$

Where  $*$  indicates the potential level of the variables in the PF.

Potential employment is given by economy's employment, when unemployment rate is in equilibrium. The equilibrium unemployment rate is given by the NAIRU (Non Accelerating Inflation Rate of Unemployment), meaning an unemployment rate which does not generate additional inflationary pressures or with a constant inflation rate. The NAIRU expression in a simple version is given as follows:

$$\text{NAIRU} = \text{Log}(\text{un}) - (\text{DLog}(\text{un}) / \text{DLog}(\text{cpi})^3) * \text{DLog}(\text{cpi})^2 \quad (8)$$

A HP filter is applied to increase the smoothness of the NAIRU series, achieving  $\text{NAIRU}^*$  or the equilibrium unemployment rate. This series is incorporated in calculating  $L^*$  (potential employment), as follows:

$$L^* = (P_{\text{wa}})^* * (\text{Shkalla e pjesëmarrjes})^* * (1 - \text{NAIRU}^*) \quad (9)$$

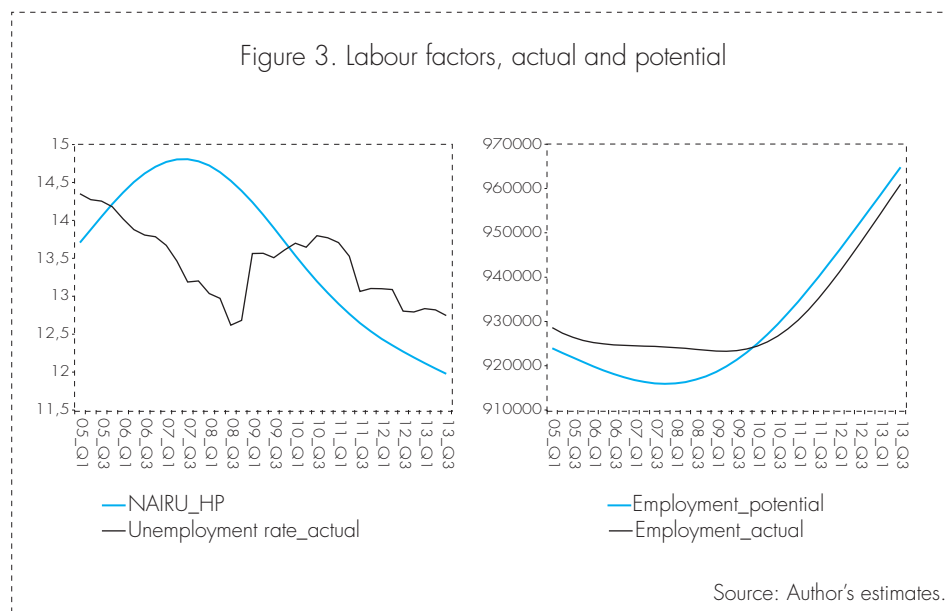
Where the trend of labour force results from multiplying  $P_{\text{wa}}$  (working age population) and Participation\* (trend of participation rate) and corrected for  $(1 - \text{NAIRU}^*)$ .

As capital stock cannot fluctuate substantially, the actual value of capital stock is used as a good proxy for its potential value. The assessment is based on the common assumption that the available capital stock is always used at its potential [10].

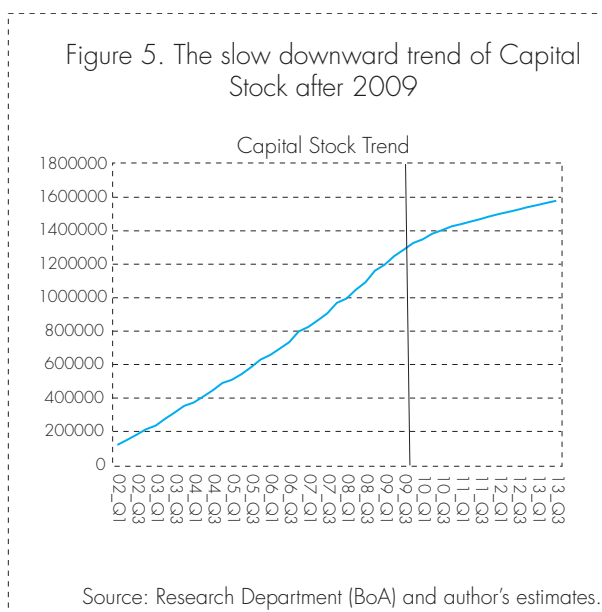
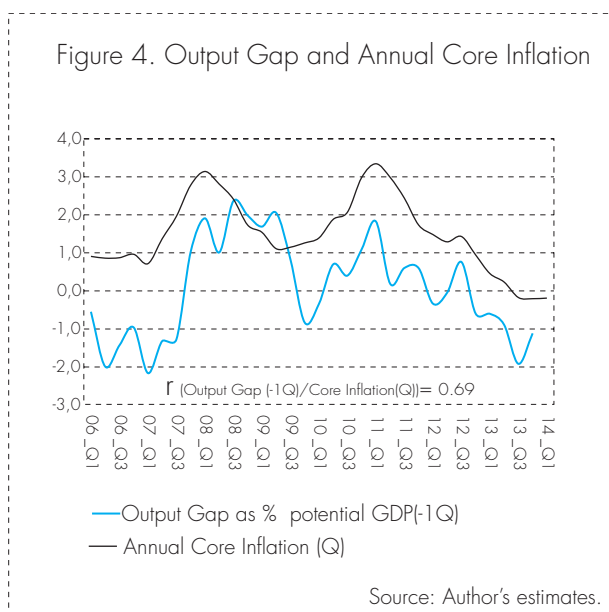
Potential value of  $TFP^*$  is obtained by filtering the TFP (as a residual of PF), through a HP filter. We assumed that potential TFP follows its own trend.

The results of PF method indicate that during the period when the economy was growing at around or above its potential (until 2009), the actual employment stood higher than its potential (Figure 3, rhs), resulting in an average unemployment rate [13.5%, (INSTAT)] below NAIRU (estimated around 15%). Inflationary pressures reflected the cyclical strengthening of the

economy, but without exhibiting any long-term inflation acceleration. After 2009, the slowing demand was reflected in weaker employment conditions and increased unemployment rate beyond NAIRU, which lowered the long-term inflationary pressures originating from domestic demand.

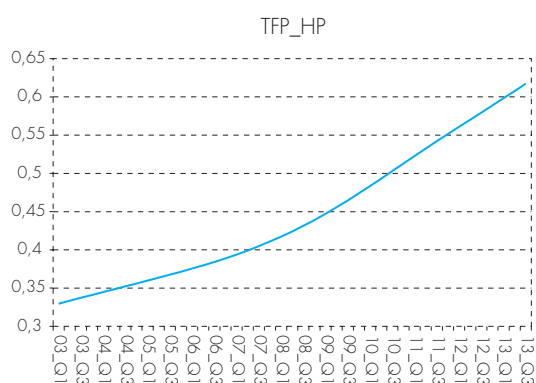


This behaviour was reflected in the downward trend of headline and core inflation during 2012-2013 and in their stronger relationship with the output gap.



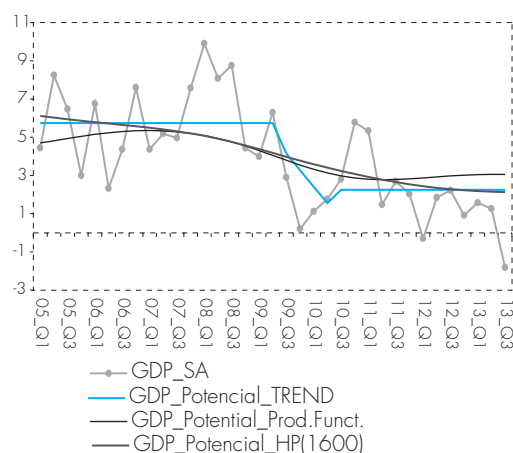
The calculations support: very low levels of TFP; small contribution of TFP to the potential GDP; really modest increasing trend of TFP over 2003-2013. The TFP has fallen considerably compared to that of 1996-2006 period [10], indicating that technological innovation, labour and capital productivity and other structural, regulatory and unexplained factors have lowered their contribution to potential and real growth during the period under review.

Figure 6. The slightly upward trend of TFP over 2003-2013



Source: Author's estimates.

Figure 7. Annual real GDP growth and potential GDP growth by the three methods



Source: Author's estimates.

As a result, the three approaches converge to the assessment that potential growth slowed after 2009, suggesting that its rates have halved compared to the previous periods. Post-2009 potential growth results relatively low when using the linear trend method, due to the high persistence of the linear decline through time. HP Filter and PF methods represent higher convergence of results, with average potential growth ranging from 2.6%-3% [12].

#### 4. CONFRONTATION WITH ECONOMIC INDICATORS' TRENDS

The impact of the global crisis is evaluated to have caused losses in the level and growth of potential output. Long-term economic growth was revised down, mainly due to the need to restructure the economy, which implies reshuffling financial, human and administrative resources across sectors and investment in know-how. In addition, the fall of remittance inflows, the decreasing trend in the population of working age (16-64 years of age), the downtrend in labour productivity and the tight financing/lending conditions imposed by the foreign economies are some of the significant tendencies affecting the long-term trend in potential growth. Also, the strengthening of the downward trend of the construction sector's contribution to economic growth in disproportion with its high contribution and growth rates before 2008 is another important structural economic factor impacting the potential output growth profile.

Table 2: Economic indicators before and after 2009 [12]

Indicator	Average of period	
	By 2009	After 2009
Annual Real GDP growth rate	5.80%	1.70%
Annual Potential Growth rate	6.00%	2.6% - 3.0%
Annual growth rate of GDP construction sector	11.20%	-8.30%
Annual Growth rate of Remittances	19%	-9%
Annual growth rate of the working age population (16-64 years of age)	-0.10%	-0.30%
Labour productivity indicator (average of the coefficient)	1.01	0.94
Capacity utilisation rate	75% (historical average 74%)	72% (historical average 74%)
Annual growth rate of monetary aggregate (M3)	12%	8%
Annual changes of the total credit	45%	6.60%
Annual changes of deposits	13.10%	10.5
Annual changes of TFP	8% (end of 2009)	6% (end of 2013)
Capital stock/GDP	20% (end of 2009)	16% (end of 2013)
Business Climate Index ( BCI) (average level)	101%	94.60%
BoA Policy rate (average)	6.2	4.2

Source: INSTAT, Bank of Albania and author's own estimates.

Chow Breakpoint Test results confirm the presence of a structural break in the long-term trend in GDP level and its growth rates since the second half of 2009, strengthening after 2009:

Table 2. Chow Breakpoint Test Results

Chow Breakpoint Test: 2009Q4				
Null Hypothesis: No. of breaks at specified breakpoints				
Varying regressors: All equation variables				
Equation Sample: 2003Q1 2013Q3				
F-statistic	3.249973		Prob. F(2,39)	0.0395
Log likelihood ratio	6.628427		Prob. Chi-Square(2)	0.0264
Wald Statistic	6.499945		Prob. Chi-Square(2)	0.0288

Source: Author's estimates.

## 5. CONCLUSIONS

Measuring the potential output and the output gap is a hard task, mostly due to the unobservable nature of these indicators. Their estimations are related to the long-term macroeconomic concepts and equilibrium evaluations of important variables in the economy. The potential output plays a crucial role in the decision-making process of the monetary and fiscal policies. Uncertainties surrounding the measurement of potential output increase during times of crisis.

Different methods of the potential output estimation in Albanian case, presented in this article, provide us similar results, showing that potential growth after 2009, has almost halved compared to the previous periods (ranging from 2.6%-3% in average terms). This downward shift was driven by the continuous reduction in contributions from the main factors of production to potential growth.

The following medium- to long-term factors have influenced and are expected to determine the future developments of the low growth potential rates:

- Demographic developments: curbed natural growth of the population and labour force due to emigration until 2000 and lower birth rate in Albania (INSTAT).
- Emigration is no longer expected to be one of the major sources of revenue inflow. A significant number of emigrants have returned home, particularly after the Greek crisis; and the rest has re-adjusted their income and spending patterns in the aftermath of the 2008 global financial crisis, thereby lowering the scope for remitting money to Albania.
- It takes time for structural changes to materialise into higher productivity. It particularly takes time for construction businesses and other activities closely related to this sector to restructure and adapt to a new economic reality.
- The utilisation of innovation, technical progress, know-how and human capital through education require investment and deep structural reforms. Their implementation and results are expected to impact positively the total productivity growth beyond the medium run;
- The contraction of lending growth rates mostly reflects a weaker aggregate demand. However, it also reflects a lower subsidiary bank supply of lending conditioned by parent bank policies, increased bank prudence with respect to lending, weakened external demand and risk aversion by investors.

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# HOUSE AND RENT PRICES: EVIDENCE FROM A MICRODATASET IN TIRANA

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## 1. INTRODUCTION

Housing is a primary good, accounting for a large share of household expenditures. Developments in house prices have major economic implications, by affecting the household capacity to borrow and spend, as well as the profitability and employment in the construction and real estate industry. Similarly, rents represent a major monthly expenditure for many households. The importance of the development of the real estate market has grown over the years and the attention has been focused on the importance of monitoring the movement in prices of residential real estate (ECB, 2010). The changes in prices are not equal for house prices and rents (Bracke, 2013). The recent financial crisis was characterized by significant rise in house to rent ratios; therefore, an analysis of movements in price-rent ratios allows the full analysis and understanding of the market.

Every developed economy has experienced the transition from a rural to an urban society. During this period of economic development, the demand for accommodation rises to unprecedented levels because a massive number of people are redistributed. To respond to these demands, the construction industry has to provide an increasing number of homes for the market. For this reason, housing markets play a decisive role in developing economies, and their failures can profoundly affect a country's overall economic growth and the well-being of its citizens (Malpezzi 1999). Albania is a CEE country. After 1990, it went through a long transition period, which was accompanied by huge demographic movements. As a consequence, the construction sector developed, and the demand and supply of apartments increased. These developments were translated into significant changes in the real estate market. In 2008, this demographic movement stopped and the internal real-estate market stabilized. Only a paper on the construction of house price indexes has been published in Albania. Kristo and Bollano, in 2012, described the methodology used to construct the house price index by the Bank of Albania. Based on a database from 1998 to 2006, they concluded that the relevant characteristics affecting prices are size, furnishing, location and age.

Through this paper, I want to analyse how the characteristics affecting the choice of apartments have changed in a stabilized real-estate (supply and demand) market. The house prices in Tirana will be analysed in terms of house and rent prices. Using a single proprietary database provided by the Bank of Albania, the prices will be considered as a function of the following characteristics: size, number of rooms, floor, age and refurbishment, currency of

announcement and status of registration. In terms of methodology a regression analysis will be applied to the data, in order to estimate the significant characteristics. It would be unrealistic and misleading to consider Tirana as a single unit. In this view, the determinants of house and rent prices in Tirana will be examined for central and peripheral zones and the whole city using data from 2008, considering all announcements published on specialized journals. Based on the results of the empirical analysis price and rent price indexes will be constructed. The indexes will be constructed by using the time dummy hedonic methods. The study will extend in measuring and analysing the price to rent ratios for central and peripheral zones in Tirana. Research in developed countries shows that central and more expensive zones are subject to higher price to rent ratios. The paper will analyse the case of Tirana and the possible arguments.

The empirical analysis shows that price to rent ratios have been different in different zones of Tirana. On average, peripheral zones have shown higher levels of price to rent ratios. The finding that less expensive peripheral zones have higher price to rent ratios, is not consistent with literature of developed countries. Unlike developed countries, house prices in European transition countries are far less explored. This paper contributes to the literature by analysing the housing market in a post transition country, where house prices increased intensively while housing was comparatively less affordable.

This paper is structured as follows: Section 1 analyses the literature on the modelling of house prices and price-rent ratios; section 2 describes the dataset used in the study; section 3 dwells on the methodology of the indexes and ratios computation; section 4 describes the results and the index construction process; section 5 concludes.

## 2. LITERATURE REVIEW

House price indexes are important for policy-makers, real estate financial market participants, and researchers specialized in housing, macroeconomic and regional issues. House prices are volatile and estimation of an index is complicated by the fact that individual houses are sold infrequently and that the composition of sold houses varies across time. Several methods have been proposed for producing a house price index. These include simple (mean and median) measures, hedonic pricing models, and repeat-sales methods.

The problem with the simple summary measures is that there is no adjustment made for quality of houses sold; thus the measure cannot distinguish whether there has been an actual change in house price level or whether the change in observed prices is due to a different mix (quality) of houses sold (Grimes et al. 2002).

To overcome this problem, Bailey et al in 1963 proposed the use of repeat-sales method to calculate price indexes. The repeat-sales method uses data on properties that have been sold at least twice. The benefits of using repeat-sales



method is that it uses repeat observations of single housing units. The main limitation of this approach is the reduced sample sizes.

Over the last 4 decades, the hedonic methods have been utilized extensively in analysing housing markets in particular to investigate the relationship between housing prices and their characteristics. Hedonic price theory assumes that a commodity such as a house can be viewed as an aggregation of individual components or attributes (Griliches, 1971). The first author that used hedonic models for residential market analysis was Rosen in 1974. The premise of hedonic methods is that observed house characteristics can be accurately used to predict the house price. Major challenges in using the hedonic method include specifying the correct functional form for the model, determining the correct set of explanatory variables, and obtaining data to accurately represent all relevant characteristics. The advantage of the hedonic methods is that they control for the characteristics of properties, thus allowing the analyst to distinguish the impact of changing sample composition from actual property appreciation (Calhoun C.A. 2001). Pakes, in 2003, described three types of hedonic indices: Dummy variable indices, Laspeyres-like indices and Paasche-like indices. Due to lack of data we can only compute dummy variable hedonic index. This type of index is the most frequently used hedonic index in economic research, mainly because it is very easy to construct. This index is obtained by pooling all the data together and then regressing the log of price on the characteristics of the period specific dummy variables. The difference between two dummies coefficients is then the growth rate of that period. This method assumes that model parameters are constant over time, so the valuation of the characteristics of the houses does not change.

Most of the price studies conducted with hedonic modelling are based on multiple regression analysis. Even though the hedonic price model has been widely recognized, issues such as model specification procedures, multicollinearity, independent variable interactions, and heteroscedascity, non-linearity and outlier data points can seriously hinder the performance of hedonic price model in real estate valuations.

While the hedonic technique is an acceptable method for accommodating attribute differences in a house price determination model, it is generally unrealistic to deal with the housing market in any geographical area as a single unit. Therefore, it seems more reasonable to introduce geographical information or location factor into a model that allows shifts in the house price level. Frew and Wilson employ the hedonic price model to examine the relationship between location and property value, in Portland, Oregon, and the authors found that there was a significant relationship between location and property value.

Ferriera and Gyourko, in 2011, use US individual level transaction data to produce local indexes and study the start of the recent house price boom. In 2008, Gallin used city level data to check if changes in price to rent ratios anticipate future price or rent growth, based on the dividend discount model.

In 2006, Hwang et al by the use of a micro dataset of apartments in Seoul exploited the high homogeneity of apartments in the area.

Bracke, in 2013, analysed house and rent prices and price to rent ratios at the individual property level for different neighbourhoods in London. In his study, price to rent ratios are shown to be higher for bigger properties and centrally located more expensive zones. Based on Bracke's paper we will analyse the differences in price to rent ratios, while taking in consideration the geographical position of the apartment. To the best of my knowledge there has been no prior study in the region analysing the prices and price to rent ratios with geographical distinction.

In constructing the price indexes, the previously studied methodology will be enriched by the distinction between centre and periphery and adding the registration status as an important attribute of house and rent prices and quality in Tirana. In spite of calculating house and rent prices, this study will analyse the price to rent ratio with a geographical focus.

### 3. SAMPLE

The house and rent price indexes will be calculated by the use of hedonic method techniques. Each apartment is defined by a fixed number of characteristics (area, surface, currency of transaction, no. of rooms, floor, age, refurbishment, and status of registration). All the other characteristics will be considered as a change in price. The underlying idea is that the utility of the households will not change with the changing of the unconsidered characteristics. The number of characteristics taken in consideration is constrained to the available attributes in the announcements of the journals. Here I am assuming that only the most important characteristics are included in the announcements, so the characteristics that will be included in the model are the ones that influence consumer's choice.

Empirical analysis will be computed by using data from January 2008 till December 2013. The data has been collected from a specialized journal of announcements. This is the only specialized journal of announcements in Tirana. Here, we assume that it represents the totality of private announcements. 30 announcements per month have been selected for the house prices and for the rent prices (20 for central and 10 for peripheral apartments). This is approximately half of the new announcements published in the journal. The data refer to Tirana. The database was provided by the Bank of Albania. The original database starts from January 1998. The size of the estimation sample is 2218 observations for house price construction and 2160 observations for rent price construction. The announcements were divided in central and peripheral zones. Table 1 summarises some general statistics of the data that were utilized in the analysis.

Table 1: Descriptive Statistics, Centre, Periphery

	P	M2	Reg	F1	F2	Fur	Room	Age	Z
Mean	11635767	88	0	0	0	1	2	1	1
Median	10547846	84	0	0	0	1	2	1	1
Maximum	50471886	225	1	1	1	1	9	5	1
Minimum	1158014	10	0	0	0	0	0	0	0
Std. Dev.	5190313	29	0	0	0	1	1	1	0
Skewness	1	1	1	1	1	0	1	1	-1
Kurtosis	7	3	1	2	2	1	3	4	1
Jarque-Bera	2408	109	377	406	477	370	239	290	393
Probability	0	0	0	0	0	0	0	0	0
Sum	25800000000	195574	829	701	598	1109	4871	1471	1478
Sum Sq. Dev.	59700000000000000	1838001	519	479	437	555	3082	899	493
Observations	2218	2218	2218	2218	2218	2218	2218	2218	2218
	P		C	F1	F2	Fur	Room	Age	Z
Mean	36575,23		0,343519	0,086111	0,278704	7,88E-01	2,590278	0,482407	0,666667
Median	30000		0	0	0	1	3	0	1
Maximum	4191465		1	1	1	5	7	7	1
Minimum	0		0	0	0	0	0	0	0
Std. Dev.	91453,69		0,474993	0,280593	0,448465	0,445403	0,910134	0,53732	0,471514
Skewness	43,46179		0,659032	2,950784	0,987134	-0,045535	0,042895	1,700487	-0,707107
Kurtosis	1974,18		1,434323	9,707128	1,974433	10,90639	2,411794	20,81331	1,5
Jarque-Bera	3,50E+08		376,9773	7183,267	445,4567	5626,734	31,80119	29599,27	382,5
Probability	0		0	0	0	0	0	0	0
Sum	79002497		742	186	602	1,70E+03	5595	1042	1440
Sum Sq. Dev.	1,81E+13		487,1093	169,9833	434,2204	428,3106	1788,396	623,3315	480
Observations	2160		2160	2160	2160	2160	2160	2160	2160

Source: Author's calculations

Where:

P is the price in Lek (ALL). Most of the sale announcements are made in euro. We have converted the prices in lek using the monthly average official exchange rate, published by the Bank of Albania.

C is the currency of the announcement. This variable has been taken in consideration only in calculating the rent prices because the announcements of house prices, in 99% of the cases, were made in euro.

M2 is the size of the apartments, expressed in square meters.

Reg is the registration status in the official public registry. This variable has been inserted in the model as a dummy. Reg is 1 when the apartment has been registered. The registration status is an important attribute in Tirana because unregistered apartments cannot be used as collateral in taking credit.

F1 and F2 refer to the floor. These variables have also been inserted as

dummy variables. F1 is 1 when the apartment is in the first floor of a building (which means that it can be rented for commercial use), and 0 in all the other alternatives. F2 is 1 when the apartment is on the upper floors (from the fifth floor and on) and 0 in all the other alternatives.

Fur refers to the refurbishment status. This variable has been inserted as a dummy. Fur is 1 when the apartment is half or fully refurbished.

Room refers to the number of rooms. It has been coded as below 1= single room apartment; 2=2-room apartment; 3= 3-room apartment; 4= 4-room apartment; 5= other.

Age: refers to the age of the building where 0 are buildings constructed before 1990 and 1 refers to buildings constructed after 1990;

Z refers to the zone. This has also been inserted as a dummy variable which is 1 if the apartment is central and 0 if it is peripheral.

#### 4. METHODOLOGY

There is no unique consensus in economic theory about the proper functional relationship between housing prices and their attributes. For the purpose of the study we will use the most common functional form, recommended by the literature, the semi logarithmic form. The form is preferred because the coefficient estimates generated from the model can be interpreted as being the proportion of goods price that is directly attributable to the respective characteristic of that good (Halvorsen et al, 1980). For the model the natural logarithm of the house price will be considered as a dependent variable.

$$\ln P = \sum a_n(x) + \varepsilon$$

Where P is the house or rent price, a is the coefficient matrix, x is the set of independent variables and  $\varepsilon$  is the error term. Ordinary least square method is employed in estimating the hedonic model.

We will model the house characteristics, distinguishing the central and peripheral location and then as a total, in order to analyse what guides household's preferences in different zones of the city.

Later on we will construct the house and rent price indexes for Tirana based on the findings by using a time dummy hedonic model.

The hedonic equation is constructed by the following equation.

$$\ln P = \sum a_n(x) + \sum b_n(D_{t+n}) + \varepsilon$$

t is the time period from 2008 Q2 to 2013 Q4

The time dummy method uses an indicator lower than the total number of periods for which the index is constructed. It includes a dummy variable for each time period where the  $D_{t+1}$  variable is 1 for the period  $t+1$  (2008 Q2) and zero for all the other periods. Only the statistically significant characteristics are included in the model. The coefficients before the dummy variables indicate the percentage of the house price change between respective periods and the base period. In other words, these coefficients represent the price change (in literature it is also known as "pure" change of price) between the periods, provided that house characteristics do not change. For computing the price index, the extreme observations (outliers) were removed. Extreme observations were considered the ones in which residual values were greater than 0.75. Finally, prices are turned from log forms in nominal values divided by the base period to obtain an index where 2008=100.

At the end House and Rent Price Indexes have been constructed with the above discussed methodology for central, peripheral and the total sample apartments. The total indexes have then been compared to the indexes published by the Bank of Albania, which have been calculated with constant quality hedonic methods. Based on the indexes, Price to Rent price ratios are constructed and analysed on the basis of spatial differences.

## 5. RESULTS

In this section, the results obtained by the hedonic model are analysed and the house and rent price indexes are constructed. The results of the hedonic regression for house and rent prices are shown in Table 2 and Table 3 below:

Table 2. Hedonic Model Estimates, House Prices

PRICE	Total	2226		Center	1481 obs		Periphery	750 obs	
	Coefficient	t-Statistic	Prob.	Coefficient	t-Statistic	Prob.	Coefficient	t-Statistic	Prob.
Independent variables									
M2 ( surface)	0,011	47,330	0,000	0,011	42,656	0,000	0,003	11,383	0,000
Reg (status of registration )	0,064	5,238	0,000	0,041	2,907	0,004	0,013	0,580	0,562
F1 (first dummy for floor)	0,043	3,000	0,003	-0,017	-1,119	0,263	-0,102	-2,205	0,028
F2 (second dummy for floor)	-0,002	-0,128	0,898	0,021	1,115	0,265	0,026	1,225	0,221
Fur (status of refurbishment)	-0,147	-15,826	0,000	-0,028	-1,273	0,203	0,001	0,084	0,933
Room (no of rooms)	-0,026	-4,487	0,000	-0,017	-2,844	0,005	0,190	15,899	0,000
Age	-0,100	-9,645	0,000	0,002	0,121	0,904	-0,051	-2,512	0,012

Source: Author's calculations

Table 3. Hedonic Model Estimates, Rent Prices

Rent	Total	2128		Center	1388		Periferi	715	
	Coefficient	t-Statistic	Prob.	Coefficient	t-Statistic	Prob.	Coefficient	t-Statistic	Prob.
Independent variables									
No. of rooms	0,205	32,172	0,000	0,199	26,751	0,000	0,224	24,236	0,000
Furnishing	0,052	4,139	0,000	0,039	2,568	0,010	0,123	6,397	0,000
Floor 1	-0,068	-3,334	0,001	-0,054	-2,050	0,041	-0,074	-2,877	0,004
Currency	0,436	32,904	0,000	0,415	30,960	0,000	0,453	14,360	0,000
Age	0,005	0,474	0,635	0,000	0,370	0,710	-0,003	-0,160	0,873

Source: Author's calculations

After the regression, I excluded the non-significant variables. The significance was decided from estimating by means of probability significance and expected sign. I also controlled for Durbin Watson statistics and R-squared. The results passed the residual normality tests and stability tests were also performed. (More detailed explanations in Appendix 1). Table 4 reports the most important and significant variables for house and rent prices

Table 4. Hedonic Model Results

Prices				Rent			
Center				Center			
Variable	Coefficient	t-Statistic	Prob.	Variable	Coefficient	t-Statistic	Prob.
M2	0,01	40,70	0,00	Curr	0,42	30,96	0,00
Room	-0,01	-2,13	0,03	Room	0,20	26,75	0,00
F2	0,03	1,74	0,08	Fur	0,04	2,57	0,01
Reg	0,05	3,64	0,00	F1	-0,05	-2,04	0,04
C	15,36	648,13	0,00	C	9,75	399,76	0,00
Periphery				Periphery			
Variable	Coefficient	t-Statistic	Prob.	Variable	Coefficient	t-Statistic	Prob.
M2	0,01	23,48	0,00	Curr	0,45	14,39	0
Room	0,05	4,23	0,00	F1	-0,07	-2,89	0,004
F1	-0,07	-1,92	0,06	Fur	0,12	6,40	0
Fur	0,03	2,00	0,05	Room	0,22	24,30	0
C	14,94	536,95	0,00	C	9,30	298,97	0
Total				Total			
Variable	Coefficient	t-Statistic	Prob.	Variable	Coefficient	t-Statistic	Prob.
Z	0,41	32,87	0,00	curr	0,44	33,21	0
M2	0,01	56,46	0,00	F1	-0,07	-3,35	0,0008
Fur	0,02	1,98	0,05	Fur	0,05	4,10	0
F1	-0,03	-2,52	0,01	Room	0,21	32,48	0
Reg	0,05	4,11	0,00	Z	0,32	24,44	0
C	14,96	756,59	0,00	C	9,41	425,18	0

Source: Author's calculations

From the results we can observe that in determining the house prices, the surface is important in all the three samples. If we consider the centre and periphery separately, the number of rooms is important but for the total sample it loses significance. Results show that for central apartments and also for the total sample, the registration status is important in determining house prices while in periphery it is not. Evidence also shows that people living in central zones prefer higher floors, while in periphery and the total sample the first floor is more expensive than the rest of the building. The refurbishment status is important in determining house prices for the total sample and for the periphery but it is not an important characteristic for central zones prices. The results also show that the zone is an important characteristic in determining house prices in Tirana. We can say that the actual results are in line with the expected ones.

In calculating the rent prices, the size and registration status were not included in the analysis because of data availability. From the results we can see that the currency, floor, status of refurbishment and number of rooms are important for central and periphery as well as the total sample. The results show also that zone is important in determining rent prices in Tirana.

Based on the above results the house and rent price index for Tirana as well as for central and peripheral zones were constructed.

Equations are the following:

Total House prices:

$$\ln P_i = a_0 + a_1(\text{zona}) + a_2(\text{sipërfaqe}) + a_3(\text{mobilitim}) + a_4(\text{kati}) + a_5(\text{hipoteka}) + b_1(D_{t+1}) + b_2(D_{t+2}) + \dots b_n(D_{t+n}) + \varepsilon_{it}$$

Central House prices:

$$\ln P_i = a_0 + a_1(\text{sipërfaqe}) + a_2(\text{numri i dhomave}) + a_3(\text{kati}) + a_4(\text{hipoteka}) + b_1(D_{t+1}) + b_2(D_{t+2}) + \dots b_n(D_{t+n}) + \varepsilon_{it}$$

Peripheral House prices:

$$\ln P_i = a_0 + a_1(\text{sipërfaqe}) + a_2(\text{numri i dhomave}) + a_3(\text{kati}) + a_4(\text{mobilitimi}) + b_1(D_{t+1}) + b_2(D_{t+2}) + \dots b_n(D_{t+n}) + \varepsilon_{it}$$

Total Rent prices:

$$\ln P_i = a_0 + a_1(\text{monedha}) + a_2(\text{kati}) + a_3(\text{mobilitimi}) + a_4(\text{numri i dhomave}) + a_5(\text{zona}) + b_1(D_{t+1}) + b_2(D_{t+2}) + \dots b_n(D_{t+n}) + \varepsilon_{it}$$

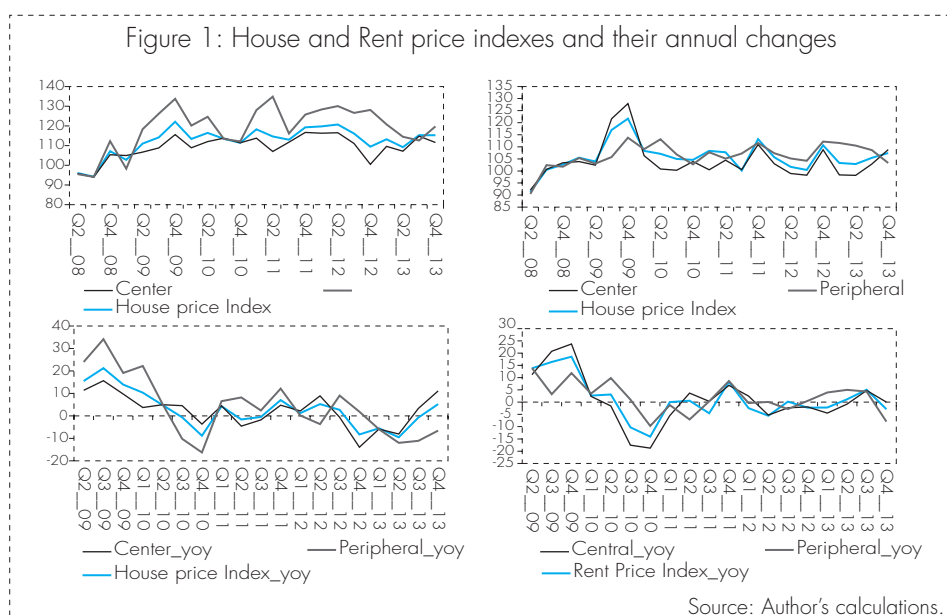
Central Rent prices:

$$\ln P_i = a_0 + a_1(\text{sipërfaqe}) + a_2(\text{numri i dhomave}) + a_3(\text{kati}) + a_4(\text{mobilitimi}) + b_1(D_{t+1}) + b_2(D_{t+2}) + \dots b_n(D_{t+n}) + \varepsilon_{it}$$

Peripheral Rent prices:

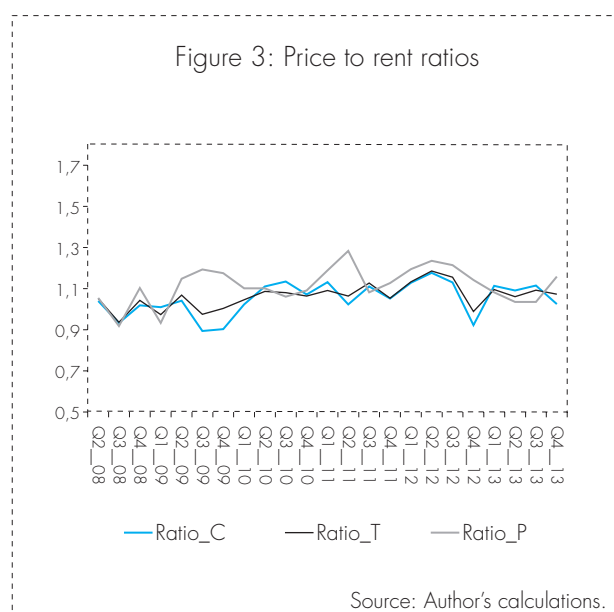
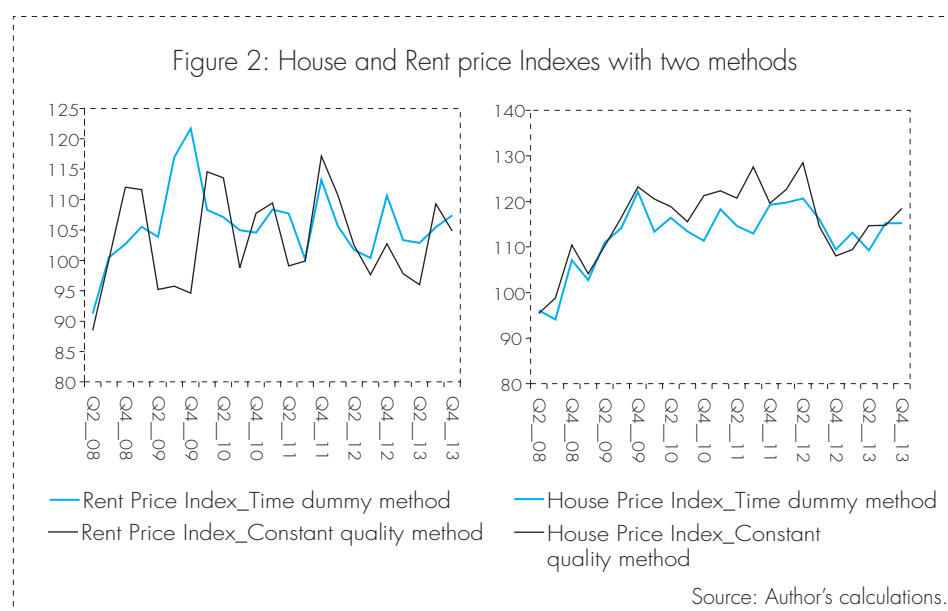
$$\ln P_i = a_0 + a_1(\text{monedha}) + a_2(\text{numri i dhomave}) + a_3(\text{mobilitimi}) + a_4(\text{floor}) + b_1(D_{t+1}) + b_2(D_{t+2}) + \dots b_n(D_{t+n}) + \varepsilon_{it}$$

The figure below depicts the house and rent price changes in time for central and peripheral zones.



With regards to the actual index used by the Bank of Albania, the new indexes for house prices are constructed with the time dummy method, while the other is constructed with the constant quality method. The characteristics included in the former house prices of Tirana were size, furnishing, zone and age of the building. The actual study shows that age has lost significance in time while two new characteristics, floor and registration status are defined as important (Figure 1).

With regards to the rent prices, the characteristics taken in consideration in the former index published by the Bank of Albania were no. of rooms, refurbishment status and zone. Our analysis shows that currency and floor have gained importance, while the former characteristics remain important in determining rent prices in Tirana. Figure 2 below depicts the house prices for Tirana calculated with time dummy method and constant quality method.



From the Figure, we can see that Rent prices variability is much different when calculated with the two different indexes. Further analysis has to be done in order to understand if this difference is a consequence of the new variables included or of the differences in the calculation method.

Now the study will proceed by computing the price to rent ratios for Tirana and analysing the differences in these ratios for properties located in central and peripheral zones. The developments of the calculated ratios are shown in Figure 3.

The empirical analysis shows that, on average, the ratio has been higher for peripheral zones. In particular, the ratio has been falling faster for



central zones than for peripheral ones. This may be a result of the economic crisis that Albania underwent after 2008 but also of the fast urbanization of the periphery. This result is not consistent with literature of developed countries. To the best of my knowledge, there has not been made any such study for the Balkans region. Further analysis has to be made in order to understand if we can generalize this conclusion to the post transition countries.

Literature suggests that there are many reasons why there are differences between prices to rent ratios in different zones. Higher price to rent ratios mean lower rental yields. Theory suggests that these differences in yields may come from major differences in property characteristics or from hidden costs existence. Hidden costs create a wedge between gross yields and net yields. While it is useful to compare properties using the gross rental yield, it does not reflect the actual situation that an investor faces. Gross rental yields do not take into account the differences due to the transaction costs. In fact centrally located apartments are usually traded in the existence of intermediaries, which are usually associated to higher transaction costs. In addition gross rental yield does not take into account expected periods of time when the property is empty and generates no rent. Unfortunately data on the time to sale/rent of apartments in Tirana is not available to help us in an explanation but it is commonly believed that more expensive properties stay in the market for longer periods. The differences may also arise because of the on-going expenses of property investment such as property maintenance, insurance, repairs, rates, taxes, corporate levies, management fees and interest paid on loans. Maintenance costs usually paid in rents are higher for centrally located properties than for peripheral ones. Centrally located apartments are usually managed by an administrator and the rent price may include the fee of administration costs. These differences may also be due to periods in which rental properties are vacant.

Many authors use the assets pricing arguments to analyse the changes in price to rent ratios. These arguments are based on the dividend discount model, according to which the price of an asset corresponds to the present discounted value of all the future rents. This implies a link between current house price ratio and future rent expectations. So properties with higher price to rent ratios should have higher rent growth or higher expected returns. The empirical analysis showed that peripheral apartments in Tirana have higher price to rent ratios, so theory implies that these apartments should display higher rent growth or be associated with lower volatility. Figure 1 shows that actually rent prices growth were neither more pronounced nor more volatile compared to central zone prices or total prices. Figure 1 shows that the higher level of price to rent ratio was mainly due to changes in house prices in that zone.

## 6. CONCLUSION

In this paper I analysed the characteristics of house and rent prices in Tirana from 2008 for central, periphery and the whole city. Hedonic method was used for the analysis. Semi logarithmic form was applied to the dataset.

Ordinary least square method was employed in estimating the hedonic model. One of the major weaknesses of this study is that hedonic method does not count for unobserved characteristics of houses. Future research has to be done to overcome this problem. The results of this study show that registration status is important in determining house prices in centre but not in periphery while the refurbishment status is important in periphery and not in central apartments. Based on the results of the whole data set a price index was constructed. The regression analysis showed that the most important characteristics for house prices in Tirana are zone, surface refurbishment floor and registration status. The empirical analysis of the rent prices show that currency of announcement, number of rooms, status of refurbishment and floor are important characteristics in determining house prices in central and peripheral zones of Tirana. With respect to the previous studies conducted on a dataset from 1998 to 2006, this study shows that age has lost significance in time in determining house prices, while two new characteristics, floor and registration status are defined as important. We can deduce that the preferences of consumers in relation to housing characteristics have changed with the stabilization in a more stabilized pricing period. The empirical analysis shows that on average the ratio has been higher for peripheral zones. This result is not consistent with literature of developed countries. To the best of my knowledge, there has not been made any such study for the Balkans region. Further analysis has to be made in order to understand if we can generalize this conclusion to the post transition countries. This is a consequence of lower rental yields in these zones as well as major changes in house prices in the periphery.

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## APPENDIX 1: RESULTS OF THE REGRESSION ANALYSIS ON REVIEWS

The results of the regression analysis are shown on the tables below. The variables whose p-value was greater than 5% were excluded from the model. After controlling for the significance level we controlled for the economic significance. The variables whose sign resulted different from the expected one were excluded from the model. After eliminating these variables the regressions were implemented again and we controlled for Durbin Watson and R squared values. All these values resulted at acceptable levels.

## Rent

## Centre

Dependent Variable: LOG(P)				
Method: Least Squares				
Date: 04/17/14 Time: 11:31				
Sample: 1 1388				
Included observations: 1388				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
Room	0.198513	0.007522	26.39222	0
Fur	0.039058	0.015423	2.532377	0.0114
F1	-0.05391	0.026478	-2.03586	0.042
C	0.414417	0.013503	30.69016	0
Age	0.004352	0.011867	0.366729	0.7139
C	9.752305	0.024421	399.3377	0
R-squared	0.619425	Mean dependent var		10.48937
Adjusted R-squared	0.618048	S.D. dependent var		0.389213
S.E. of regression	0.240542	Akaike info criterion		-0.00753
Sum squared resid	79.96319	Schwarz criterion		0.015102
log likelihood	11.2259	Hannan-Quinn criter.		0.000934
F-statistic	449.8698	Durbin-Watson stat		1.621919
Prob(F-statistic)	0			

## Periphery

Dependent Variable: LOG(P)				
Method: Least Squares				
Date: 04/17/14 Time: 13:37				
Sample: 1 715				
Included observations: 715				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.452608	0.03152	14.35961	0
F1	-0.07398	0.025714	-2.87688	0.0041
Fur	0.122695	0.019179	6.397497	0
Room	0.223896	0.009238	24.23618	0
Age	-0.00259	0.016168	-0.16015	0.8728
C	9.310755	0.032836	283.5531	0
R-squared	0.577841	Mean dependent var		9.998556
Adjusted R-squared	0.574864	S.D. dependent var		0.33672
S.E. of regression	0.21955	Akaike info criterion		-0.18612
Sum squared resid	34.17524	Schwarz criterion		-0.14775
log likelihood	72.53819	Hannan-Quinn criter.		-0.1713
F-statistic	194.0927	Durbin-Watson stat		1.905903
Prob(F-statistic)	0			

Total

Dependent Variable: LOG(P)				
Method: Least Squares				
Date: 04/17/14 Time: 14:22				
Sample: 1 2128				
Included observations: 2128				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.435896	0.013248	32.90363	0
F1	-0.06802	0.020401	-3.33423	0.0009
Fur	0.052429	0.012668	4.138544	0
Room	0.205302	0.006381	32.17243	0
Z	0.316614	0.013042	24.27732	0
Age	0.005024	0.01059	0.474421	0.6352
C	9.403805	0.022417	419.5011	0
R-squared	0.686609	Mean dependent var		10.33174
Adjusted R-squared	0.685722	S.D. dependent var		0.457684
S.E. of regression	0.25658	Akaike info criterion		0.120532
Sum squared resid	139.6325	Schwarz criterion		0.13916
Log likelihood	-121.246	Hannan-Quinn criter.		0.127351
F-statistic	774.4833	Durbin-Watson stat		1.730911
Prob(F-statistic)	0			

Price

Centre

Dependent Variable: LOG(P)				
Method: Least Squares				
Date: 04/09/14 Time: 14:12				
Sample: 1 1481				
Included observations: 1481				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
Reg	0.040647	0.013981	2.907219	0.0037
F1	-0.01738	0.015539	-1.11872	0.2634
F2	0.02085	0.0187	1.114969	0.265
Fur	0.04482	0.014426	3.106798	0.0019
Room	-0.01711	0.006017	-2.84423	0.0045
M2	0.011099	0.00026	42.65582	0
Age	0.001598	0.013232	0.120756	0.9039
C	15.33894	0.026549	577.7526	0
R-squared	0.60109	Mean dependent var		16.31351
Adjusted R-squared	0.598922	S.D. dependent var		0.403458
S.E. of regression	0.255513	Akaike info criterion		0.114968
Sum squared resid	96.10201	Schwarz criterion		0.147179
Log likelihood	-76.1341	Hannan-Quinn criter.		0.126976
F-statistic	277.2568	Durbin-Watson stat		1.591668
Prob(F-statistic)	0			

## Periphery

Dependent Variable: LOG(P)				
Method: Least Squares				
Date: 04/09/14 Time: 14:14				
Sample: 1 750				
Included observations: 748				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
Age	-0.05097	0.020288	-2.51239	0.0122
M2	0.003327	0.000292	11.38325	0
Room	0.189958	0.011948	15.899	0
F1	0.025645	0.020931	1.225183	0.2209
F2	-0.10204	0.046267	-2.20543	0.0277
Fur	0.031168	0.019308	1.614247	0.1069
Reg	0.01298	0.022361	0.580478	0.5618
C	15.09084	0.045362	332.6726	0
R-squared	0.537494	Mean dependent var		15.89116
Adjusted R-squared	0.532487	S.D. dependent var		0.391871
S.E. of regression	0.267942	Akaike info criterion		0.215863
Sum squared resid	53.05479	Schwarz criterion		0.27142
Log likelihood	-71.7329	Hannan-Quinn criter.		0.237273
F-statistic	107.352	Durbin-watson stat		1.715162
Prob(F-statistic)	0			

## Total

Dependent Variable: LOG(P)				
Method: Least Squares				
Date: 04/09/14 Time: 14:11				
Sample: 1 2226				
Included observations: 2224				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
Reg	0.063591	0.012141	5.237651	0
F1	0.042558	0.014186	2.999942	0.0027
F2	-0.00183	0.014276	-0.12835	0.8979
Fur	0.085057	0.008531	9.970523	0
Room	-0.02556	0.005696	-4.48666	0
M2	0.010942	0.000231	47.33	0
Age	-0.10008	0.010376	-9.64516	0
C	15.33158	0.022428	683.5934	0
R-squared	0.635289	Mean dependent var		16.17371
Adjusted R-squared	0.633972	S.D. dependent var		0.442957
S.E. of regression	0.26799	Akaike info criterion		0.208307
Sum squared resid	159.0787	Schwarz criterion		0.231402
Log likelihood	-222.638	Hannan-Quinn criter.		0.216742
F-statistic	482.2884	Durbin-Watson stat		1.523161
Prob(F-statistic)	0			

# A NON-LINEAR MODEL FOR ALBANIAN LEK FORECASTING

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## ABSTRACT

*The literature on exchange rate forecasting is massive. Many authors have tested whether implications of theoretical economic models or the use of advanced econometric models can be useful to explain future movements in exchange rates. In the case of the Albanian lek, the literature on exchange rate forecasting is scarce. This study tries to fill this gap, by testing whether non-linear time series models are able to generate forecasts for the nominal exchange rate of the Albanian lek that are more accurate than forecasts from a random walk or an ARIMA model. The results confirm that using an Artificial Neural Network model can outperform a naïve random walk and a linear autoregressive model in Albanian exchange rate forecasting contest.*

*Keywords: exchange rate forecasting; artificial neural network; Albanian lek.*

*JEL Classification: C22, C45, C53, F31, G17.*

## 1. INTRODUCTION

The study of Meese and Rogoff (1983) showed that monetary models cannot achieve better results than a simple random walk in out-of-sample exchange rate forecasting. Since then, many studies investigated whether it is possible to forecast the future movements of exchange rates at all. The economic literature has evolved mainly in two streams: researches, where the emphasis was put on a) underlying economic theory or b) econometric techniques used.

The first part of the literature refers to whether the use of information related to macroeconomic fundamentals can increase exchange rate forecast accuracy. The study of Mark (1995) and Chinn and Meese (1995) have showed that monetary fundamental models are more accurate than those from a naïve random walk only for long-term horizons forecast. However, the reliability of Mark (1995) was soon questioned by e.g. Berkowitz and Giorgianni (1996), Kilian (1999) and Faust et.al (2001). The first ones have undermined the hypothesis about the cointegration relationship between main macroeconomic fundamentals and exchange rate. Kilian (1999) questioned the robustness of the results among countries and time sample and Faust (2001) pointed out that the approach followed focused on the latest-available dataset, whereas macroeconomic data are subject to frequent and sometimes significant reviews. Another work that has attempted to take advantage of macroeconomic

information to produce the forecasts and is worthy of reference is the study by Cheung et al. (2002). The authors examined the performance of the interest rate parity model, the Balassa-Samuelson model, the behavioural equilibrium exchange rate model and the monetary sticky-price model for different exchange rates and time periods. They concluded that no model is able to steadily outperform a random walk in exchange rate forecasting.

The second stream of literature is concentrated on accuracy of generated forecasts by different advanced econometric techniques (non-linear ones), in comparison to a random walk or an ARIMA model (Rubaszek et al, 2011; Neerly and Sarno, 2002).

Artificial neural networks (ANN) constitute a category of non-linear models used to forecast exchange rates. According to Yu et al. (2007), whose work analysed 45 journal articles using ANNs for exchange rate forecasting, the relative success of ANNs depends on frequency of data, the time sample and the group of currencies under study.

In the case of the Albanian lek (ALL), the published work is still very scarce. According to Rubaszek et al, (2011) there are very few articles that investigate the accuracy of model-based forecasts for the currencies of Central and Eastern European (CEE) countries (Crespo-Cuaresma and Hlouskova 2005; Ardic et al. 2008) and their findings show that a random walk model is a very difficult benchmark to beat in the case of the CEE currencies.

The main goal of this paper is to analyse whether it is possible using an ANN model to outperform a simple random walk and an ARIMA model in forecasting the Albanian Lek (ALL) against the euro (EUR) and the American dollar (USD). These two bilateral exchange rates were chosen since they are the most important currencies in the Albanian internal currency market.

The structure of this paper is as follows. Section 2 describes the competing models used in this work. Section 3 describes the data used in the analysis. Section 4 relates to the out-of-sample forecast evaluation results and Section 5 describes the conclusions.

## 2. COMPETING MODELS

### 2.1 Random walk

The random walk (RW) model assumes that the exchange rate is generated by the unit root process of the form:

$$y_t = y_{t-1} + \varepsilon_t$$

where  $\varepsilon \sim \text{NID}(0, \sigma^2)$  is the random term. The h-step ahead forecast equals to  $y_{T+h} = y_T$ , where  $y_T$  is the last available value of the dependent variable in the sample of length  $T$ . In this paper, the  $y_T$  variable is the natural logarithm of the exchange rate.



## 2.2 Autoregressive integrated moving average

One of the most common and recurrently used stochastic time series models in more than fifty years is the Autoregressive Integrated Moving Average (ARIMA) model. In an ARIMA (p,d,q) model, the future value of a variable is assumed to be a linear function of several past observations and random errors. One of the attractive features of the ARIMA is its flexibility to represent several varieties of time series without difficulty (as well as the associated Box-Jenkins methodology for optimal model building process). But the main limitation of these models is the pre-assumed linear form of the associated time series which becomes inadequate in many practical situations. To overcome this drawback, various non-linear stochastic models have been proposed in literature. However, from the implementation point of view, these are not so straightforward and simple as the ARIMA models.

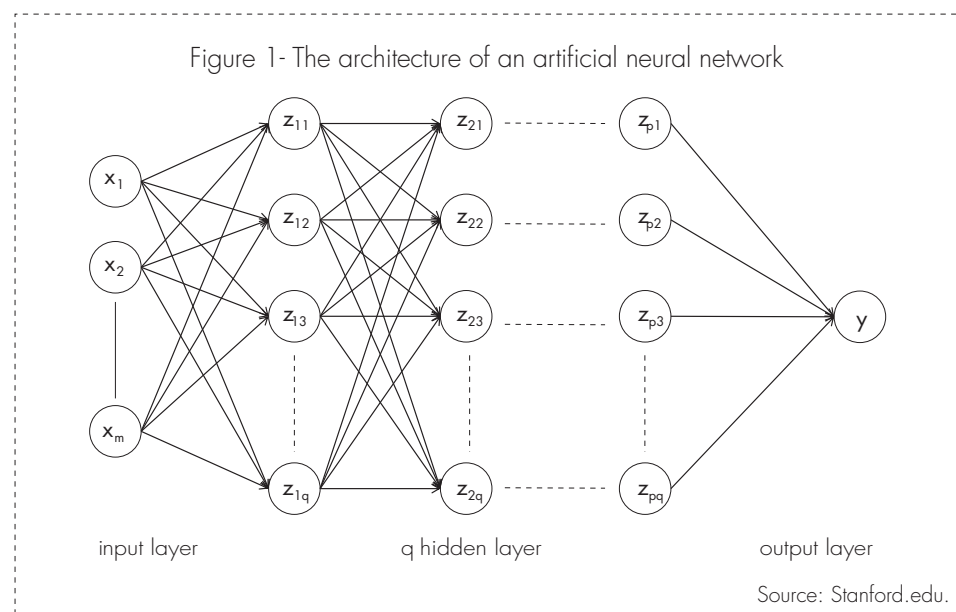
$$y_t = \theta_0 + \varphi_1 y_{t-1} + \varphi_2 y_{t-2} + \dots + \varphi_p y_{t-p} + \varepsilon_t - \theta_1 \varepsilon_{t-1} - \theta_2 \varepsilon_{t-2} - \dots - \theta_q \varepsilon_{t-q}$$

## 2.3 Artificial neural networks

Due to the fact that exchange rate forecasting is of practical and theoretical importance, a large number of methods and techniques (including linear and nonlinear) have been introduced to beat the random walk model in foreign exchange rates forecasting. With increasing development of artificial neural networks (ANNs) (used in forecasting social, economic, engineering, foreign exchange, stock problems, etc.), this method has been applied even in forecasting foreign exchange market movements. Several distinguishing features of artificial neural networks make them valuable and attractive for a forecasting task. First, artificial neural networks are data-driven self-adaptive methods in that there are few a priori assumptions about the models for problems under study (Qi and Zhang, 2001; Yu et al., 2006e). Second, artificial neural networks can generalize (Hornik et al., 1989; White, 1990). After learning the data presented to them (a sample), ANNs can often correctly infer the unseen part of a population even if the sample data contain noisy information. Third, ANNs are universal functional approximators. It has been shown that a network can approximate any continuous function to any desired accuracy. Fourth, the greatest advantage of ANN is its ability to model complex non-linear relationships without assumptions like a black box (Shin and Han, 2000; Yu et al., 2006e). In fact, real world systems are often nonlinear (Zhang, Patuwo, & Hu, 1998).

However, no one technique has been successful enough to consistently beat other methods in predicting foreign exchange rates. Therefore, it is difficult to say that ANNs uniformly perform better than other methods. Some articles show that ANNs perform well in foreign exchange rates forecasting, while others give negative conclusions. Even in the same article, conflicting results are often presented (Yu et al, 2007).

Neural networks are an information processing technology which model mathematical relationships between inputs and outputs. Based on the architecture of the human brain, a set of processing elements or neurons (nodes) are interconnected and organized in layers. These layers of nodes can be structured hierarchically, consisting of an input layer, an output layer, and middle (hidden) layers. Each connection between neurons has a numerical weight associated with it, which models the influence of an input cell on an output cell. Positive weights indicate reinforcement; negative weights are associated with inhibition. Connection weights are 'learned' by the network through a training process, as examples from a training set are presented repeatedly to the network.



A network is trained through general-purpose algorithms based on time-series data and focusing on the computation of weight neuron connections in a feed-forward network to accomplish a desired input-output mapping. The learning phase of the computation procedure can be viewed as a high dimensional, non-linear, system identification problem. A typical feed-forward network architecture is shown in Figure 1, which refers to a network with  $m$  inputs,  $q$  neurons in the hidden layer and one neuron in the output layer (Azoff, 1994).

### 3. ANN MODEL DESIGN AND IMPLEMENTATION

An ANN is typically composed of layers of nodes. In the popular Multi-Layer Perceptron (MLP), all the input nodes are in one input layer, all the output nodes are in one output layer and the hidden nodes are distributed into one or more hidden layers in between. To design a MLP, one must determine the following variables:

- number of input nodes
- number of hidden layer and hidden nodes
- number of output nodes

The selection of these parameters is basically problem-dependent. However, designing an ANN is considered an art rather than a science.

According to the literature, using experimentation is a good practice, in order to determine the number of inputs and hidden nodes. Thus, the number of inputs and hidden nodes to the network are selected through systematic experimentation. The number of input nodes in this study corresponds to the number of lagged past observation. Twenty levels of the number of input nodes, ranging from 1 to 20 lagged values of the dependent variable, i.e. monthly exchange rate levels are used in this study.

Influenced by theoretical works, which show that a single hidden layer is sufficient for ANNs to approximate any complex nonlinear function (Cybenko, 1989; Hornik et al., 1989), this study has taken into consideration one hidden layer for forecasting purposes.

For a time series forecasting problem, the number of output corresponds to the forecasting horizon. Using a one-step ahead forecasting (iterated method), only one output node is necessary in this case.

The network architecture is also characterized by the interconnection of nodes in layers. The activation function of the transfer function that determines the relationship between inputs and outputs of a node and a network, introduces a nonlinearity degree that is valuable for most ANN applications. In this study, the hyperbolic tangent transfer function is used, as it reflects the choices made in the articles which forecast exchange rate, selected in the paper of Yu et al., (2007). Linear transfer function is used in the output layer, which is a standard choice in neural network.

A training and a test set are typically required to for building an ANN forecaster. The training sample is used for ANN model development and the test sample for evaluating the forecasting ability of the model. In this paper we have used a third sample, a validation one, in order to avoid the overfitting problem and to determine the stopping point for the training process. The larger the sample size, the more accurate the results will be. Hence, it is interesting to note that ANNs don't necessarily require a larger sample than is required by linear model in order to perform well (Kang, 1991).

In summary, since this paper applies ANNs for exchange rate forecasting, the output variable  $yt$  is the log of the nominal exchange rate level. The input variable  $x$ , which represents a set of regressors that are chosen for forecasting  $yt$ , consists of lagged values of  $x$  up to lag  $K$  (max  $K=20$ ).

The structure of an ANN with  $p$  hidden layers and with  $q$  neurons in each hidden layer is represented by Figure 1. The value of neuron  $i$  in the first hidden layer is given by  $z_{1i} = g(x'w_{1i} + v_{1i})$  where  $g$  is an activation function,  $x = [x_1 \ x_2 \ \dots \ x_m]'$  is a vector of the input variables,  $w_{1i} = [w_{1i,1} \ w_{1i,2} \ \dots \ w_{1i,m}]'$  is a vector of weights,  $v_{1i}$  is a constant and  $i = 1, 2, \dots, q$ .

Finally, the fitted output variable  $y_{est}$  is a linear combination of the neurons from the  $p$ -th hidden layer (in this case  $p=1$ )  $y_{est} = z_1'w + v$  where  $w$  is a vector of weights and  $v$  a constant.

The unknown parameters of ANNs, given by vectors  $w_{i1}$  and  $w$  and scalars  $v$  and  $v_{i1}$  are computed by minimizing the in-sample root mean square error (RMSE). For this purpose, the backpropagation technique has been used (see Rumelhart et al. 1986) with the Levenberg-Marquardt algorithm. The  $h$ -step ahead forecasts  $y_{T+H}$  are calculated recursively according to  $y_{T+H} = f(y_{T+H-1}, y_{T+H-2}, \dots, y_{T+H-k})$ . To avoid the problem of getting stuck in local minima and to increase the possibility of getting the true global optimal, we run the algorithm of getting the best neural network fit model, 10 times, by using 10 different sets of initial random weights.

#### 4. DATA AND FORECAST EVALUATION CRITERIA

We test the models introduced in the previous section on the basis of average monthly data, for the nominal exchange rate of the Albanian lek against the euro and the US dollar. These two bilateral exchange rates were chosen since they are the most important currencies in the Albanian internal currency market. The monthly data are taken from official website of the Bank of Albania, for the period from January-1999 to August-2013, for a total of 176 observations for each series.

Considering that the EUR/ALL and USD/ALL show a seasonal behaviour especially during the summer months, we have decided to use log of the exchange rate level of seasonally adjusted monthly data for RW and ANN model. In case of ARIMA model, considering the seasonality of the series, we have used a 12th order logarithmic differentiation.

For the in-sample data we have used 152 observations and the remaining ones (24 observations) are used for the out-of sample test for all the considered models. For the ANN model, this corresponds to a division in training, validation and test set to 70%, 15% and 15% of the total sample (Zhang, 1994).

To evaluate the neural network performance against RW and ARIMA models, two performance criteria are used: RMSE (root mean square errors) and MAE (mean absolute error) for 3, 6, 12 and 24-month forecast horizon.

#### 5. OUT OF SAMPLE FORECAST ERRORS

The main focus of this study is to check whether out-of sample forecasts of the Albanian lek exchange rate are more accurate than the forecasts from a simple random walk and an ARIMA (1.1) model. The best fit neural network model, observed from in-sample performance for EUR/ALL exchange rate is ANN (19-6-1) model, composed by 19 inputs that correspond to 19 first lagged values of the variable exchange rate and 6 neurons in the hidden layer.

Table 1 compares the out-of-sample performance of the ANN, random walk, ARIMA forecasts for monthly EUR/ALL exchange rate. Results show that neural network out-of-sample forecasts are more accurate than the random walk and linear integrated autoregressive model forecasts for both performance measures and for every time horizon considered. However, the predictive accuracy of the model is higher for short-term periods, in accordance with other studies in this field (Yu et.al., 2007).

*Table 1- Out-of-sample performance of ANN, RW, ARIMA (1,1) models on monthly EUR/ALL exchange rate at level for the period September 2011 - August 2013*

Model	3 months		6 months		12 months		24 months	
	MAE	RMSE	MAE	RMSE	MAE	RMSE	MAE	RMSE
RW(sa)	0,34153	0,37439	1,19440	1,50276	1,12613	1,30643	1,22890	1,55640
ARIMA (1,1)	0,91913	0,99070	2,08908	2,41642	3,17298	3,51493	3,53508	3,73499
ANN (19-6-1)	0,48325	0,106881202	1,15335	1,358267073	0,969435	1,153384309	1,17483	1,4748

Source:

The tests show that the hypothesis of normality heteroscedasticity and no serial correlation of the neural network residuals cannot be rejected.

*Table 2 Out-of-sample performance of ANN, RW, ARIMA (1,1) models on monthly USD/ALL exchange rate at level for the period September 2011 - August 2013*

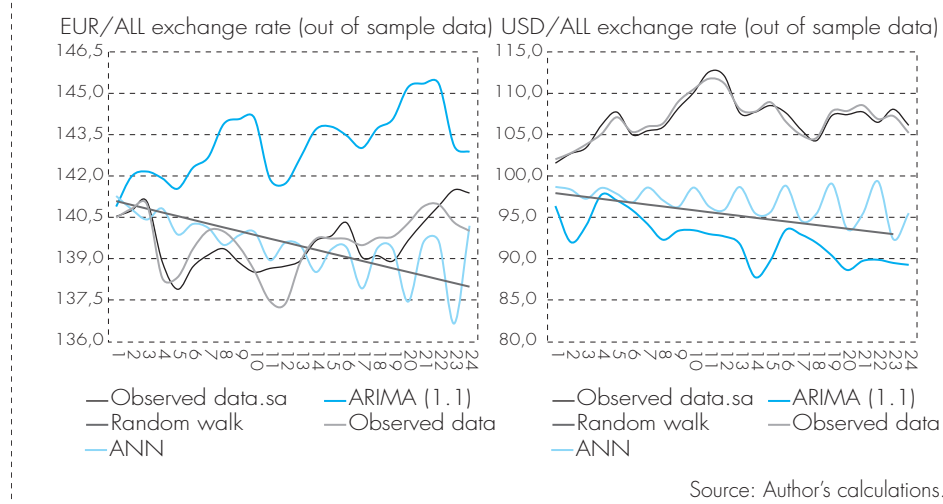
Model	3 months		6 months		12 months		24 months	
	MAE	RMSE	MAE	RMSE	MAE	RMSE	MAE	RMSE
RW(sa)	4,6326	4,7307	6,8481	7,2677	9,8532	10,6799	11,3624	11,8599
ARIMA (1,1)	8,7446	9,0221	8,8489	9,0253	12,4107	13,0897	14,5230	15,0798
ANN (7-7-1)	4,4612	4,6612	6,5143	6,9305	9,2231	10,0610	10,0566	10,6288

Table 2 compares the out-of-sample performance of the ANN, random walk, ARIMA forecasts for monthly USD/ALL exchange rate. Results show that neural network out-of-sample forecasts are more accurate than the random walk and linear integrated autoregressive model forecasts for both performance measures and for every time horizon considered. However, it is important to underline that the RMSE for 3-month horizon forecasts is almost equal to that of the random walk. As one can notice, the predictive accuracy of the ANN model is higher for short-term and gets worse for 24-month periods of forecasts.

Compared to the performance measures that have been shown for EUR/ALL exchange rate, the forecast accuracy for USD/ALL is worst for all time horizons considered.

As for the EUR/ALL exchange rate, the robustness test for ANN forecasting model shows that neural network residuals have normal distribution, there is no correlation between the residuals and, finally, the residuals are homoscedastic (ARCH LM test).

Figure 2 – Forecasted data by the RW, ARIMA and ANN models



## 6. CONCLUSIONS

This research examined and analysed the use of neural networks as a forecasting tool, specifically, a neural network's ability to predict future trends of Albanian lek exchange rate against the euro and the US dollar. Accuracy was compared against a naïve model and a traditional forecasting method (ARIMA).

In both cases, EUR/ALL and USD/ALL, the ANN models selected by the algorithm have shown higher forecasting accuracy against a random walk and ARIMA model. The performance measures in case of USD/ALL exchange rate have revealed lower forecasting accuracy compared to EUR/ALL performance, due to the high volatility of the USD/ALL in the exchange market and/or, may be, to a particular behaviour of USD/ALL that the considered models are not able to catch.

It is important to note that, even the ANN model outperforms better than the benchmark models, the neural networks designing and implementation are time consuming and not as simply as random walk or ARIMA model.

The next step in future research work is to integrate neural networks and other techniques such as genetic techniques, wavelet analysis, fuzzy inference, pattern recognition and, traditional time series models, for finance and economic forecasting. Another possible step might be the application of hybrid systems (combining ARIMA and ANN models) that seemed to be well suited for the forecasting of financial data.

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# BANK OF ALBANIA NEWS JANUARY-JUNE 2014

*Celebrating the Global Money Week*

In the framework of the Global Money Week, on 10-17 March, Bank of Albania, in cooperation with the Ministry of Education and Sports, and the Albanian Association of Banks, carried out several educational activities for nine-year school and high school students.

Global Money Week is a worldwide event that aims to make children and youth aware of being money-conscious and financially-literate citizens. From March 10th to 17th, partners across the world, coordinated by the Child and Youth Finance International, held various activities to enhance children's financial involvement worldwide, teaching them about money, saving and understanding changes in the economic systems they live in, earning money through entrepreneurship, and building their foundations for the future.

Over the years, the Bank of Albania has been engaged in improving the financial literacy of the public through numerous activities, publication of educational brochures, the elective module "Personal Finance in your Hands", and the educational package "1, 2, 3 ... Çufo the Piglet is Learning to Save".

Activities on the Global Money Week began with a finance-themed puppet show called "Çufo and Tip – An adventure with goldlets", which was staged on March 10th, 2014, at Tirana Puppet Theatre. The ceremony was attended by the Governor of the Bank of Albania, representatives of diplomatic corps, government and banks. The Governor stressed the importance of increasing the financial education of the public and Bank of Albania's serious commitment to it.

The second activity dedicated to grade III pupils encouraged them to participate in a drawing competition "My Money". The drawings were posted on Bank of Albania's educational Facebook page and voted by the public. The 10 drawings with the most likes until March 27th, 2014, were awarded with symbolic presents and benefited a bank account of 10,000 leks, as an initial amount deposited at one of the commercial banks in the system. During the ceremony held on this occasion, the Governor of the Bank of Albania, Mr. Ardian Fullani signed a Memorandum of Cooperation with the Chairman of the Albanian Association of Banks, Mr. Seyhan Pencabliligil. The goal of this Memorandum is to encourage reciprocal cooperation on financial education of nine-year school, high school and university students in the field of economy, finance and banks.

Another activity on Global Money Week for high schools students that have elected the module "Personal Finance in your Hands" gave them the opportunity to visit commercial banks in the country and get closely acquainted with the way banks function, their daily work and products they offer.

*Second Financial Forum of Albania*

On 26 March 2014, the second Financial Forum of Albania was organised under the auspices of the Governor of the Bank of Albania, Mr. Ardian Fullani. The Forum was co-organised with the International Monetary Fund and provided a platform for discussion among major banking groups active in Albania and

their subsidiaries, Albanian authorities that monitor the financial system, and representatives of the World Bank, European Bank for Reconstruction and Development, European Banking Authority, and European Central Bank. The Albanian Minister of Finance Mr. Shkëlqim Cani and Albanian Minister of Economic Development, Trade and Entrepreneurship, Mr. Arben Ahmetaj also attended and addressed the Forum.

Discussions focused on the analysis of current developments and the prospect of the economy and financial system in Albania, especially in the light of structural reforms undertaken by the Albanian Government, supported by the recent arrangement with the IMF.

In addition, the participants discussed the role of the financial system, in particular of the banking sector, in supporting the country's economic development. Swift action to reduce the share of non-performing loans was considered as particularly important for boosting financial intermediation. Participants highlighted that these efforts are endorsed by the recent legislative changes on collateral execution, changes that will be adopted in the near future about the taxation of loss loans write offs, and the practical expertise provided by the World Bank. The measures are complemented by structural reforms undertaken lately by the Albanian Government to improve the business climate in Albania. Participants considered that lending to small and medium-sized enterprises in Albania has the potential for growth.

Furthermore, the Forum discussed issues relating to the business strategy of local banks, members of larger European-based cross-border banking groups, appropriateness of the regulatory framework and the impact of European initiatives on banking activity. In this regard, participants from European-based cross-border banking groups iterated their commitment to supporting the activity of their subsidiaries in Albania.

In conclusion, participants commended the Forum as a platform providing the possibility to openly exchange views and identify issues for follow up.

The Bank of Albania organised, on 31 March 2014, the awards ceremony for the winners of "My money" drawing contest. This contest was organised by the Bank of Albania in cooperation with the Albanian Association of Banks in the framework of the Global Money Week, and targeted grade III pupils of schools that have adopted the teaching set "1, 2, 3... Çufo the piglet is learning to save". For the contest, the pupils were invited to make simple designs, drawing on their concept about money.

*Awards ceremony for the winners of "My money" drawing contest*

About 420 drawings by 400 children from 13 schools across the country were submitted until 27 March 2014 on the official Facebook page of the Bank of Albania. The 10 best drawings were selected by the number of "Likes" they had received.

The award ceremony was attended by the Governor of the Bank of Albania, Mr. Ardian Fullani, Minister of Education and Sports, Ms. Lindita Nikolla, Chairman of the Albanian Association of Banks, Mr. Seyhan Pencabligil, and Chief Executive Officer of Raiffeisen Bank in Albania, Mr. Christian Canacaris. During the ceremony, Governor Fullani and Minister Nikolla underlined the importance of financial education at an early age. They added that the pupils' drawings were indeed their first steps towards cultivating financial literacy.

The Bank of Albania gave the top ten contestants a certificate of award and an encyclopaedia, and Raiffeisen Bank Albania sponsored each of the ten winners with ALL 10,000 in a bank account.

*Bank of Albania meets with the banking sector to introduce and discuss the bilateral SWAP agreement on national currency exchange between the Bank of Albania and the People's Bank of China*

On 2 April 2014, the Bank of Albania organised a meeting with banking sector executives to introduce the bilateral SWAP agreement on national currency exchange, entered into between the Bank of Albania and the People's Bank of China.

This agreement was signed on 12 September 2013 by the Governor of the Bank of Albania, Mr. Ardian Fullani and the Governor of the People's Bank of China, Mr. Zhou Xiaochuan, for the maximum amount of 2 billion Yuan or 35.8 billion Albanian lek. The agreement is valid for an initial period of three years, and may be extended upon consent by both parties.

*ECB launches EU-funded cooperation programme with Central Banks in the Western Balkans*

The European Central Bank (ECB) launched a Eurosystem cooperation programme with the Bank of Albania (BoA), the Central Bank of the Republic of Kosovo (CBRK), and the National Bank of the Republic of Macedonia (NBRM). The European Union (EU) has allocated €500,000 to the programme from its Instrument for Pre-Accession Assistance.

The programme aims to prepare the three central banks in the region for joining the European System of Central Banks (ESCB), once the respective economies have qualified for EU membership. Within the framework of the programme, needs assessment reports for the BoA and the CBRK will be prepared, identifying further progress required to meet EU central banking standards. Furthermore, the programme will take stock of priorities for further strengthening the NBRM, following a needs assessment of the NBRM's functions, which was carried out during 2012-13.

To lay the foundations for this cooperation programme, the first Interim report was signed in Tirana by Yves Mersch, member of the Executive Board of the ECB, Ardian Fullani, Governor of the BoA, Bedri Hamza, Governor of the CBRK and Fadil Bajrami, Vice-Governor of the NBRM. They all commended this programme as another step in strengthening cooperation between central banks in Europe and reinforcing the ties between the EU and the Western Balkans region.

At the invitation of Mr. Ardian Fullani, Governor of the Bank of Albania, on 23 April 2014, Mr. Stefan Ingves, Governor of the Sveriges Riksbank, paid an official visit to the Bank of Albania.

*Mr. Stefan Ingves, Governor of the Sveriges Riksbank, pays an official visit to the Bank of Albania*

During the official visit, Mr. Ingves met with heads of departments at the Bank of Albania and discussed the latest economic developments in Albania, with special focus on the Albanian banking sector. Mr. Ardian Fullani, Governor of the Bank of Albania, presented Governor Ingves with the measures taken by the Bank of Albania to safeguard financial stability in the country. Governor Fullani highlighted the importance of the latest legal amendments made by the Bank of Albania, which aim at lowering the level of non-performing loans and boosting lending. Governor Ingves commended Bank of Albania's work towards safeguarding the country's financial stability.

Bilateral discussions focused also on the important contribution of the Bank of Albania to Albania's EU integration process through the approximation of the regulatory framework and work practices with EU Directives. In this context, the Bank of Albania has enhanced its cooperation with euro area central banks. Bank of Albania's membership in Vienna Initiative 2.0 Steering Committee marks an important step in this regard. Governor Fullani noted that Albania's presence in this Steering Committee also voices the interests of other non-EU Member States.

At the end of the meeting, the attendees stated the importance of continued deep cooperation between the two institutions.

On 10 June 2014, at Bank of Albania's premises, a cooperation agreement was signed between the Bank of Albania and the General Directorate for the Prevention of Money Laundering (GDPML), on the fight against money laundering and terrorist financing.

*Cooperation Agreement between the Bank of Albania and the General Directorate for the Prevention of Money Laundering*

The agreement was signed by the Governor of the Bank of Albania, Mr. Ardian Fullani, and the General Director of GDPML, Mr. Genti Gazheli.

The joint agreement with the GDPML was made pursuant to requirements of the Law No. 9917, dated 19.05.2008 "On Prevention of Money Laundering and Terrorist Financing", as amended, recommendations of the FSAP mission of the World Bank and the International Monetary Fund.

The purpose of this agreement is to increase cooperation between the two institutions on facilitating the information exchange, aiming at strengthening the risk-based supervision approach to preventing money laundering and terrorist financing.

Following the signing of the agreement, Governor Fullani and Mr. Gazheli stated that the signed agreement was of special importance and an outcome of the successful cooperation between the two institutions. It aims at enhancing the supervisory role in order to foster the preventive system in Albania and

reduce the possibilities of use of the financial system for money laundering and terrorist financing.

The agreement will also contribute to boosting efficiency in the two institutions, by carrying out joint examinations and activities, making a better use of human resources and, at the same time, reducing financial costs not only to the two authorities but also to entities themselves.

*Friday seminars* Research papers presented in “Friday Seminar Series” during January-June 2014 addressed various issues, such as the effect of inflation targeting in a dollarized economy, factors determining foreign currency lending in the case of Albania, house prices and their equilibrium. A detailed description of the papers follows in the next sections.

INFLATION TARGETING IN A DOLLARIZED ECONOMY, by Eda Dokle, winner of the Governor’s Award for the Best Diploma Thesis 2013, Masters in Economics and Finance, Charles University (Prague)

The study presents an overview of general characteristics of the targeted inflation regime starting with its origin and preconditions and compares it with other alternative regimes. Based on the empirical analysis of 29 countries from Central and Eastern Europe and the Commonwealth of Independent States, characterized by a certain level of dollarization, it was concluded that the level of average inflation fell under the inflation targeting regime. Also, output growth was not affected by the targeted inflation and dollarization of deposits did not deteriorate the positive impact of inflation targeting on inflation.

FOREIGN CURRENCY LENDING IN ALBANIA, by Gerti Shijaku, Research Department

The paper assesses the determinant factors of lending in foreign currency in Albania, in 2000-2012. The investigation of lending behaviour is very important given that 65% of private sector credit is denominated in foreign currency. Results show that foreign currency lending is more preferred due to the lower interest rates in foreign currency, inflation stability and the exchange rate.

GDP, CONSUMPTION COMPONENTS AND DEFLATORS: EXTRAPOLATION AND QUARTERLY INTERPOLATION, by Ilir Vika and Enian Çela, Research Department

This paper presents the methodology applied in quarterly interpolation of nominal and real GDP in the interval 1996-2011. At the same time, it explains the steps in extrapolating the expenditure side components in the years 2009-2011 in nominal and real terms. The material explains the method of transformation of the series from real terms with previous year prices to real terms based on 2005 prices and also the quarterly distribution of deflators for overall GDP and expenditure components.

EXTERNAL INTERVENTION IN ETHNIC CONFLICTS, by Ada Huibregtse,  
Ph.D, Professor at New York University of Tirana

This study explores how ethnic composition of states and the power of ethnic kinship affect external state interventions in ethnic conflicts. The research question of the study is whether ethnic composition in the state, ethnic kinship with groups in other states, and ethnic settlements of the ethnic group in conflict make some states more prone to others to intervene in ethnic conflicts. The study raises two assumptions: (i) in the states with well-defined ethnic groups, political decision-making is aligned with the ethnic divisions; (ii) ethnic conflicts, due to their nature, perform differently compared to the other types of civil wars. Results show that states with a definite ethnic dominance have higher impact on the ethnic conflicts.

HOUSE PRICES IN ALBANIA: DEVIATIONS FROM AN EQUILIBRIUM, by  
Endrit Yzeiraj, Research Department

The paper presents a “fundamental” price index for housing, based on key macroeconomic indicators, such as, economic growth rates, interest rates, and demographic developments. This index is used as a benchmark for the actual house prices in Albania in order to measure the possible deviations from equilibrium. The research finds that house prices starting have appreciated since the post-2006 period. However, from 2012 and onwards the findings suggest a price correction process. Nonetheless, the long term relationship between actual and fundamental house prices remains weak.

## MONETARY POLICY DECISIONS

29 January 2014

The Supervisory Council of the Bank of Albania decided to keep the interest rate on repurchase and reverse repurchase agreements (REPO and reverse REPO) unchanged at 3.00 per cent.

26 February 2014

The Supervisory Council of the Bank of Albania decided to cut the interest rate on repurchase and reverse repurchase agreements (REPO and reverse REPO) by 0.25 percentage points.

Following this move, the interest rate on repurchase and reverse repurchase agreements is 2.75 per cent (from 3.00 per cent).

27 March 2014

The Supervisory Council of the Bank of Albania decided to keep the interest rate on repurchase and reverse repurchase agreements (REPO and reverse REPO) unchanged at 2.75 per cent.

30 April 2014

The Supervisory Council of the Bank of Albania decided to keep the interest rate on repurchase and reverse repurchase agreements (REPO and reverse REPO) unchanged at 2.75 per cent.

30 May 2014

The Supervisory Council of the Bank of Albania decided to cut the interest rate on repurchase and reverse repurchase agreements (REPO and reverse REPO) by 0.25 percentage points.

Following this move, the interest rate on repurchase and reverse repurchase agreements is 2.50 per cent (from 2.75 per cent).

25 June 2014

The Supervisory Council of the Bank of Albania decided to keep the interest rate on repurchase and reverse repurchase agreements (REPO and reverse REPO) unchanged at 2.50 per cent.



## LEGAL NEWS, 2014 H1

### MONETARY POLICY

On 29 January 2014, the Supervisory Council of the Bank of Albania approved by Decision No. 2 the "Monetary Policy Statement of the Bank of Albania for the second half of 2013". Year 2013 was difficult for the Albanian economy. Aggregate demand and economic growth remained at low levels; inflation fluctuated around Bank of Albania's lower bound of the target band, while budget deficit and public debt increased significantly. The Bank of Albania, aiming to encourage aggregate demand, lowered the key interest rate by 0.5 percentage points, to 3.0%, in the fourth quarter. After four quarters, inflation is expected to range between 0.7 - 3.8%, with a 90% probability of occurrence. This will require maintaining a stimulating monetary policy even in the medium term.

On 26 February 2014, the Supervisory Council of the Bank of Albania approved the Decision No. 08 "On cutting the interest rate on repurchase and reverse repurchase agreements". According to this Decision, the Supervisory Council cuts by 0.25 percentage points the interest rate on repurchase and reverse repurchase agreements, from 3.0 to 2.75%.

On 30 April 2014, the Supervisory Council of the Bank of Albania approved by Decision No. 27 the "Monetary policy report on the first quarter of 2014". The available data for the 2014 Q1 show that the Albanian economy continues to be characterised by a weak aggregate demand, which further impacts almost all the economic and financial parameters of the country. From the financial point of view, the weak economic growth pressures for an increase in budget deficit and public debt, and creates financial difficulties for businesses. These difficulties are reflected in the increase of non-performing loans, and affect negatively the banks' willingness to lend.

On 30 May 2014, the Supervisory Council of the Bank of Albania approved the Decision No. 33 "On cutting the interest rate on repurchase and reverse repurchase agreements". The Supervisory Council decided to cut by 0.25 percentage points the interest rate on repurchase and reverse repurchase agreements, from 2.75 to 2.50%.

On 25 June 2014, the Supervisory Council of the Bank of Albania approved the Decision No. 39 "On the approval of interest rate applied on the remuneration of required reserve and excess reserve of banking entities" The remuneration interest rate applied on the required reserve denominated in Lek

will be 70% (seventy) of the interest rate applied on repurchase and reverse repurchase agreements, adopted by the Supervisory Council of the Bank of Albania at the last day of the base period. While, remuneration interest rate applied on the Euro excess reserve will be 0.10% lower than the interest rate applied on the deposits, as set forth by ECB.

## PAYMENT SYSTEM

On 29 January 2014, the Supervisory Council of the Bank of Albania approved the Decision No. 04 "Approval of some amendments to the Regulation 'On the functioning of the Albanian Electronic Clearing House (AECH) system'". These amendments consist in the articles of the Regulation that lay down the organisation, regulation and oversight of the AECH system, as well as the execution of payments via this system. Also, this Decision sets forth the amendments to the appendices of this Regulation.

On 29 January 2014, the Supervisory Council of the Bank of Albania approved the Decision No. 5 "Approval of some amendments to the Regulation 'On the functioning of the Interbank Payments System– AIPS'". The Supervisory Council adopted the amendments that apply on articles that lay down the organisation and regulation of AIPS and the terms and conditions to participate in this system.

On 30 April 2014, the Supervisory Council of the Bank of Albania approved by Decision No. 32, the document "Oversight policies of the payment and settlement systems". The purpose of this document is to make clear to the public the objectives of the oversight of payment and settlement systems; application scope and the activities related to the oversight function carried out by the Bank of Albania, standards and methodology used in compliance with the importance of each entity that is subject to the oversight.

On 30 May 2014, the Supervisory Council of the Bank of Albania approved by Decision No. 34 the Regulation "On the functioning of portfolio analytics tool 2 (part 2) system at the Bank of Albania". The purpose of this Regulation is to provide for the well-functioning of the forex management system "PAT2", by laying down the functions of tasks of the main departments that will use the system, and by mutual coordination and collaboration.

On 25 June 2014, the Supervisory Council of the Bank of Albania approved by Decision No. 37 the Regulation "On the organisation and functioning of the National Committee on Payment System ". The purpose of this Regulation is to lay down the objective, functions, duties, composition and rules for the organisation and functioning of the National Committee of Payment System, as an advisory collegial authority. The purpose of this committee is to support and contribute to strengthening the security, stability and effectiveness of the national payment system in Albania, in compliance with the legal obligation of the Bank of Albania in encouraging the normal functioning of the payment system.

## BANKING SUPERVISION

On 26 February 2014, the Supervisory Council of the Bank of Albania approved by Decision No. 09 the document "On Supervision Policy". This document lays down the risk-based supervision policy for banks and banking or financial groups, whose activity is subject to the supervision of the Bank of Albania. The main objective of the risk-based supervision is to ensure an effective process for the assessment of the financial situation and the stability of banks. The document sets forth the principles and priorities of the risk-based supervision, banks' risk profiles, elements of supervision process, the supervision regulatory framework, etc.

On 26 February 2014, the Supervisory Council of the Bank of Albania approved by Decision No. 10 the Regulation "On the Risk Management from Large Exposures of Banks". The purpose of this Regulation is to set out rules and criteria for calculating, supervising and reporting bank's large exposures to a person/client or group of persons/clients connected between them or with the bank, for the purpose of managing the risk arising from concentrated exposure to them. The Regulation will apply on banks licensed by the Bank of Albania to carry out the financial and banking activity in the Republic of Albania.

On 26 February 2014, the Supervisory Council of the Bank of Albania approved by Decision No. 11 the Guideline "On recovery plans". The purpose of this Guideline is to lay down the core principles and supervisory requirements on the structure and recovery plans of banks, and their reporting to the Bank of Albania. This guideline will apply on foreign banks, determined as systemic important banks by the respective Administrator of the Bank of Albania for the purpose of this guideline, based on the proposal by the Supervision Department.

On 27 February 2014, the Supervisory Council of the Bank of Albania approved the Decision No. 22 "Amendments to the Regulation 'On credit risk management by banks and branches of foreign banks'". The amendments to this Decision consist in articles that regulate the classification of loans by banks and the loan loss write-offs.

On 27 March 2014, the Supervisory Council of the Bank of Albania approved the Guideline No.2 "On the execution of liabilities on the amounts of accounts at the bank". This guideline lays down the way of execution on the amounts at the bank account. This guideline shall apply on banks licensed by the Bank of Albania and shall regulate, among others, the procedures related to the order on the amount sequestration or transfer, and on the suspension and dismissal of execution.

On 30 April 2014, the Supervisory Council of the Bank of Albania approved the Decision No. 31 "Amendments to the Regulation 'On the licensing, organisation, activity and supervision of foreign exchange bureaus'". The amendments consist in the articles that regulate the approval of the additional

activity for the institutions, the necessary documentation for the licensing and the requirements related to the capital, transparency and sanctions if concluded that the entity infringes the provisions set forth in the Regulation.

## MONETARY OPERATIONS

On 26 February 2014, the Supervisory Council of the Bank of Albania approved the Decision No. 12 "An amendment to the Regulation 'On the guaranties in the crediting transactions of the Bank of Albania'". The amendment to this Regulation consists in the Article that regulates the measures on the risk control, by laying down that the Haircut size will be applied by subtracting 3% from the market value of securities.

On 26 February 2014, the Supervisory Council of the Bank of Albania approved the Decision No. 13 "Amendments to the Regulation 'On repurchase and reverse repurchase agreements'". This decision contains the definition for the treasury bills and bonds, and sets forth that the securities, subject to repurchase and reverse repurchase agreements are the treasury bills and bonds, denominated in Lek, issued by the Government of the Republic of Albania.

On 25 June 2014, the Supervisory Council of the Bank of Albania approved the Decision No. 38 "Amendments to the Regulation 'On the minimum required reserve held by banks at the Bank of Albania'". The amendments consist in some of the regulation's stipulations, and add an Article that regulates the remuneration of the amount exceeding the required reserve account.

## ISSUE

On 26 February 2014, the Supervisory Council of the Bank of Albania approved the Decision No. 15 "On printing the Albanian banknotes legal tender, denominations 1000 Lekë and 500 Lekë". This Decision stipulates the reprinting of Albanian banknotes of legal tender, denominations 1000 Lekë and 500 Lekë, which will bear in print the issue year, 2014.

On 26 February 2014, the Supervisory Council of the Bank of Albania approved the Decision No. 16 "On the reprint of Albanian metal coins, of legal tender, denomination 5 Lekë". Upon this Decision, the Supervisory Council approves the reprinting of Albanian metal coins, denomination 5 Lekë, of legal tender, and which will bear the issue year, 2014.

On 26 February 2014, the Supervisory Council of the Bank of Albania, approved with Decision No. 20 the Regulation "On the procedures for purchasing the numismatic values at the Bank of Albania". This Regulation lays down the rules and procedures to purchase numismatics values at the Bank of Albania. In accordance with this Decision, the Bank of Albania the purchase does not follow the procurement procedures, which shall apply only if they do not contradict the provisions of this regulation.

On 27 March 2014, the Supervisory Council of the Bank of Albania approved the Decision No. 25 "On the printing of Albanian banknote, legal tender, denomination 10000 Lekë". Upon this Decision, the Supervisory Council approved in principle the printing of the Albanian banknote, of legal tender, with nominal value 10,000 Lekë. The Decision also stipulates the establishment of a group to study the theme of the banknote design.

On 25 June 2014, the Supervisory Council of the Bank of Albania approved the Decision No. 40 "On the minting of metal coins for numismatic purposes, year 2014 and 2015". This Decision lays down the nominal values and physical characteristics of the metal coins for numismatic purposes, of no legal tender, that will be printed in 2014-2015, with these thematic: 1. Historical events: 70th Anniversary of the Liberation of Albania (1944-2014); 2. Loro Boriçi, distinguished personality of Albanian football (1922-1984); 3. Science and scholars: Kostandin Kristoforidhit (1827-1895) and 4. Albanian art: Distinguished composer Çesk Zadeja (1927-1997).

## FINANCIAL STABILITY

On 30 April 2014, the Supervisory Council of the Bank of Albania approved by Decision No. 29 the "Financial Stability Report 2013 H2". The Albanian banking sector and financial system were stable in 2013 H2. Despite the lower economic growth, developments in the macroeconomic setting sustained the performance of the financial system. The macroeconomic setting was characterised by low exchange rate volatility and weak inflationary pressures, notwithstanding the easing monetary policy. In financial markets, the volume of trading and number of transactions has been steady. In the banking sector, capitalisation and liquidity indicators were at sound levels, supported by the improved net financial result. The banking activity volume expanded at slower rates, as deposits' increase decelerated and crediting contracted

## ECONOMIC POLICY

On 12 February 2014, the Council of Ministers approved the Decision No. 73 "Amendments to the Decision No.1114, dated 30 July 2008 of the Council of Ministers "On some issues pursuant to laws No. 7703 dated 11.5.1993 "On social insurances in the Republic of Albania", as amended, No. 9136, dated 11.9.2003 "On the collection of the required contributions of social and health insurance in the Republic of Albania", as amended, and No. 7870 dated 13.10.1993 "On health insurances in the Republic of Albania", as amended. This decision stipulates, among others, that the minimum monthly salary, for the effect of calculating the social and health insurance contributions, from 1 January 2014 shall be no lower than Lek 19026 (nineteen thousand and twenty-six), while the maximum one will be Lek 95130 (ninety-five thousand one hundred and thirty).

On 27 April 2014, the Council of Ministers approved the Decision No. 110 "On the approval of the preparatory expenditure ceilings on medium-term expenditure budget program". In accordance with this Decision, within 21 March 2014, all the ministries of line and central institutions will deposit in the treasury system the limits of their three-year commitments for the period 2015-17, or in more details 30% of the retained earnings, after subtracting from the item ceiling "Other current expenditure", of the existing contracts agreed under this item; and 50% of the retained earnings, after subtracting from the item ceiling "domestic capital expenditure", of the existing contracts agreed under this item.

On 5 March 2014, the Council of Ministers approved the Decision No. 124 "Statute of the Required Insurance Fund of Health Care in the Republic of Albania". This decision sets forth that the Required Insurance Fund of Health Care is the sole autonomous public authority that offers and manages the required insurance of health care in the Republic of Albania. This fund manages the scheme of required health insurance, in compliance with the national policies of health care, as laid down by the Ministry of Health.

On 17 March 2014, the Minister of Finance approved the Guideline No. 6/1 "Amendments to the Guideline No. 17 dated 13.5.2008 'On value added tax', as amended". The guideline lays down that from 1 April 2014, the supply of medicines, health services by public and private health institutions, is a supply excluded from VAT. In regard to this paragraph, medicines imply those for human and animal consume.

On 28 March 2014, the State Aid Commission approved the Decision No. 47 "On the plan of granting the state aid" On the program to promote the employment for the category of people with disabilities". The plan on providing aid aims to promote the employment, by providing facilities to the enterprises, which hire people with disabilities, through annual employment contracts. This measure aims to facilitate the integration of this category in the labour market, social and economic life of the country.

On 2 April 2014 the Council of Ministers approved the Decision No. 188 "Amendments to the Decision No. 199, dated 11.1.2012 of the Council of Ministers 'On the financing amount, criteria and procedures for the implementation of the program to promote the employment of unemployed job-seekers that are hired for the first time'". These amendments set forth, among others, that for the beneficiaries of this program, young people aged 16-30 years old, the respective employment office will finance the employers up to 100% of the required social and health insurance contributions (part of the employer's contribution), upon the condition that the employment contract is agreed for not less than one year.

On 2 April 2014, the Council of Ministers approved the Decision No. 189 "Amendments to the Decision No. 27 dated 11.1.2012, of the Council of Ministers "On the employment promotion program aiming at employing women belonging to special groups". The amendments to this decision stipulate

that for the beneficiaries of this program - women job-seekers belonging to special groups, the respective employment offices will finance the employer, at a monthly financing to 100% of the required social and health insurance contributions (part of the employer's contribution), upon the condition that the employment contract will not be less than one year.

On 2 April 2014 the Council of Ministers approved the Decision No. 192 "Amendments to the decision No. 48 dated 16.1.2008 of the Council of Ministers, "On the program of promoting the employment of unemployed job-seekers who are in difficulty". The decision lays down that for the unemployed job-seekers in difficulty, the respective employment office will finance the employer to 100% of the required social and health insurance contributions, upon the condition that the duration of the employment contract will be not less than one year.

On 2 April 2014 the Council of Ministers approved the Decision No. 193 "Amendments to the decision No. 47 dated 16.1.2008, of the Council of Ministers 'On employment promoting program, through formation at work place', as amended". These amendments lay down that the unemployed job-seekers, who will benefit training through the work, the respective employment offices will finance up to 70% of fees based on training cost, for the small and medium-sized enterprises and up to 50% of fees at training cost, for large enterprises.

On 3 April 2014, the Parliament of the Republic of Albania adopted the Law No. 32/2014 "Amendment in the Law No. 8438 dated 28.12.1998, 'On income tax', as amended. This amendment consists in the Article that regulates the bad debts in the Law "On Income tax". In case of banks, branches of foreign banks and non-bank financial institutions, licensed by the Bank of Albania to carry out the lending activity, in defining the taxed profitability, the written off bad debt, related to lending, is known as deductible expense upon the fulfilment of some terms laid down in this paragraph.

On 8 February 2014, the Minister of Finance approved the Guideline No. 6/3 "Amendments to the Guideline, dated 13.5.20118, 'On value added tax', as amended. The amendments stipulated in this Decision relate to the articles that regulate VAT lending rates on gasoil used in the sectors of construction, transport, services and trade.

On 27 February 2014, the Parliament of the Republic of Albania ratified by the Law No. 19/2014 "The Agreement between the Council of Ministers of the Republic of Albania and the Government of the Republic of Italy on the realisation of 'The Program of integrated assistance for the development of small and medium-sized enterprises (SME)'". The purpose of this Agreement is to regulate the implementation, management and responsibilities of parties for the realisation of the program of integrated assistance for the development of the Albanian SMEs. The main objective of this program is to assist the economic growth of Albania in the light of integration in the European Union market, by supporting the broad development of the domestic enterprises and



encouraging at the same time the implementation of stable environmental standards, and the improvement in general of the working conditions.

On 5 March 2014, the Council of Ministers approved by Decision No. 119 the "National Strategy for the integrated border management and action plan, 2014-2020". The strategy for the integrated border management is a strategic document in compliance with the major objectives of the Government to meet the standards in the framework of Albania integration and membership in EU. The objectives laid down in this strategic document are in line with the obligations arising from the Stabilisation and Association Agreement and the EU recommendations for Albania to become a member in the European Union.

On 9 April 2014, the Council of Ministers approved the Decision No. 202 "On laying down the terms and conditions for exporters for the purposes of VAT reimbursement". Upon this decision, it is established that exporter, for purposes of VAT reimbursement, will be considered if the value of exports conducted in the taxing period/periods, for which reimbursement is requested, is higher than 60% of the total amount of selling, including exports if having crediting outstanding, that exceeds the amount of Lek 400 000 (four hundred thousand).

On 23 April 2014, the Council of Ministers approved the Decision No. 223 "The draft-agreement between the Council of Ministers of the Republic of Albania and the Government of the Republic of Kosovo, on the cooperation in promoting and facilitating trade". Through this Agreement, the governments of both countries aim to promote and facilitate the trade between them, accepting that the broader application of risk-based controls will provide the reduction of frequency and intensity of physical examinations, and thus the time at the border and for the clearance of goods.

On 24 April 2014, the Parliament of the Republic of Albania approved the Law No. 42/2014 "Some amendments to the Law No. 8438 dated 28.12.1998, 'On income tax'", as amended. The amendments consist in the articles that regulate the transfer of price and methods, the assessment of the combined controlled transactions, market indicators diapason and the advance pricing agreements.

On 24 April 2014, the Parliament of the Republic of Albania approved the Law No. 43/2014 "An amendment to the Law No. 9920 dated 19 May 2008, 'On the taxation procedures in the Republic of Albania', as amended". The approved amendment stipulates the addition of an Article that regulates the damages related to the transfer pricing. Thus, the Article stipulates that in case of not presenting in due time "the notification of the controlled annual transactions", the taxpayer will be charged of a fixed penalty of Lek 10 000 for each month of overdue.

On 30 April 2014, the Council of Ministers approved the Decision No. 245 "On laying down the terms and procedures for the improvement and



updating of data in the real estate register". In accordance with this Decision, the improvement and updating of real estate register data is a process aiming at updating and guaranteeing the registered information on real estate; the accurateness of the data in the initial register; the registration of real estate that are within the cadastral area, unregistered earlier, and the increase in the services quality to the client.

On 6 May 2014, the Minister of Finance approved the Guideline No. 13 "Amendments to the Guideline No. 32 dated 31.12.2013, 'On simplified tax on profit for small-sized business'". The amendments consist in paragraphs that regulate the management of simplified tax applied on profit and the transfer of income to the account of local government units.

On 21 May 2014, the Council of Ministers approved the Decision No. 307 "On the registration and identification of insured persons under the required health insurance". According to this Decision, the following will be considered as insured under the required insurance scheme: the economically active persons, permanently residing in the Republic of Albania, who pay the required contribution of health insurance; the economically non-active persons, whose contribution payment is financed by the state or other sources, as stipulated by the Law; as well as the voluntarily insured persons.

On 22.05.2014, the Council of Ministers approved the Law No. 52/2014 "On insurance and re-insurance activity". This Law regulates the establishment, activity and supervision of insurance, re-insurance and intermediation activity, for the insurance market to operate in a safe, stable and transparent environment, for the protection of consumers' rights and interest. It will apply on natural and legal persons that carry out the insurance and re-insurance activity, of intermediation in insurance and re-insurance and the operations that are directly related to the insurance and re-insurance activity in the Republic of Albania. The Financial Supervisory Authority is responsible for monitoring the implementation of this Law.

On 22 May 2014, the Council of Ministers approved the Law No. 53/2014 "On deposits insurance". This Law regulates the functioning of deposits insurance scheme at banks, branches of foreign banks and savings and loans association in the Republic of Albania. The objective of deposits insurance scheme is the compensation of deposits. In compliance with this main objective, two main secondary objectives of the scheme are to: protect the depositors' interests and contribute to the stability of the banking and financial system.

On 23 May 2014, the Minister of Finance approved the Guideline No. 14 "Some amendments to the Guideline No. 5, dated 30.1.2006, 'On income tax', as amended". These amendments consist in those paragraphs of the Guideline that regulate the exempted income, tax collection, taxation degree and the evidence of tax at the source.

On 29 May 2014, the Parliament of the Republic of Albania approved the Law No. 54/2014 "Some amendments to the Law No. 9572 dated 3 July 2006 'On Financial Supervisory Authority'". These amendments consist in the articles of the Law that regulate the organisation, functioning and competences of the Albanian Financial Supervisory Authority's Board and the Chairperson, the appointment of board's member, wages and other treatment of the Authority, the funding and budget, and lays down the tariffs applied on the supervised entities.

On 4 June 2014, the Council of Ministers approved the Guideline No. 1 "On the execution of monetary obligations of the general government units at the treasury account". This guideline aims to lay down the execution of the monetary obligations of the general government units from the treasury account, which derive from final court decisions. The execution of court decisions which are foreseen to be paid from the respective budgets, will take place according to the order of their official presentation at the previous year and the settlement chart will be published at the online site of the spending unit or other means of publication, which are made known to public.

On 5 June 2014, the Parliament of the Republic of Albania approved the Law No. 57/2014 "On the establishment and function of the National Economic Council". The purpose of the Law is to establish the National Economic Council (NEC), to guarantee the institutional collaboration and public-private partnership for the development of economic policies, to guarantee the dialogue and provide advise between public administration authorities and private sector, and the increase of transparency in public decision-taking and the representation of private sector in this process. This Law is about the initiatives and practices of public administration authorities on amending laws or by-law acts, as well as the drafts on changing policies, which affect the economy.

On 11 June 2014, the Council of Ministers approved the Decision No. 360 "On amendments to Decision No. 419 dated 15.5.2014, of the Council of Ministers 'On the establishment of the Albanian Competitiveness Fund'". These amendments lay down that the Albanian Competitiveness Fund provides direct financial assistance to micro enterprises, small and medium-sized enterprises, to Lek 1 400 000 (one million and four hundred thousand), but no higher than 70% of the acceptable costs. The acceptable cost that may be financed, include the costs on: product adaptation, participation in cross-border fairs, development of electronic trade and promotion, as well as advisory services. In this case, the cost that may be co-financed shall not exceed 50% of total cost of these services.

On 11 June 2014, the Council of Ministers approved the Decision No. 365 "Approval of annual report 'On the state grants for the year 2013'". Annual report on the state assistance for 2013 contains an analytical description of state assistance in the Republic of Albania in 2013 accompanied by the updated data of the state assistance for the years 2011 and 2012.

On 19 June 2014, the Parliament of the Republic of Albania adopted the resolution "On evaluating the activity of the Bank of Albania for 2013". Accordingly, the Parliament of the Republic of Albania estimates that Bank of Albania has fulfilled its main, constitutional and legal objective to maintain price stability, and keep inflation within the set target. Through the implementation of a prudential monetary policy, the Bank of Albania has contributed to preserving the economic environment, preventing economic growth decrease beyond the critical limits and maintaining macroeconomic and financial stability in Albania. Monetary policy of the Bank of Albania is positively transmitted to financial markets, but it is not appropriately and adequately reflected on the real economy. While financial markets were liquid, in the real economy, a decrease in demand for loans by businesses and households, and a fall in lending supply by the banking system were noted.

On 23 June 2014, the Minister of Social Welfare and Youth approved the Guideline No. 8 "On the calculation of benefiting the economic assistance, in pilot zones". This guideline lays down that the regional directorate, after the evaluation according to the score system for the individuals and households in Tirana, Elbasan and Durrës, will calculate the amount of the economic assistance. Notwithstanding its composition, the complete maximum amount of economic assistance for the household may not be higher than Lek 8 000 (eight thousand) in a month.

## BANK OF ALBANIA MANAGEMENT, AS AT 30 JUNE 2014

## SUPERVISORY COUNCIL

ARDIAN FULLANI	Chair
ELISABETA GJONI	Deputy Chair
ADRIAN CIVICI	Member
DHORI KULE	Member
ELA GOLEMI	Member
ERMELINDA MEKSI	Member
PETRAQ MILO	Member

## GOVERNOR

ARDIAN FULLANI

## DEPUTY GOVERNORS

ELISABETA GJONI	First Deputy Governor
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## GENERAL INSPECTOR

ELIVAR GOLEMI

## GOVERNOR'S OFFICE

GENC MAMANI	Chief of Cabinet
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## HEAD OF COORDINATION AT GOVERNOR'S OFFICE

GRAMOZ KOLASI

## SECRETARY OF SUPERVISORY COUNCIL

Elvis Çibuku

## DEPARTMENTS AND OTHER UNITS

HUMAN RESOURCES DEPARTMENT	Roden Pajaj
MONETARY POLICY DEPARTMENT	Erald Themeli
RESEARCH DEPARTMENT	Altin Tanku
MONETARY OPERATIONS DEPARTMENT	Marjan Gjermeni
SUPERVISION DEPARTMENT	Indrit Banka
FINANCIAL STABILITY AND STATISTICS DEPARTMENT	Klodion Shehu
INFORMATION TECHNOLOGY DEPARTMENT	Mariglen Biti
ISSUE DEPARTMENT	Dorian Çollaku
PAYMENT SYSTEMS AND ACCOUNTING AND FINANCE	Anjeza Harizaj
LEGAL DEPARTMENT	Altin Naqe
AUDIT DEPARTMENT	Elivar Golemi
ADMINISTRATION DEPARTMENT	Agron Skënderaga
SECURITY AND PROTECTION DEPARTMENT	Eduard Sinani

## BRANCHES

SHKODRA	Ermira Istrefi
ELBASANI	Thoma Rula
GJIROKASTRA	Anila Thomaj
KORÇA	Liljana Zjarri
LUSHNJA	Shpresa Meço

## BANKS AND BRANCHES OF FOREIGN BANKS LICENSED BY THE BANK OF ALBANIA, AS AT 30 JUNE 2014

### 1. RAIFFEISEN BANK SH.A.

Licence No. 2/1998, dated 11.01.1999

Approved by the Bank of Albania Supervisory Council Decision No. 163, dated 11.12.1998

Certificate No. 2 "On Deposit Insurance"

Director: Christian CANACARIS

Address: Bulevardi "Bajram Curri", European Trade Center, Tirana, Albania

Tel: +355 4 2274 910

Fax: +355 4 2275 599

E-mail: [info@raiffeisen.al](mailto:info@raiffeisen.al)

Website: [www.raiffeisen.al](http://www.raiffeisen.al)

### 2. UNITED BANK OF ALBANIA SH.A.

Licence No. 3/1998, dated 11.01.1999

Approved by the Bank of Albania Supervisory Council Decision No. 165, dated 11.12.1998

Certificate No. 3 "On Deposit Insurance"

Director: Emina ŠIŠIĆ

Address: Rruga e Durrësit, sheshi tek Zogu i Zi, Godina Teknoprojekt,  
P.O. BOX 128, Tirana, Albania

Tel: +355 4 2404 575

Fax: +355 4 2228 460, 2228 387

E mail: [info@ubaal.com](mailto:info@ubaal.com)

Website: [www.uba.com.al](http://www.uba.com.al)

### 3. VENETO BANKA SH.A.

Licence No. 5/1998, dated 11.01.1999

Approved by the Bank of Albania Supervisory Council Decision No. 164, dated 11.12.1998

Certificate No. 4 "On Deposit Insurance".

Director: Lucio Luigi GAITA

Address: Bulevardi "Dëshmorët e Kombit", Ndërtesa Kullat Binjake, Tirana,  
Albania

Tel: +355 4 2280 555

Fax: +355 4 2280 356

E-mail: [info@venetobanka.al](mailto:info@venetobanka.al)

Website: [www.venetobanka.al](http://www.venetobanka.al)

### 4. NATIONAL COMMERCIAL BANK SH.A.

Licence No. 6/1998, dated 11.01.1999

Approved by the Bank of Albania Supervisory Council Decision No. 162, dated 11.01.1999

Certificate No. 5 "On Deposit Insurance"

Director: Seyhan PENCAPLIGIL

Address: Bulevardi "Zhan D'Ark", Tirana, Albania

Tel: +355 4 2250 955

Fax: +355 4 2250 956

E – mail: [info@bkt.com.al](mailto:info@bkt.com.al)

Website: [www.bkt.com.al](http://www.bkt.com.al)

5. TIRANA BANK SH.A.

Licence No. 7, dated 12.09.1996

Approved by the Bank of Albania Supervisory Council Decision No. 9, dated 12.09.1996

Certificate No. 6 "On Deposit Insurance"

Director: Savvas THALASSINOS

Address: Rruga "Ibrahim Rugova", Tirana, Albania.

Tel: +355 4 2269 616, 2233 441

Fax: +355 4 2233 417 / 2369 707

E – mail: info@tiranabank.al

Website: www.tiranabank.al

6. NATIONAL BANK OF GREECE – ALBANIA SH.A.

Licence No. 8, dated 25.11.1996

Approved by the Bank of Albania Supervisory Council Decision No. 4, dated 14.03.1996.

Certificate No. 7 "On Deposit Insurance"

Director: Ioannis KOUGIONAS

Address: Rruga e Durrësit, Godina "Comfort", Tirana, Albania

Tel: +355 4 2274 802 / 2274 822

Fax: +355 4 2233 613

E – mail: nbgalbania@icc-al.org

Website: www.nbgbank.al

7. INTERNATIONAL COMMERCIAL BANK SH.A.

Licence No. 09, dated 20.02.1997

Approved by the Bank of Albania Supervisory Council Decision No. 9, dated 30.04.1996

Certificate No. 8 "On Deposit Insurance"

Director: Gideon van den BROEK

Address: Qendra e Biznesit, Rruga "Murat Toptani", Tirana, Albania

Tel: +355 4 2254 372 / 2256 254

Tel/Fax: +355 4 2254 368

E – mail: info@icbank-albania.com

Website: www.icbank-albania.com

8. ALPHA BANK - ALBANIA SH.A.

Licence No. 10, dated 07.01.1998

Approved by the Bank of Albania Supervisory Council Decision, No.01/03/96, dated 27.12.1997

Certificate No. 9 "On Deposit Insurance"

Director: Periklis Drougkas

Address: Rruga e Kavajës, G – KAM Business Center, kati II, Tiranë.

Tel: +355 4 2278 500

Tel/fax: +355 4 2232 102

Website: www.alphabank.al

9. INTESA SANPAOLO BANK ALBANIA SH.A.

Licence No. 11, dated 10.08.1998

Approved by the Bank of Albania Supervisory Council Decision, No. 105, dated 10.08.1998

Certificate No. 10 "On Deposit Insurance"

Director: Silvio PEDRAZZI

Address: *Rruga "Ismail Qemali" Nr. 27, P.O. Box 8319, Tirana, Albania*  
 Tel: *+355 4 2248 753 / 4 / 5 / 6, 2276 000.*  
 Fax: *+355 4 2248 762*  
 E – mail: *helpdesk@intesanpaolobank.al*  
 Website: *www.intesanpaolobank.al*

**10. PROCREDIT BANK SH.A.**

*Licence No. 12, dated 15.03.1999*

*Approved by the Bank of Albania Supervisory Council Decision No. 22, dated 03.03.1999*

*Certificate No. 11 "On Deposit Insurance"*

*Director: Flutura VEIPI*

*Address: Rruga "Dritan Hoxha", Nr. 92, H. 15, Njësia Bashkiake no. 11, Kodi Postar 1026, Tirana, Albania*

*Tel: +355 4 2389 300*

*Fax: +355 4 2233 918*

*E-mail: info@procreditbank.com.al*

*Website: www.procreditbank.com.al*

**11. CREDIT AGRICOLE BANK ALBANIA SH.A.**

*Licence No. 14, dated 28.10.1999*

*Approved by the Bank of Albania Supervisory Council Decision, No.105, dated 19.10.1999*

*Certificate No. 13 "On Deposit Insurance"*

*Director: Luc BEISO*

*Address: Rruga e Kavajës, Nr. 59, "Tirana Tower", Tirana, Albania*

*Tel: +355 4 2258 755 / 56 / 57 / 58 / 59 / 60*

*Fax: +355 4 2258 752*

*E-mail:*

*Website: www.creditagricole.al*

**12. CREDIT BANK OF ALBANIA SH.A.**

*Licence No. 15, dated 28.08.2002*

*Approved by the Bank of Albania Supervisory Council Decision No. 66, dated 28.08.2002*

*Certificate No. 14 "On Deposit Insurance"*

*Director: Sherine KAMEL*

*Address: Rruga "Perlat Rexhepi", Al-Kharafi Group Administration Building, Kati 1&2, Tirana, Albania*

*Tel: +355 4 2272 168, +355 4 2272 162*

*Fax: +355 4 2272 162*

*E-mail: creditbkalb@icc-al.org*

*Website: www.creditbankofalbania.al*

**13. CREDINS BANK SH.A.**

*Licence No. 16, dated 31.03.2003*

*Approved by the Bank of Albania Supervisory Council Decision No. 22, dated 26.03.2003*

*Certificate No. 15 "On Deposit Insurance"*

*Director: Artan SANTO*

*Address: Rruga "Ismail Qemali", Nr. 21, Tirana, Albania*

*Tel: +355 4 2234 096*

*Fax: +355 4 2222 916*

*E-mail: info@bankacredins.com*

*Website: www.bankacredins.com*

**14. SOCIETE GENERALE ALBANIA BANK SH.A.**

Licence No. 17, dated 16.02.2004

Approved by the Bank of Albania Supervisory Council Decision No. 06, dated 11.02.2004

Certificate No. 16 "On Deposit Insurance"

Director: Frederic BLANC

Address: Bulevardi "Dëshmorët e Kombit", Kullat Binjake, Kulla 1, Kati 9, Tirana, Albania

Tel: +355 4 2280 442 / 3

Faks: +355 4 2280 441

E-mail: info@societegenerale.al

Website: www.societegenerale.al

**15. UNION BANK SH.A.**

Licence No. 18, dated 09.01.2006

Approved by the Bank of Albania Supervisory Council Decision No. 101, dated 28.12.2005.

Certificate No. 17 "On Deposit Insurance"

Director: Gazmend KADRIU

Address: Bulevardi "Zogu I", pallati 13-katësh, përballë stacionit të trenit, Tirana, Albania

Tel: +355 4 2250 653 / 2258 081

Fax: +355 4 2272 880

E-mail: info@unionbank.com.al

Website: www.unionbank.com.al

**16. FIRST INVESTMENT BANK ALBANIA SH.A.**

Licence No. 19, dated 06.07.2007.

Approved by the Bank of Albania Supervisory Council Decision No. 35, dated 27.06.2007

Certificate No. 12 "On Deposit Insurance"

Director: Bozhidar TODOROV

Address: Bulevardi "Dëshmorët e Kombit", Kullat Binjake, Kulla 2, 14&amp;15, Tirana, Albania

Tel: +355 4 2276 702 / 3

E-mail: -

Fax: +355 4 2280 210

Website: www.fibank.al

As at 30 June 2014, the Bank of Albania also licensed the following entities:

No.	ENTITIES
21	NON-BANK FINANCIAL INSTITUTIONS
333	FOREIGN EXCHANGE BUREAUS
2	UNIONS OF SAVINGS AND CREDIT ASSOCIATIONS
121	SAVINGS AND CREDIT ASSOCIATIONS
1	REPRESENTATIVE OFFICE OF FOREIGN BANKS



## PUBLICATIONS ISSUED BY THE BANK OF ALBANIA DURING 2014 H1

This list is designed to inform readers about publications issued by the Bank of Albania during the first half of 2014. By visiting our website ([www.bankofalbania.org](http://www.bankofalbania.org)) you can subscribe to our mailing list either by e-mail at [public@bankofalbania.org](mailto:public@bankofalbania.org) or by sending a fax to + 355 4 2419408 and enrol in the mailing list for the publications of the Bank of Albania.

You can also subscribe to updates by signing up to receive free e-mail notices when new items are posted on the Bank of Albania website. You will receive e-mail notices each time we post new items of the series you selected.

Listed below you can find all the publications issued by the Bank of Albania during the first half of 2014. This list does not include surveys carried out by the Bank of Albania as they are available only online ([http://www.bankofalbania.org/web/Surveys\\_1709\\_2.php?kc=0,2,4,2,0](http://www.bankofalbania.org/web/Surveys_1709_2.php?kc=0,2,4,2,0)).

ANNUAL REPORT:  
Annual Report 2013

FINANCIAL STABILITY REPORT  
Financial Stability Report- 2013 H2

SUPERVISION ANNUAL REPORT  
Supervision Annual Report 2013

MONETARY POLICY PERIODICAL REPORTS  
Monetary Policy Report 2013 Q4  
Monetary Policy Report 2014 Q1

PUBLICATIONS ON STATISTICS  
Statistical Report (Published monthly)

PUBLICATIONS ON STATISTICS  
Statistical Report (Published monthly)

#### OFFICIAL BULLETIN

Official Bulletin – Volume 16, no. 1 Year 2014

Official Bulletin – Volume 16, no. 2 Year 2014

Official Bulletin – Volume 16, no. 3 Year 2014

Official Bulletin – Volume 16, no. 4 Year 2014

#### BULLETIN OF THE BANK OF ALBANIA:

Bulletin of the Bank of Albania - 2013 H2

#### RESEARCH PAPERS:

“Density Estimation for Economic Variables – A Genuine Application” - Altin Tanku, Kliti Ceca

“The Role of Exchange Rates in International Trade Models: Does the Marshall-Lerner Condition Hold in Albania?” - Bledar Hoda

#### SCIENTIFIC NOVELTIES AT THE BANK OF ALBANIA:

Scientific Novelties at the Bank of Albania, No.11