

SHORT TERM IMPACT OF EUROIZATION ON KEY ECONOMIC
INDICATORS IN ALBANIA

INAR SEITLLARI

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APPROVAL PAGE

Students Name and Surname: Inar SEITLLARI
Faculty: Faculty of Economics and Administrative Sciences
Department: Banking and Finance
Thesis Title: Short Term Impact of Euroization on Key Economic Indicators in Albania
Date of defense: 22 June 2018

I certify that this final work satisfies all the requirements as a Master Thesis in Banking and Finance.

Assoc. Prof. Dr. Ugur Ergun

Head of Department

I certify that I have read this final work and that in my opinion it is fully adequate in scope and quality as a Master Thesis.

Prof. Timothy Hagen

Supervisor

Examination Committee Members	Affiliation	Signature
Name and Surname		
1- Assoc. Prof. Dr. Ugur Ergun		
2- Dr. Timothy Hagen		
3- Dr. Patrice Kandolo Kabeya		

SHORT TERM IMPACT OF EUROIZATION ON KEY ECONOMIC INDICATORS IN ALBANIA

ABSTRACT

The use of foreign currency in post-communist countries of Eastern Europe, including Albania, is a widespread phenomenon. Since all the countries passed from a totalitarian to a free open market system, foreign currency is perceived as a protector against the macroeconomic instability that characterized these countries. Most of these countries in transition expressed their preferences for the use of European currency, leading to a partial Euroization of their economies. In academic literature and politics, the predominant opinion is that Euroization provides advantages in the short run especially for developing countries with the aspiration of accession to the European Union. However Euroization, besides its advantages, has a number of disadvantages in terms of economic costs and impact on the monetary system of the country.

In order to make policy decisions regarding Euroization, it is important to understand the impact of Euroization on key economic indicators such as inflation, imports, exports interest rates, and exchange rates for Euro and USD. Therefore, this paper attempts to provide an exploratory examination of the impact of Euroization in terms of loans and deposits in foreign currency on these key Albanian economic indicators.

Data are obtained from the Albania Institute of Statistics, the International Monetary Fund and the Banka of Albania. A Vector Autoregressive Model is used to assess the impact of Euroization on key economic indicators and see whether Euroization is profitable for the Albanian economy. The empirical results show negative effects of Euroization on the Consumer Price Index and positive and negative exchange rates for Euro and USD.

Keywords: *Euroization, Loans and Deposits in foreign currency, Albania, Exchange rates, Imports, Exports, Inflation*

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DECLARATION

I hereby declare that this Master Thesis titled “Short Term Impact of Euroization on Key Economic Indicators in Albania” is based on my original work except quotations and citations which have been duly acknowledged. I also declare that this thesis has not been previously or concurrently submitted for the award of any degree, at Epoka University or any other university or institution

Inar SEITLLARI

Date: 21 September 2018

Signature

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CHAPTER 1

INTRRODUCTION

Euroization is an important phenomenon, especially after the financial crisis of the 1990s, and has inspired a large literature (Pisani-Ferry, 2013). After the crisis the use of foreign currency in domestic economies in Eastern Europe has increased in ways obvious even to the casual observer (Brown, 2014). The Euroization phenomenon in these countries was initially explained as the result of a highly inflationary environment and unstable economic conditions. According to Doyle (2000) approximately 40-70 % of German Marks (DM) were in circulation outside Germany before the Euro. In 1996 Judsson and Porter estimated that 45-60% of the US dollars circulate outside the USA. Most of this currency is circulating as foreign currency deposits and cash in transition economies. In Albania both Euroization and Dollarization are present (Bank of Albania n.d.). Euroization and Dollarization may be defined in a number of ways. Generally the terms refer to the replacement of local currency with foreign currency. The more prevalent the use of foreign currency in different transactions, the greater potential for the domestic currency to be substituted. Euroization means the entire or partial use of foreign currency as a unit of account and medium of exchange (Milenkovic, 2012). The entire literature is forced to accept the amount of foreign currency deposits and loans as the proxy for Euroization (Calvo, 1992). This is due to the data limitations on measuring the amount of foreign currency in circulation.

The higher the loans in foreign currency, the higher is the Euroization level in the money market of a country. The higher the deposits in foreign currency, the lower the Euroization level in the money market.

There are different measures of Euroization in literature that reflect different types of data constraints and different types of Euroization. One of the most used measures of Euroization is the percentage of deposits in foreign currency to total deposits and percentage of loans in foreign currency to total loans.

Compared to other transition countries like Macedonia and Romania, Albania appears to have a moderate level of Euroization. According to Sojli (2002), Euroization in Albania including Foreign Currency in Circulation (FCC), could be higher than 37% of total money by 2004. Both consumers and businesses use of foreign currency are important in order to measure FCC.

Measuring FCC in Albania is very difficult due to the high level of informality that constrains availability of data on how business in Albania carry out their activities. Based on many studies and surveys, foreign currencies are used by individuals in daily transactions while constituting approximately 60% of revenue for a considerable number of businesses in Albania (INSTAT, 2010). The level of Euroization in Albania could be 45 percent of total money (Bank of Albania, 2010). Credit is mostly provided in foreign currency in Albania and this ratio is expected to increase in the future because of an increase in the number of financial intermediaries. Further descriptive data on the prevalence of Euroization in the Albanian banking sector, namely the deposits and loans in foreign currency from 2015 to 2018, is provided in the literature review.

The IMF, in its concluding statement of October 2012, said that since the onset of the global crisis in 2008, Albania has avoided a sharp fall in output and maintained banking system stability, thanks to a fiscal stimulus, sound monetary policy and effective and prudential macro actions.

Based on the most credible national and international sources, Albania has made important progress during the last decade in reforming its fiscal and legislative system, which somehow saved the Albanian economy from the financial crisis of 2008-2009. Nonetheless, political parties in Albania still argue over how to recover from the 2008-2009 crisis. Such debate revolves around claims that the Albanian financial system was not directly exposed to financial risk during the crisis due to weak economic development and that the Albanian economy was not integrated in the Euro zone. Although the country's GDP growth rate has decreased from 2009 to 2011, it remains positive. Other macroeconomic statistics related to unemployment, the banking system, inflation and economic growth show that macroeconomic stability is preserved. Still, Euroization in Albania is wide spread and the Euro has replaced the national currency Lekë massively in the real estate market, touristic packages, flight fees, universities fees and also in the banking system (Duraj 2011). The phenomenon of Euroization is common also for other Balkan countries such as Bosnia-Herzegovina, Croatia, etc, which have not yet officially introduced the Euro. Based on many

surveys done on the question as to why Albanians keep the Euro while the Albanian economy is stable, respondents claim that adopting of a strong currency like Euro may help in avoiding a balance of payment crisis (Narazani, 2013). It also helps in avoiding exchange rate and interest volatility.

However, some are against Euroization because they believe that the adoption of a foreign currency reduces Albanian's ability to exercise effective income and monetary policy. Paul Krugman (2012) concluded that the Euro is built on shaky foundations, and that will continue to be the case until a common European bank guarantee scheme is established. In the meantime, the system can quite comfortably survive if it is treated to a sufficiently strong dose of inflation (Krugman, 2012).

Within this wider debate, it is important policy-makers in Albania to understand that of Euroization may have on the Albanian economy. This thesis therefore seeks to provide an exploratory examination of the impact of Euroization in terms of loans and deposits foreign currency on the key Albanian economic indicators of inflation, imports, exports, interest rates and exchange rate for Euro and USD. This question is addressed in the methods, results, and conclusion of the thesis.

In order to evaluate the possible impact of Euroization on Albania, it is helpful to see what impact Euroization has had on neighboring countries. An overview of such impacts is provided in the literature review of this thesis. Furthermore, in the literature review presented in the second chapter I will show the relationship and effect of Euroization on the key economic indicators as presented in the literature.

The remainder of the study after literature review is organized as follows: The third chapter presents the data and methodology used in empirical study of this thesis. Data obtained are monthly from 2015 to 2018, overall 29 observations for each measure. Loans and deposits in foreign currency are the independent variable, while CPI, exchange rates, exports, imports and interest rates are the depended variables of the Vector Autoregression Model. The fourth chapter presents the empirical results, in particular the negative relationship between Euroization and inflation and Euroization and exchange rates. The research ends with the fifth section, the conclusion which provides recommendations for future actions and study.

CHAPTER 2

LITERATURE REVIEW

Before proceeding with the core empirical question of the impact of Euroization on key Albanian economic indicators, an overview of literature is necessary. This second chapter provides an analysis of literature regarding the effect of Euroization. Firstly I will mention some advantages and disadvantages of Euroization. After that I will examine the Euroization level in Albania in terms of deposits and loans in foreign currency, after the Euro was used as the official currency. The Bank of Albania's (BoA's) three types of Euroization are presented. Next I will explain the sources of Euroization in Albania, including formal and informal sources of Euroization.

2.1 Advantages of Euroization

Politically and academically there is a prevailing opinion that for developing countries with stronger aspirations to join the European Union, there are advantages of Euroization that are evidenced for a short-term period (Shehu, 2016).

Euroization of the economy can reduce transaction costs (Shehu, 2016). Transaction costs practically affect countries like Albania with an import-oriented economy. Adopting a single currency allows avoidance of appreciation or depreciation of the national currency.

Likewise, application of a single currency brings lower interest rates which will encourage investments and consequently will positively impact fiscal policies and will reduce costs of public debt (Shehu, 2016). Countries in which central banks pursue a policy of real interest rate are more sensitive and affected more by Euroization.

Another advantage of Euroization is the reduction of exchange rate fluctuation. Pressure on exchange rates would be eliminated if one currency would be adopted as prices would be more stable. Castilo (2006) says that most studies conclude that partial Euroization

significantly reduces inflation. Based on Eduardo and Magendzo's (2001) findings, inflation has been

significantly lower in dollarized nations than in non-dollarized ones. Turkey and Russia experienced a drastic devaluation of their currency due to investors dumping the national currency, flight of the capital and rational expectation for high inflation. The last episode of instability in Turkey increased Euroization causing inflation and exchange rate volatility.

2.2 Disadvantages of Euroization

Euroization as a phenomenon is a very complicated one, which makes it important to examine all the players and variables involved when analyzing Euroization. The Central Bank takes the main role on possible disadvantages of implementing a single strong currency.

Money supply shock is a very strong negative impact of formal Euroization and consists of insufficiency of foreign exchange reserves in Euros. It is difficult to generate the amount of necessary money reserves to implement Euroization. The process of formal Euroization would charge a high bill to the Albanian economy (Zefi, 2016).

If the Euro were to be adopted as single currency in Albania, most of the substantial functions of the Central Bank of Albania would not take place. Euroization would mean that Albania would lose its monetary policy independence. By Euroization, the Central Bank of Albania would remove its instruments for implementing monetary policies (Zefi, 2016).

Seigniorage cost is the difference between the nominal value of each currency issued and the currency's printed value. The cost of printing money is insignificant compared to its nominal value. If Albania were to officially switch to the Euro and cease to use the Albanian Lekë (ALL), it would lose this source of income. Removing ALL from the market would eliminate profit from this source (Zefi, 2016). Duraj (2008) concluded that seigniorage cost from 2002-2008 is 1.73% (on average) of the GDP. He observed a downward trend of its weight on government budget revenue. From 2000-2008 income for Albania in fiscal terms was 0.44% of the GDP and actually it is 1.92 per cent of fiscal revenue.

Thus, official Euroization would be an expensive process for Albania. One of the most important roles of the Central Bank is to be the lender of the last resort for commercial banks. If Albania undergoes formal Euroization, the Central Bank of Albania would no longer have this role (Zefi, 2016). As the Euroization regime is not a familiar process for Albania, adapting the mechanisms and structures to manage the Euroization regime would be very costly for the Albanian economy. As for the banks, Euroization is a problem and has a

negative effect because of the exposure of liabilities and assets to exchange rate risk (Kokenyne, 2009).

2.3 Euroization level in Albania

Starting from 2003, houses, cars and lands in Albania began to be sold in Euros (Shijaku, 2005). Clients also gradually changed their deposits in domestic currency for deposits in foreign currencies.

Today Euroization in Albania is considered to be very high. During the years 2012 and 2016 there has been a preference for keeping savings in Euros (BoA, 2018). Compared to the total number of deposits there is a tendency of keeping saving in foreign currency mainly in Euro and this can be observed from the beginning of the global financial crisis. According to the Bank of Albania, deposits in foreign currency increased from 42% to 48% of the total deposits from 2008 to 2013.

It is not the same thing from a borrower's perspective. Euros can be attractive for the depositors but it is not the same thing for the individual or business borrowers. Because of depreciation of Albanian Lekë against Euro, from 2011 to 2015 the payments have been increased. Starting from 2008, the Euro has been appreciated by gaining point against ALL.

According to the Bank of Albania there are three types of Euroization in Albania. Each of them has own measuring tools.

The first one is the Euroization of assets of Albanian economy, measured by ratio of foreign currency deposits to domestic currency deposits.

The second type is Euroization of Liabilities which is measured by the ratio of loans in foreign currency to loans in domestic currency.

The third type is Euroization of transactions, measured by the level of transactions in foreign currency to the transactions done in local currency.

I did not used the third method because it is very difficult to measure the transactions done in foreign currency.

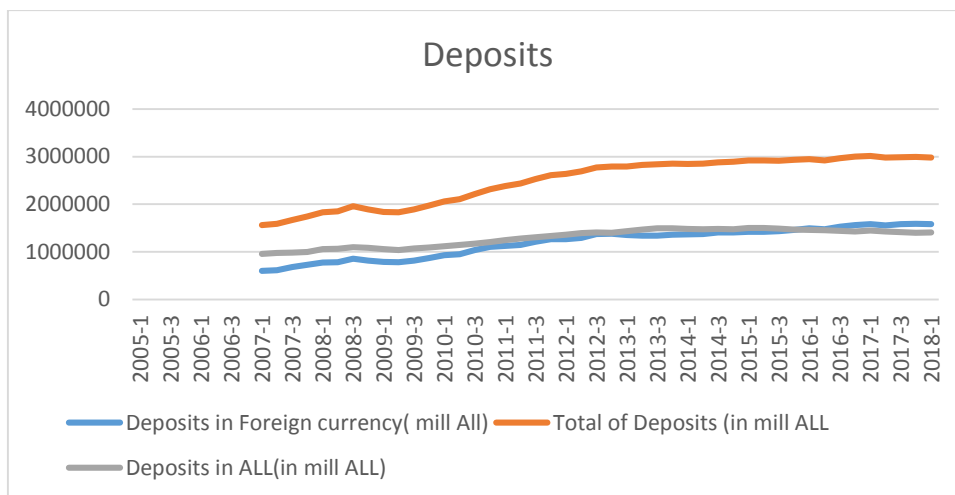


Figure 2.1 Euroization level in terms of deposits (BoA, 2018)

As we can see from the Figure 2.1 there is an increase in the number of deposits starting from first quarter of 2008. Looking at the deposits in foreign currency they have been increased obviously starting from 2010 overcoming the number of deposits in ALL in 2016.

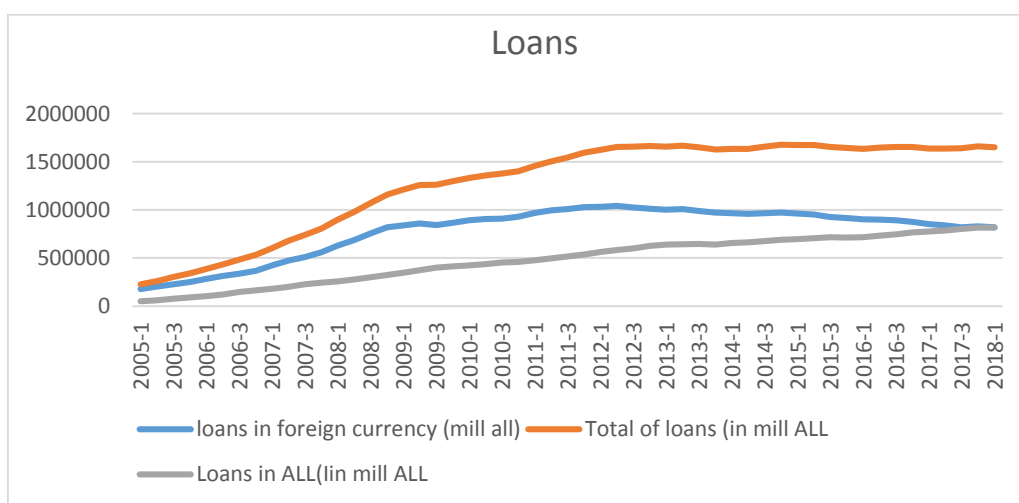


Figure 2.2 Euroization in terms of loans (BoA, 2018)

As we can see from the Figure 2.2 there is an increase of loans starting from 2006. Loans in foreign currency has been obviously higher compared to the loans in domestic currency and they started decreasing in 2013 while loans in domestic currency have had an increasing tendency during all this period.

In terms of assets (deposits) Euroization, Albania has an average level of assets dominated in foreign currency compared to the region. Croatia and Serbia are the countries keeping the record of assets in foreign currency.

Regarding the liabilities (loans), the Euroization level is higher. After Croatia, Albania is ranked the second one with a high percentage of loans given in foreign currency (IMF, 2016). Especially in Balkan countries loans in foreign currency have been significantly preferred by individuals and businesses (IMF, 2016).

2.4 Source of Euroization

One of the main sources of the foreign currency are remittances, which increase deposits in foreign currency. According to a survey done by the Bank of Albania (September 2007) more than 1 million Albanians have emigrated to Italy and Greece. The larger the number of emigrants, the higher the deposits in foreign currency, and the higher the Euroization level in Albania in terms of deposits in foreign currency. A considerable number of remittances have been transferred via informal channels, such as through relatives or travel agencies.

According to a survey by the Bank of Albania (2010), approximately 89% of remittances are transferred unofficially. Based on the data provided by the Bank of Albania (2010) remittances have been increasing through the years reaching their maximum in 2007 but they fell sharply after the financial crisis. There are two main factors for the fall in remittances. The global financial crisis negatively affected income level and employment opportunities for Albanians in Italy and Greece, which are two of the most preferred destination countries for Albanian emigrants. The reduction of income levels of emigrants negatively impacted remittances. The second factor decreasing the remittances is a long-term declining trend and this is accepted in many studies. This may in part result from a number of factors, such as weakened relations with family in the country of origin creating and supporting families in the host country, or bringing their family from Albania to them in the host country.

The second main source of using foreign currency in Albania is foreign direct investment. The increase of foreign direct investment is an important indicator of the foreign currency flow, much of which would likely be directed to the banking system.

The third source foreign currency in Albania consist of transactions conducted in foreign currency (Xhepa, 2009). An examination of real estate journals shows that the prices are quoted in foreign currency, something confirmed by businesses and agencies working in the real estate market (Xhepa, 2009). The same can also be observed for other commodities with long-term consumption (Xhepa, 2009).

There is an increase of businesses transactions in foreign currency. Using foreign currency in daily financial and economical operations increases the possibility of substituting domestic currency money in the banking system in terms of deposits which is translated in the decrease of local currency money in the market and increase of Euroization level. In terms of assets (deposits) Euroization, Albania has an average level of assets dominated in foreign currency compared to the region. Regarding the liabilities (loans), the Euroization level is higher. After Croatia, Albania is ranked the second one with a highest percentage of loans given in foreign currency (IMF, 2016). As seen in this review of literature, scholars differ on the impact of Euroization on economies. Thus further research is needed to assess this impact. .However, before proceeding to the empirical study, further information is need on the drivers of Euroization, as discussed in the next section of this literature review.

2.5 Drivers of Euroization

The literature on Euroization has revealed several factors driving this process related to past and future expectations. Regarding the past experiences, the lack of confidence in local currency and credibility of economic policy due to past events may increase the use of foreign currency instead of domestic currency (Nicolo et al, 2005).

As for the future expectations Ize and Yeyati (2003) state that Euroization occurs when expected volatility of inflation exceeds the volatility of exchange rates. Feige and Dean (2004) observed that for highly euroized countries, the use of foreign currency for transaction purposes irreversible even if those countries undertake macroeconomic measures in order to reduce inflation risk. Individual characteristics also play an important role in Euroization.

Regarding currency substitution, Seater (2008) said that high income-households are more prone to currency substitution compared to low income-households. Nonetheless Dvorsky et al (2009) provide some evidences of householder's reactions to the financial crisis that arrived in October/November 2008, showing that although people's trust in banks decreased and was substituted with a less optimistic economic outlook, their foreign currency holdings did not decrease.

According to the OENB EURO Survey conducted in 2010 after the financial crisis and its drastic consequences, households in Central, Eastern and South Eastern European (CESEE) countries still have more confidence in the Euro than their own domestic currency.

Rodrigues and Guidotti (1992) emphasized that it is logical and not surprising for foreign currencies to gain market share when they provide cheaper financial services. The credit portfolio in foreign currency also was growing faster compared to the local currency once accounting more than 60% of the total credit stock (IMF, 2015). Lower interest rates in Euro and USD encouraged people and businesses borrowing in foreign currency.

An early study on currency substitution by Habib (2002) found that, countries generally abandoned their currency in favor of the Euro. The study resulted that an earlier switch to the Euro is a risky choice for the front-runners expect Bulgaria.

As for the Euroization level in Albania, Sojli (2004) found that it was 36 per cent in 2002 while Muco et al. (2006) found that the Euroization level in Albania in 2005 was 45 per cent. Based on these two studies there is an increase of 9% in the Euroization level in Albania in three years.

At the end of the year 2008 and the beginning of 2009 the banking system was shocked by a massive withdrawal of savings, reducing the total amount of deposits by 8.6%. One of the measurements undertaken by Bank of Albania in 2009 on deposit insurance was the increase in the amount of insured deposits from 700,000 Lekë to 2,500,000 Lekë (Bank of Albania 2010). As a consequence, at the end of 2009 deposits increased by 1.6% suggesting that the confidence to the banking system was rebuilt. According to the Bank of Albania in the summer of 2017 deposits reached the highest level (Bank of Albania, 2018). Such deposit increase was driven by deposits in foreign currency.

After the opening of the borders of the country, the Albanian economy faced a large inflow of foreign currency, in which financial accounts and capital recorded a high level of inflows of foreign capital investment such as FDI (IMF 2008). Businesses increased the demand for

foreign currency with countries in the region for transaction purposes. A high level of Euroization as cause of inflows from emigrant's remittances accounted more than 15 per cent of GDP in 2000 (Bank of Albania 2008).

After 2008 when the global financial crisis started and spread, psychological effects depreciated the value of local currencies around the world. Empirical evidence (Manjani, 2015) indicates that the higher and more volatile the inflation, the higher the instability level of exchange rates, which encourages people to have contracts in foreign currency, ensuring more purchasing power in terms of domestic consumption.

Regarding Euroization in terms of credits Haiss and Rainer (2010) analyzed credit Euroization phenomenon in the region including 13 countries by linking their econometric analysis with literature overview resulting that credit Euroization is more significant when foreign sources are easy accessible.

Based on a study conducted by Vavra, Chailloux and Ohnsorge (2010) for the Euroization process in Serbia, volatility of exchange rate and the lack of foreign funding have forced borrowers toward domestic currency borrowing. They concluded that the Euroization process will discontinue if the macroeconomic policies gain credibility.

Based on the study conducted by Galac (2012) on the evolution of Euroization in Croatia, he concluded that if economic policy makers decide to de-euroize, the public sector should increase borrowings in local currency.

After reviewing the Euroization phenomenon in the Albanian economy Xhepa (2002) pointed out the importance of real convergence to the European Union economy in terms of average price level, GDP per capita liberalization of labor mobility and economic structure.

Regarding the impact of Euroization on the economic growth, Magenzdo and Eduards (2001) stated in their study that euroized countries have had lower economic growth rate compared to non-euroized countries. A different conclusion presented by Castillo (2006) suggested that the increase of dollarization is positively associated with economic growth and that dollarization significantly reduced inflation.

According to Maloku, (2011) the adoption of the Euro in Kosovo brought macroeconomic stability which is very important for all economies. The collapse of the financial system and inflationary experiences under the Yugoslav regime destroyed the confidence in the local currency, leading to a high degree of currency substitution in Kosovo and neighboring countries. Euroization in Kosovo reduced inflation bringing financial stability (Maloku,

2011). Unlike Albania, which experiences unofficial partial Euroization, Kosovo has adopted the Euro as the official currency.

According to empirical results provided by Manjani (2015) the exchange rate is one of the determinants of the deposit Euroization. If there is a positive shock of exchange rate there is also a devaluation of domestic currency indicating in the Euroization of deposits.

Regarding the Consumer Price Index, Manjani (2015) said that as consumer prices increase, purchasing power decreases, so this tells economic agents to switch to foreign currency as a better store of value. If prices level in Albania will increase in the future, then a high level of Euroization is expected. Currency substitution motivates the negative correlation between the inflation and demand for local currency.

According to the IMF (2011), “without any implications on the direction of causality, empirical analysis on data in some South and Eastern European countries shows that a higher degree of Euroization is associated with higher default probabilities and higher nonperforming loan levels”. According to a report published by the IMF (2018), a strong Euro dominating over ALL is a threat for Albanian economy.

In a euroized economy such as Albania’s, financial stability may be very susceptible to developments in the currency exchange rate. IMF report says that loans in foreign currency becomes harder to be paid back as foreign currency strengthens. A low interest rate in Lekë promotes deposits Euroization. IMF goes further in its study. From 2006 until 2016, deposits in Euro has been grown by 10%, of their total. IMF experts suggests that local currency should be strengthened even though high interest rates. Different measurements in the money market should be undertaken against Euroization and Bank of Albania has a special package of measurement for this (IMF, 2018).

According to IMF (2018), an extended period of low interest rates might have negative effect on financial stability, so Albanian authorities should undertake measurements by raising interest rates for the domestic currency. According to IMF experts, low interest rates encourage investors and banks to take more risks. These risks may have been softened by micro and macro policies. However, to identify these risks on time and in order to apply cautious policies is not always easy. These risks seem to be lower in Albania.

According to the Governor of the Bank of Albania (2017) at the Becici Summit of the countries of the region on regional financial stability in a new global environment:

The monetary policies of both US Federal Reserves and European Central Bank are highly relevant to us. They affect external conditions and they could dictate the directions, the speed and the price of financial flows. Furthermore, for countries with a dollarized or euroized financial system, they might also affect domestic credit, financial conditions, balance sheets, as well as exchange rates". (p.1)

In Becici summit in Montenegro (16 June 2017), the Governor of the Bank of Albania said also:

On one hand, the lower price of Euro helped decrease the costs for foreign currency loans. On the other hand, a low policy rate by the ECB has enabled us to decrease our policy rate without having to worry about any exchange rate depreciation or financial stability problems. The last one is very important, given that around 40% of foreign currency loans are unhedged. At this point, I would like to take the opportunity and mention that, in order to address the high euro exposure in our financial system, the Bank of Albania, together with other authorities, has drafted a plan to decrease the level of Euroization in the country. (p.1)

The Governor of Bank of Albania (2017) mentioned also that region's economies' main trading partner is the Euro area. The banking system in Albania is dominated by EU-based banking groups so the US Federal Reserve and ECB's monetary policy decisions affect their economies but they might have a longer-lasting effect on the Albanian economy. Since the Albanian economy is more exposed to Euros, the ECB's monetary policy is more relevant to our economy so it has a stronger impact on Albanian monetary conditions.

Table 2.5.1

The summery of literature review

Topic	Findings	Author
Advantages of Euroization in short-term	<ol style="list-style-type: none"> 1. Reduce transaction costs. 2. Lower interest rates. 3. Reduction of exchange rate fluctuation. 4. Partially Euroization significantly reduces inflation. 5. Inflation has been significantly lower in dollarized nations 	<p>Shehu(2016)</p> <p>Castilo (2006)</p> <p>Magendzo's (2001)</p>
Disadvantages of Euroization in short-term	<ol style="list-style-type: none"> 1. Money supply shock. 2. Bank of Albania loose its independence. 3. Seignorage cost. 4. Euroization has a negative effect because the exposure of liabilities and assets to exchange rate risk 	<p>Zefi 2016</p> <p>(Kokenyne, 2009)</p>
Sources of Euroization	<ol style="list-style-type: none"> 1. Remittances. 2. Foreign Direct Investments. 3. Transactions conducted in foreign currency. 4. After Croatia, Albania is ranked the second one with a highest percentage of loans given in foreign currency 	<p>(Bank of Albania, 2007)</p> <p>(Bank of Albania, 2007)</p> <p>(Xhepa, 2009)</p> <p>(IMF, 2016)</p>
Drivers of Euroization	<ol style="list-style-type: none"> 1. Lack of confidence in local currency. 2. If expected volatility of inflation > volatility of exchange rate. 3. Cheaper financial services of using foreign currency. 4. Euroized countries have had lower economic growth rate compared to non-euroized countries. 5. A different conclusion suggest that the increase of dollarization is positively associated with economic growth and that dollarization significantly reduced inflation. 	<p>(Nicolo et al 2005)</p> <p>Ize and Yeyati (2003) and (Manjani, 2015)</p> <p>Rodrigues and Guidotti (1992)</p> <p>Magenzdo and Eduards (2001)</p> <p>Castillo (2006)</p>

	6. A strong Euro dominating over ALL is a threat for Albanian economy	IMF (2018)
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Based on this literature review, there are economic advantages and disadvantages of Euroization. Therefore the following methods section will seek to examine the impact of Euroization on key economic indicators in Albania to see whether Euroization has positive or negative impact, if any. The hypothesis presented in the methods sections supposes that Euroization will significantly impact the key economic indicators in Albania. However, given that Euroization may have many dimensions, it can be difficult to measure. This literature review has founded that the most feasible way to measure the Euroization level in Albania is by measuring deposits and loans in foreign currency in the banking system because the many informal sources foreign currency are not easily measure despite their impact on the economy. Thus in this study, Euroization will be defined as the percentage of deposits and loans in foreign currency in the Albanian banking system.

CHAPTER 3

DATA AND METHODOLOGY

The main aim of this paper is to study whether there is an impact of Euroization on the main economic indicators of Albania and how much this impact is. The economic indicators examined in this study as dependent variables are the percent change in Consumer Price Index, exchange rates of Lekë/USD and Lekë/Euro, exports, imports and interest rates in Albania, while independent variables are percent change of deposits and loans in foreign currency in Albanian banks. I choose loans and deposits in foreign currency to measure the Euroization level in Albania because they are the only official measurers of foreign currency in Albania since there is a lot of informal foreign currency in Albania that affects the Albanian economy but is immeasurable.

The Bank of Albania's Consumer Price Index (CPI) is the measure of the weighted average of prices for a basket of consumer goods and services. Change to CPI shows the average of price changes for each item in the predetermined basket of goods and services. CPI is the most used statistics in identifying periods of inflation and deflation.

By the exchange rate I mean the value the Albanian Lekë against foreign currencies, namely the USD and Euro. Exchange rates reflect the supply and demand for various currencies relative to the other currencies, which are driven by the free movement capital, goods and financial transactions of Albania with trading partners.

According to the Bank of Albania, by exports we mean goods and services produced domestically and purchased by citizens of other countries. Imports are goods and services bought by residents of the country, in the situation Albania, including government, individuals and businesses. By deposits in foreign currency I mean all the deposit accounts in the banking system dominated in different foreign currencies while by loans in foreign currency I mean

all the loans given by the banks in Albania that are dominated in foreign currency. In this chapter I will explain the methodology and data contributing used to address the key research question. Taking in consideration other studies on Euroization in Albania and other countries my hypothesis is:

H₁: There is a significant effect of Euroization on key economic indicators of Consumer Price Index, the exchange rates of Lekë/USD and Lekë/Euro, exports, imports and interest rates in Albania.

Therefore, I will study the impact of deposits and loans in foreign currency on dependent variables: firstly, I will provide descriptive longitudinal data for the variables and possible explanation for changes in these variables over time: after that I will examine the impact of Euroization as measured by loans and deposits in foreign currency in Albania on the dependent variables.

Data for loans and deposits in foreign currency are obtained from the Bank of Albania, exports and imports are obtained from INSTAT, while consumer price index and exchange rates and interest rates are obtained from the IMF. All the measurements are on a monthly basis from December of 2015 until March of 2018 counting 29 observations for each variable. I intentionally selected monthly data in this time interval in order to better see the impact of Euroization in Albanian economy in recent years. This topic is on the top of the discussion nowadays where there are a lot of analyses for and against whether the Bank of Albania is going to take measurements to de-euroize the Albanian money market.

I conducted Vector Autoregression Estimate model (VAR) using the EViews software to see the impact of Euroization on economic indicators in order to better policy by the Bank of Albania. The EViews program is a statistical package used for general statistical analysis such as panel data and time series econometrics analysis. Regarding the Vector Autoregression Model, it has become a key instrument in macroeconomic researches. The VAR model is used to study the linear interdependence among time series variables and the univariate autoregressive mode (Lutkepoh, 2012).

In order to run a VAR model, all the variables must be stationary at level. After the unit root test all the variables were stationary at level so I could run a Vector Autoregression Estimate model in order to find the long-run relationship between variables. There are 26 observations for each variable after the adjustment. In my paper I take in consideration the growth rate of each variable to develop the model and suggest the best policies that the Bank of Albania

has to implement regarding Euroization. Assumptions of how Euroization would impact dependent variables are presented in the empirical results.

CHAPTER 4

EMPIRICAL RESULTS

In this fourth chapter, empirical results, I will show how the key economic indicators in Albania have changed during the last years and what may explain these changes. The changes are expressed in percent change of a measure from one month to the next. Next I will present results for the VAR model examining whether there is an effect of Euroization of Albania in terms of deposits and loans in foreign currency on the key economic indicators: Consumer Price Index, exchange rates of Lekë/USD and Lekë/Euro, exports, imports and interest rates and the magnitude of this effect. The empirical results will offer evidence for or against the hypothesis that there is an effect of Euroization in key economic indicators of Albanian economy in the short run.

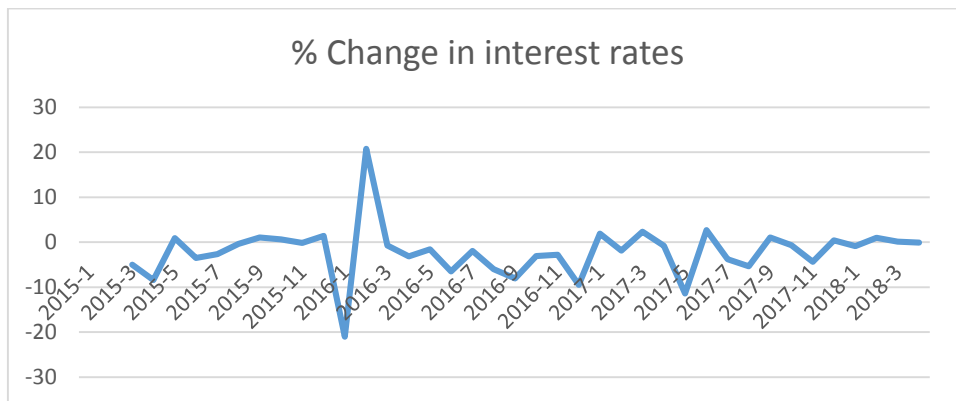


Figure 4.1 Percentage change in Interest Rates (BoA, 2018)

As it is shown in the Figure 4.1 there is high percentage change of interest rates especially at the beginning of the year 2016 when interest rates decreased by 20 per cent and just after one month they increased by 20 per cent. After the year 2016, the percentage change in interest rate was negative until the beginning of 2017. High interest rates for deposits in the domestic currency would have encouraged people to deposit in the domestic currency causing an increase in relative Euroization levels because less Lekë will be circulating in the market. An increase of interest rates for loans in domestic currency will discourage people taking loans in domestic currency resulting in less domestic currency in the market and a higher rate of Euroization in Albania. The higher Euroization level would likely be driven by lower interest rates for deposits in foreign currency. As for loans, a high Euroization level means a high interest rate for loans in the domestic currency and a low interest levels for the loans in foreign currency.

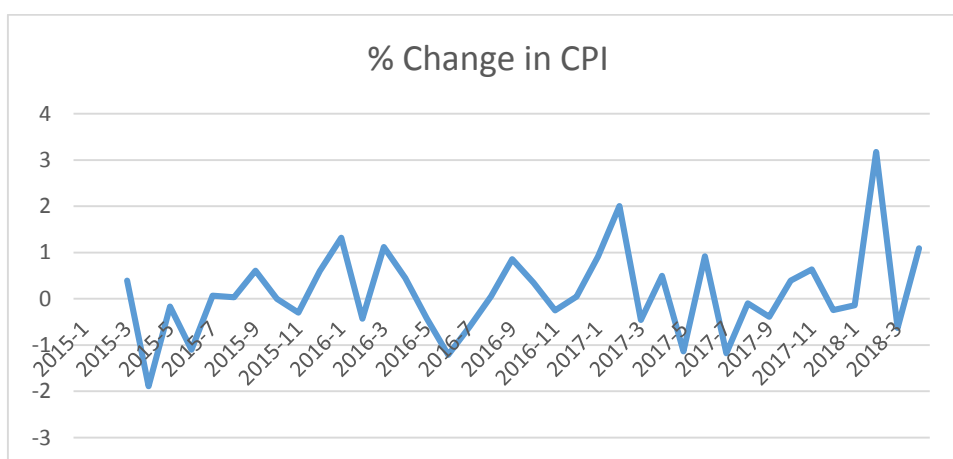


Figure 4.2 Percentage change in CPI (BoA, 2018)

Regarding the percentage change of Consumer Price index for Albania, it has been negative until the end of 2015, after which it does not fluctuate much except the beginning of the year 2017 and 2018. This might happen because of the BoA's attempts to de-euroize the Albanian money market. Decreasing interest rates for loans in domestic currency means more ALL in the market because people tend to borrow more in domestic currency causing an increase in the Consumer Price Index. As for the impact of Euroization level on Consumer Price Index, the higher the Euroization level, the lower the Consumer Price Index because less Lekë will be in the market.

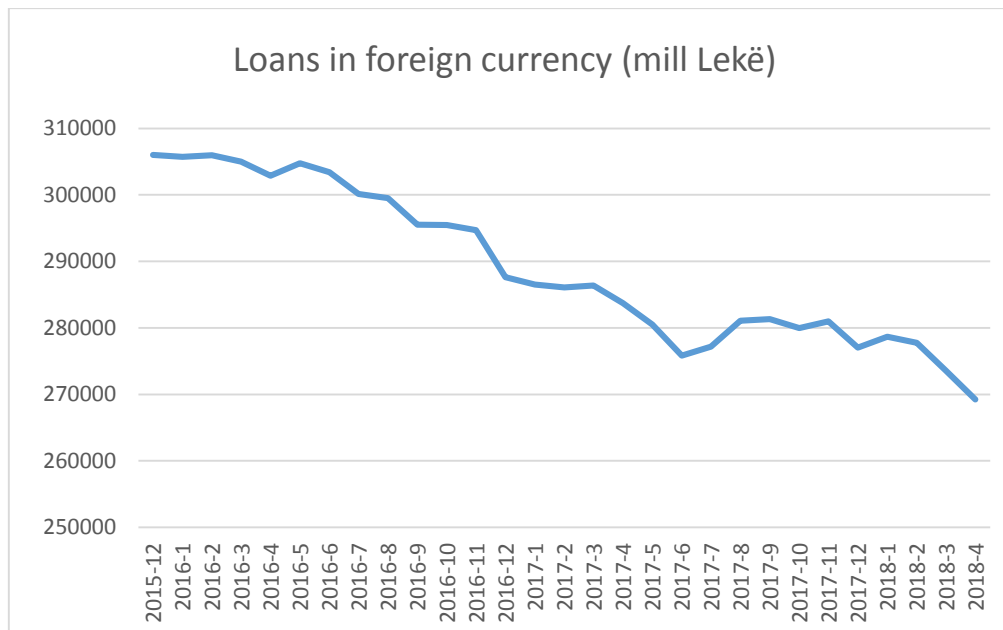


Figure 4.3 Loans in foreign currency (BoA, 2018)

As shown in the Figure 4.3, there is a decreasing trend of loans in foreign currency starting from 2016. Previously, the amount of loans in foreign currency has been high causing a higher level of Euroization in the Albanian market. The more loans given to the people in foreign currency, the greater the amount of foreign currency in the market and the higher the appreciation of Lekë. Throughout 2016 and the first part of 2017 there is a drastic decrease of loans in foreign currency, because of the de-euroization process initiated at the beginning of 2016.

Increasing interest rates for loans in a foreign currency and decreasing interest rates for loans given in the domestic currency brings less foreign money and more domestic currency into the market. The Bank of Albania could discourage people depositing in domestic currency by decreasing interest rates of deposits in domestic currency so as to increase the domestic money in the market and lower the-Euroization level

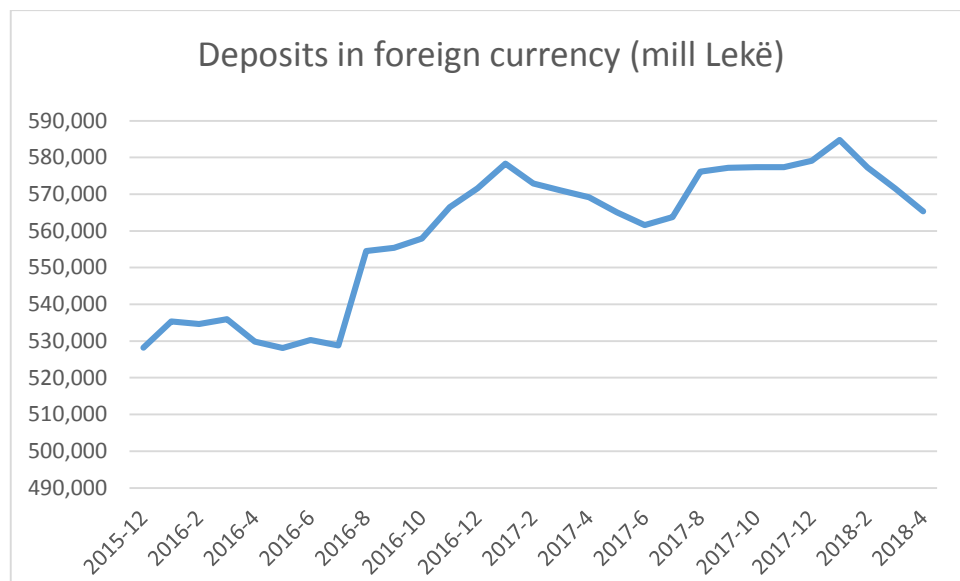


Figure 4.4 Deposits in foreign currency (BoA, 2018)

Figure 4.4 shows that amount of deposits in foreign currency has been low until July of 2016. This happened because of low interest rates for deposits in foreign currency resulting in more foreign currency money in the market, so a high level of Euroization in Albania. The high amount of loans in foreign currency and low amount of deposits in foreign currency also have a positive effect on the Lekë because foreign currency was used instead of Lekë. After 2016 there was an increase of deposits in foreign currency. Deposits in foreign currency increased so less foreign currency was in the market, thereby decreasing the relative Euroization level in the money market.

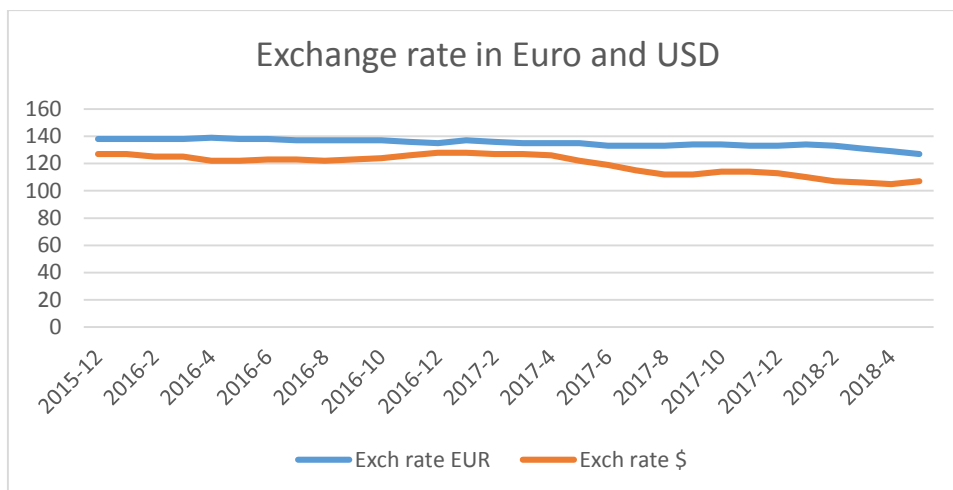


Figure 4.5 Exchange rate of ALL to Euro and USD (BoA, 2018)

As it is shown in the Figure 4.5 there are high exchange rates for Euro and USD until the end of 2016. From the beginning of 2017 until April of 2018 exchange rate for two most used foreign currencies in Albania, the Euro and the Dollar, has decreased. Low exchange rate of foreign currency means that they lose point against the Lekë so people tend to better change foreign currency into ALL until appreciation of foreign currency and use ALL which has gained point against foreign currencies. As a result, there would be more domestic money in the market so Euroization level in Albania will be decreasing.

The Governor of Bank of Albania (2018) said: “We are clear about the fact that in an economy there are imports and exports and many exchanges take place in Euro. We would encourage those who are part of this process to continue like this. Our aim is to orientate the financial system”. So, it is not the aim of Bank of Albania to de-euroize Albanian money market by playing with exchange rate because there is a considerable amount of revenues coming from exports.

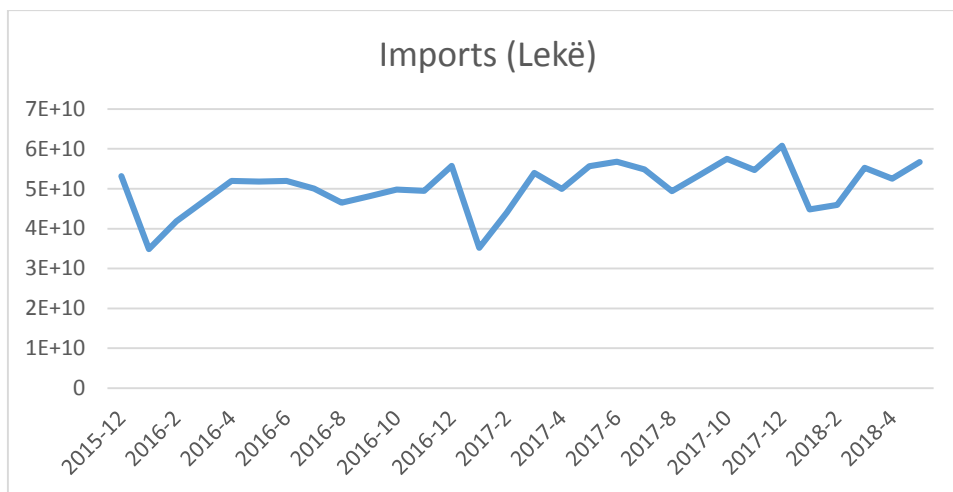


Figure 4.6 Imports (BoA, 2018)

According to the Figure 4.6 there is not big fluctuation in Albanian imports. They seem to be stable except for the last two years where there is an increase of imports. In terms of exchange rate, it could be explained as appreciation of ALL against foreign currency. So, the lower the exchange rate of domestic currency against foreign currency, cheaper the goods and services imported. Likewise, the higher the purchasing power of ALL the more expensive imports will be.

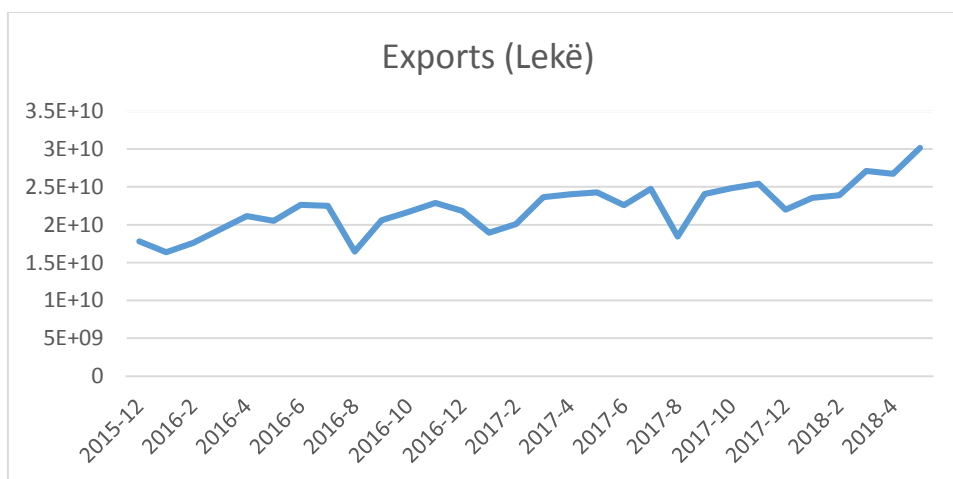


Figure 4.7 Exports (BoA, 2018)

As for the exports, based on the Figure 4.7 we can see that there is an increasing trend. In terms of exchange rates, exports should have been decreased because of depreciation of foreign currency so exporters are discouraged to export their goods and services in foreign currency knowing that foreign currency in their country is depreciating. Since the interval of

time in which observations for exports variable is short maybe more time is needed to see the impact of the exchange rate decrease in exports for Albania.

Table 4.1
Vector Autoregression Estimates

	GCPI	GDOLLAR	GEURO	GEXPORTS
GDEPOSITS(-1)	0.55 -0.33 [1.67]*	0.66 -0.32 [2.06]**	-0.32 -0.17 [1.91]*	5.16 -2.97 [1.74]*
GDEPOSITS(-2)			0.54 -0.19 [2.85]**	
GLOANS(-1)	-0.72 -0.38 [-1.88]*		0.56 -0.20 [2.84]**	
GLOANS(-2)				

*Significant at 5% significance level

**Significant at 10% significance level

Table 4.1 shows the results of the VAR analysis of the impact of loans and deposits in foreign currency as the measure of the Euroization level in Albania on the dependent variables. As mentioned previously, loans and deposits in foreign currency are used to measure the Euroization level in Albania because they are the only official measurers of foreign currency in Albania. Informal foreign currency in Albania would also affect the Albanian economy but it is not easily measured.

As shown in the Table 4.1, there is a positive impact of percentage change in deposits in foreign currency on the percentage change in Consumer Price Index since the t-statistic 1.67 is higher than critical value 1.65 at a 5% significance level. One percent increase in deposits in foreign currency, predicts a 55% positive change in CPI one month later.

As for the impact of percentage change in deposits in foreign currency on the percentage change in Lekë/USD exchange rate, it is significant since t-statistics are higher than the critical value at 5% significance level. One percent increase in deposits in foreign currency, predicts a 65% positive change on Lekë/USD exchange rate one month later. As for one month after the impact of percentage change in deposits in foreign currency on percentage change in Lekë/Euro exchange rate it is significant at a 5% significance level but the positive

effect of percentage change deposits in foreign currency on percentage change in exchange rate is not in accordance with the literature. If we see the impact of deposits in foreign currency on Lekë/Euro exchange rate it is significant at 5 % significance level and one percent increase in deposits in foreign currency has a positive effect of 54% on Lekë/Euro exchange rate two months later.

Although the impact of percentage change in foreign currency deposits on percentage change exports is statistically significant at the 5% significance level, more variables are likely needed in order to see the impact of percentage change deposits in foreign currency on percentage change in exports since the beta coefficient is very high, (5.16). Limitation of the variables due to the informal Euroization could bring that result.

The impact of foreign currency loans on Lekë/Euro exchange rate is significant at 5% significance level since absolute value of t-statistic 2.84 is higher than critical value. So one percent change in loans in foreign currency has a positive impact of 55% on the Lekë/Euro exchange rate. This unexpected result could be explained as lack of explanatory theory and informal Euroization. More variables should be used in future studies and more studies to be conducted.

Regarding the impact of one unit change in loans in foreign currency in Consumer Price Index, it is significant at 5% significance level since the absolute value of the t-statistic is higher than critical value. The impact of one percent change in loans in foreign currency, is a 72% decrease in Consumer Price Index one month later.

Regarding the effect of percentage changes if deposits and loans on percentage changes in interest rates, imports and exports, they are not significant since their coefficients are higher than the significance level. Maybe more variables are needed in the study in order to get a significant effect or the results appear because of informal Euroization which is not counted in the model because it is difficult to obtain data for the informal foreign currencies coming in or out of the country.

Based on the VAR model, I conclude that there is a positive impact of percentage change in deposits in foreign currency on the percentage change in Consumer Price Index. The impact of deposits in foreign currency on Lekë/Euro exchange rate it is significant at a 5 % significance level and one percent increase in deposits in foreign currency has a positive effect of 54% on Lekë/Euro exchange rate two months later. The impact of one percent

change in loans in foreign currency cause a 72% decrease in Consumer Price Index one month later.

CHAPTER 5

CONCLUSION

In the last chapter I will explain main findings of this paper and note implications and limitations.

Based on the Figure 4.4 explained in the previous chapters I conclude that there is a high level of deposits in foreign currency in last months. In terms of loans, Figure 4.3 shows that the Euroization level has been high until the beginning of 2016. After 2016 there is a decrease in foreign currency loans.

Change in Consumer Price Index has been stable except some high positive fluctuations starting from the end of 2016 lasting until March of 2017. The second period of high Consumer Price Index starts from the end of 2017 until February of 2018. These results suggests that a decrease of foreign currency loans and an increase of foreign currency deposits which lead to a decline in foreign currency in the market, a high proportion of Lekë in the market, which in turn resulted in inflation that forces the Consumer Price Index to increase.

Regarding the exchange rates there is a high decrease of Lekë/Euro exchange rate and Lekë/USD exchange rate. The IMF (2018) concluded that this is because of the de-euroization monetary policies that the Bank of Albania is pursuing but this is denied by the Governor of Bank of Albania (2018), who said that it is not the aim of Bank of Albania to depreciate the Euro currency value in Albania but it may instead be as the result of people's psychology. I think that the evidence in Table 4.1 is contradictory and inconclusive regarding the impact of de-Euroization on the exchange rate.

Regarding the results of Vector Autoregression Estimation I can say that there is a positive impact of foreign currency deposits on the Consumer Price Index. So, the higher the deposits

In foreign currency meaning low level of Euroization, the higher CPI is. An increase of loans in foreign currency significantly correlates to lower CPI. The casual pathway may be that an increase in loans in foreign currency leads to an increase in the Euroization level and thus a lower relative percentage of the money market consisting of Albanian Lekë. This would lower inflation and lower CPI. The evidence thus agrees with literature. Euroization is associated with economic growth. The findings of this study support Castillo's (2006) findings that Euroization has a strong negative effect on inflation. In the long term, if CPI in Albania will increase in the future, this will drive increased Euroization in line with the currency substitution illustrated in the negative correlation between the inflation and demand for local currency (Manjani, 2015).

Based on the results in Table 4.1, since the impact of one percent change in deposits positively affects CPI by 55% and one percent change in foreign currency loans negatively affect the percentage change CPI by 72%, I conclude that my hypothesis is partially supported by the model where Euroization have a significant impact on CPI.

Furthermore, since the main aim of Bank of Albania is to develop and pursue monetary policies to keep inflation stable and low, I suggest that the Bank of Albania neither implement the Euro as a base currency nor pursue the complete de-Euroization of Albanian money market. Partial Euroization gives the Bank of Albania the opportunity to stabilize the inflation rate and exchange rates in light of the impact level of Euroization and de-euroization shown by the results in Table 4.1. Thus the Bank of Albania can encourage Euroization and de-euroization by monetary policies and use that as a financial tool to control the inflation rate.

This study faces a number of limitations. First, more variables in a longer time interval must be used in order to have a better result. Second informal Euroization is another issue which limits my model. There is a lot of foreign currency going in and out of the Albanian economy that is not measurable but of course has a significant impact on the Albanian economy.

To address these limitations, more studies are needed on the Euroization impact on the exports, imports, exchange rates and other economic indicators in Albania. More variables over a longer time interval must be used to better examine whether Euroization has a significant impact on the key economic indicators.

Nonetheless this paper provides a descriptive analysis on the effect of Euroization on the Albanian economy. The findings suggest that Euroization has a significant impact on CPI

and exchange rates and that the Bank of Albania would be wise to avoid aggressive de-Euroization policies at this point but instead use Euroization and de-Euroization as tools to manage inflation.

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Appendix A

MONTHS	Interest rates	CPI	loans in foreign curr	deposits	Exch rate	Exch rate	Imports in ALL	Exports in ALL
2015-12	12.45	111.37	306010	528,187	138	127	53169763251	17817098572
2016-1	9.83	112.83	305741	535,377	138	127	34878590527	16379709018
2016-2	11.87	112.35	305979	534,686	138	125	41841459152	17591972503
2016-3	11.79	113.61	304977	535,953	138	125	46937627017	19360807436
2016-4	11.41	114.12	302883	529,822	139	122	51978724538	21136152926
2016-5	11.23	113.63	304771	528,085	138	122	51804917651	20525628425
2016-6	10.50	112.26	303424	530,256	138	123	52000607824	22603102406
2016-7	10.29	111.58	300144	528,835	137	123	50067416016	22504815872
2016-8	9.67	111.64	299530	554,507	137	122	46515229285	16431317301
2016-9	8.90	112.59	295526	555,415	137	123	48115553098	20577166764
2016-10	8.62	112.39	295479	557,942	137	124	49824722108	21681001618
2016-11	8.38	112.70	294721	566,450	136	126	49500666133	22870281574
2016-12	7.58	112.76	287644	571,595	135	128	55782787374	21835840319
2017-1	7.73	113.79	286532	578,359	137	128	35186211376	18928575561
2017-2	7.59	116.07	286079	572,914	136	127	43987580619	20095283727
2017-3	7.76	115.54	286375	570,999	135	127	53951356779	23621732650
2017-4	7.70	116.11	283726	569,143	135	126	49952277810	24021457483
2017-5	6.82	114.79	280503	565,052	135	122	55628037870	24262479460
2017-6	7.01	115.85	275811	561,608	133	119	56799598762	22570989648
2017-7	6.74	114.49	277202	563,767	133	115	54885050546	24742344294
2017-8	6.38	114.37	281063	576,115	133	112	49391248727	18454024657
2017-9	6.45	113.33	281294	577,226	134	112	53382827529	24076234404
2017-10	6.40	114.37	279955	577,327	134	114	57549015693	24821890477
2017-11	6.12	115.10	280998	577,370	133	114	54660560005	25406411979
2017-12	6.15	114.82	277022	579,101	133	113	60806943085	21986506651
2018-1	6.10	114.66	278660	584,767	134	110	44847079698	23556302113
2018-2	6.16	118.29	277773	577,267	133	107	45918786331	23874282550
2018-3	6.17	117.55	273554	571,562	131	106	55274641881	27079950858
2018-4	6.16	118.84	269259	565,330	129	105	52537302605	26732142810

Appendix B

Vector Autoregression Estimates

	GCPI	GDEPOSITS	GLOANS	GDOLAR	GEURO	GEXPORTS	GIMPORTS	GINTEREST
GDEPOSITS(-1)	0.55	-0.40	-0.61	0.66	-0.32	5.16	2.16	-1.55
	-0.33	-0.46	-0.33	-0.32	-0.17	-2.97	-4.64	-1.57
	[1.66943]*	[-0.86782]	[-1.87594]	[2.06168]**	[-1.90708]*	[1.73612]*	[0.46528]	[-0.98442]
GDEPOSITS(-2)	0.30	0.58	0.38	-0.11	0.54	-2.65	-2.92	0.19
	-0.37	-0.51	-0.37	-0.36	-0.19	-3.34	-5.21	-1.77
	[0.81872]	[1.12505]	[1.03175]	[-0.30056]	[2.85267]**	[-0.79408]	[-0.56070]	[0.10715]
GLOANS(-1)	-0.72	0.58	0.49	0.36	0.56	-0.11	2.84	0.90
	-0.38	-0.53	-0.38	-0.37	-0.20	-3.46	-5.40	-1.83
	[1.87820]*	[1.09224]	[1.27873]	[0.96830]	[2.84396]**	[-0.03266]	[0.52646]	[0.48961]
GLOANS(-2)	-0.15	-0.69	-0.79	0.24	-0.12	3.51	1.66	0.29
	-0.36	-0.50	-0.36	-0.35	-0.18	-3.24	-5.06	-1.72
	[-0.40893]	[-1.39462]	[-2.20805]	[0.69184]	[-0.67286]	[1.08218]	[0.32801]	[0.16764]

CURRICULUM VITAE

Inar Seitllari was born in 1994 in Pogradec. He received his BS degree in Banking and Finance in 2016 and M.S. degree in 2018 in Banking and Finance both from Epoka University. During this time, he has been working at American Hospital in Finance Department. His research interests include the impact of Euroization of money market in Albania on key economic indicators of the country.