



The wiiw Balkan Observatory

Working Papers | 071 | August  
2006

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Euroisation in Albania:  
From Spontaneous to Consensual





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Shortly after the end of the Kosovo war, the last of the Yugoslav dissolution wars, the Balkan Reconstruction Observatory was set up jointly by the Hellenic Observatory, the Centre for the Study of Global Governance, both institutes at the London School of Economics (LSE), and the Vienna Institute for International Economic Studies (wiiw). A brainstorming meeting on Reconstruction and Regional Co-operation in the Balkans was held in Vouliagmeni on 8-10 July 1999, covering the issues of security, democratisation, economic reconstruction and the role of civil society. It was attended by academics and policy makers from all the countries in the region, from a number of EU countries, from the European Commission, the USA and Russia. Based on ideas and discussions generated at this meeting, a policy paper on Balkan Reconstruction and European Integration was the product of a collaborative effort by the two LSE institutes and the wiiw. The paper was presented at a follow-up meeting on Reconstruction and Integration in Southeast Europe in Vienna on 12-13 November 1999, which focused on the economic aspects of the process of reconstruction in the Balkans. It is this policy paper that became the very first Working Paper of the wiiw Balkan Observatory Working Papers series. The Working Papers are published online at [www.balkan-observatory.net](http://www.balkan-observatory.net), the internet portal of the wiiw Balkan Observatory. It is a portal for research and communication in relation to economic developments in Southeast Europe maintained by the wiiw since 1999. Since 2000 it also serves as a forum for the Global Development Network Southeast Europe (GDN-SEE) project, which is based on an initiative by The World Bank with financial support from the Austrian Ministry of Finance and the Oesterreichische Nationalbank. The purpose of the GDN-SEE project is the creation of research networks throughout Southeast Europe in order to enhance the economic research capacity in Southeast Europe, to build new research capacities by mobilising young researchers, to promote knowledge transfer into the region, to facilitate networking between researchers within the region, and to assist in securing knowledge transfer from researchers to policy makers. The wiiw Balkan Observatory Working Papers series is one way to achieve these objectives.



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# **Euroisation in Albania: from spontaneous to consensual**

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## **Abstract**

In this paper, we present a new estimation of the euroisation level of the Albanian economy taking into account both foreign deposits and foreign currency in circulation. We implement a recent novel methodology to calculate foreign currency in circulation. It is found that the overall level of euroisation including this often unaccounted measure is approximately 45 percent of total money. We also try to investigate some of the implications the re-estimated level of euroisation has on the actual monetary policy and the future path towards EMU.

**Keywords:** euroisation, foreign currency in circulation, Albania.

All the views expressed in this paper are those of the authors and do not necessarily represent those of the institutions that they work for. We would like to thank Peter Sanfey, Randall Filer, Vladimir Gligorov, Mario Holzner, Boris Vujcic, Manjola Tase, and participants in the GDN-SEE workshop in Vienna (2005, 2006), GDN Seventh Annual Conference in St. Petersburg, for comments on earlier drafts of the paper.

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## 1. Introduction

Dollarisation and the more recent Euroisation are important phenomena that have inspired a large literature, especially after the financial crises of the 1990s and the increasingly spontaneous use of foreign currencies in domestic economies in Latin America, Eastern Europe and Africa.<sup>1</sup> Porter and Judsson (1996) estimate that 40-60% of the US dollar circulates outside the USA, while according to Doyle (2000) approximately 35-70% of DM were out of Germany before the Euro was released. Most of this currency is circulating in transition economies as foreign currency deposits and cash. In this paper, we measure the level of foreign currency substitution (dollarisation and euroisation) in Albania and evaluate its implications for the actual monetary policy and for the eventual process of joining the EMU. In Albania, both dollarisation and euroisation are present, although there are signs that the Euro is more widespread. Therefore, throughout this paper, the term euroisation refers to the use of both Euros and US dollars.

In the literature, there are different measures of euroisation, which reflect different types of euroisation and data constraints. A widely used euroisation measure is the percentage of foreign currency deposits to total deposits (asset euroisation). According to this indicator Albania appears to have a moderate level of euroisation of less than 30 percent, compared to some other transition countries like Macedonia FYR and Romania. Nevertheless, the foreign currency deposits ratio does not capture the whole scale of euroisation. In transition economies like Albania, it is very common for transactions to take place outside of the banking channels, and the cash economy is quite widespread. Furthermore, foreign currency in circulation (FCC) is a major component of cash in circulation especially in emerging economies.<sup>2</sup> Therefore, it is necessary to include FCC to obtain a more accurate measurement of euroisation. This change in the measurement should influence the results and lead to a different scenario. In an early attempt, Sojli (2004) finds that euroisation in Albania, including FCC, could be higher than 36 percent (of total money<sup>3</sup>) by the end of 2002.

In order to measure FCC, estimates of both consumer and business use of foreign currency are important. Thus far, the latter has received little attention, partly due to the level of informality which constrains data availability on how businesses carry out their activities in Albania. To overcome the problem of insufficient coverage of official data on foreign currency substitution, we drew on a survey where both consumers and businesses were asked on how much they rely on foreign currency *vs.* Albanian Lek for different purposes. We find that foreign currencies are barely used in daily transactions by individuals, while they constitute more than 60 percent of revenues for many businesses. The mismatch

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<sup>1</sup> For further reference please refer to Winkler et al. (2004) and references therein.

<sup>2</sup> Calvo and Vegh (1992), Feige (2002) and Feige et al. (2000, 2002) highlight the importance of foreign currency in circulation in emerging economies.

<sup>3</sup> Total money is the sum of broad money and foreign currency in circulation. See section 3 for a longer explanation.

between individual and business euroisation might arise due to the different nature of the consumption basket of individuals, where food constitutes about 70 percent, and the businesses that we have surveyed (services, construction and manufacturing), which represent 75 percent of GDP. Furthermore, there appears to be a stark mismatch between the foreign assets and liabilities of companies.

Based on this new businesses' survey data, we estimate that the current level of euroisation in Albania could be as high as 45 percent of total money (broad money and foreign currency in circulation) or even more. As credit is still being provided mostly in foreign currency, this ratio is expected to increase further as financial intermediation deepens. Regarding its implications for monetary policy, it weakens the interest rate channel, given that a large part of the decision related to interest rate are taken in foreign currency while central bank becomes very sensitive to exchange rate developments independently of the regime in place. The benefits of adopting officially Euro sooner rather than later are large in terms of closing the door to possible crisis and speculative attacks that could occur under some forms of pegging. However, the process of joining EMU may take unnecessarily long time after entering EU, forgoing its stabilisation advantage. Therefore we advocate a 'consensual' early euroisation for highly euroised countries like Albania in order to gain the benefits of the Euro when most needed.

The paper proceeds as follows. In the next section, we present a short overview of the Albanian economy. The third section addresses and investigates issues related to the measurement of euroisation. A discussion of the implications of euroisation for the Albanian economy and evaluation of the possibility of unilateral euroisation of Albania under the "traditional" and "new" OCA criteria, follows in the forth section. Section five presents some conclusions of our research.

## 2. A quick overview of Albanian economy

Following the crisis of 1997-1998, the Albanian economy has been growing relatively fast, due to policies for economic stabilisation and a period of relative political stability. Overall, there are encouraging signs for further strengthening of macroeconomic equilibrium. Over the past seven years, the economy has experienced considerable growth in real terms, the domestic currency has been more stable and even appreciating, and inflation has been kept at modest levels (Table 1).

**Table 1: Main economic indicators**

	1998	1999	2000	2001	2002	2003	2004
Real GDP growth (%)	12.7	8.9	7.7	7.0	2.9	5.7	5.9
GDP per capita (in usd)	842.1	1052.0	1086.3	1329.0	1460.0	1833.5	2,434
Unemployment rate (%)	17.8	18.0	16.9	14.6	15.8	15.0	14.6
Inflation rate (end year, in %)	8.7	-1.0	4.2	3.5	2.1	2.9	2.2
Debt-exports ratio (in %)	358	187	166	143	129	128	--
	(In percent of GDP)						

General govt. balance (excluding grants)	-11.4	-12.1	-9.2	-8.2	-6.9	-5.6	--
Domestic debt	36.2	37.4	42.6	41.0	41.7	41.1	38.5
Trade balance	-22.8	-19.3	-21.6	-22.5	-25.9	-25.1	-21.8
Current account balance (excl. grants)	-7.1	-7.9	-7.4	-5.8	-10.0	-8.1	-5.5
External debt	36.9	32.3	31.8	26.6	23.3	20.7	18.0
Foreign direct investment	1.6	1.2	3.7	5.1	3.0	3.2	4.6
	(In nominal terms)						
Exchange rate lek/usd (av.)	150.6	137.7	143.7	143.5	140.1	121.9	102.9
Exchange rate lek/euro (av.)	--	146.96	132.58	128.47	132.36	137.51	127.67

Source: Ministry of Finance, INSTAT, Bank of Albania

The real GDP growth rate in 2003 and 2004 recovered to its trend of 5.7 percent and 5.9 percent respectively from 2.9 in 2002. This growth is mainly due to growth in the services sector. The latest data issued by Albanian Institute of Statistics (INSTAT) show a large structural shift from agriculture to services (Table 2). Agriculture accounts for less than one-fourth of the economy, while services have reached 46 percent of GDP, and there are signs that this structural change will deepen in the future. While to some extent this is a sign of development, the lack of investment and restructuring in the agriculture sector has accelerated its fall.

**Table 2: Origin of GDP (% of total)**

	2001	2002	2003	2004
Agriculture	26.0	25.4	24.7	21.8
Industry	10.8	10.5	10.2	14.5
Construction	8.3	8.6	9.1	9.5
Services	45.7	45.9	46.1	45.2
Transport	9.1	9.6	10.0	9.0

Source: Ministry of Finance, INSTAT, Bank of Albania

The strong growth performance has had a positive impact on the unemployment rate, which has fallen to 14.6 percent in 2004 from 18 percent in 1998-1999, although these statistics should be treated with caution. Economic activity is mostly concentrated in small companies and farms and the informality in the labour market, especially among SME, is very high.<sup>4</sup>

The fiscal stance has continuously improved, due to significant fiscal adjustments in the recent years. In 2003, the size of budget deficit (excluding grants) reduced to 4.4 percent of GDP, which is close to that of the ten EU new member countries (the average deficit was 4.7 percent of GDP in 2002). Yet, there is a strong need for further improvements in the fiscal position, given the low level of government revenues compared to GDP, which remain the lowest among the countries in the region. In addition, the resumption of lending activity by Raiffeisen Bank, that holds more than 80 percent of government T-bills, will increase the pressure for improving the alternative sources of financing the budget deficit in the future.

<sup>4</sup> According to INSTAT, around 98 percent of enterprises in Albania have ten or less employees.

Ongoing reforms to enhance the efficiency of tax administration combined with a concerted effort to reduce the size of the informal economy, which is estimated to be one of the highest in the region, is expected to increase tax revenues as a share of GDP and permit an expansion of priority expenditure within a framework of further fiscal consolidation. As this consolidation takes place and the business sector takes on a bigger role, public and private consumption will decline as share of GDP.

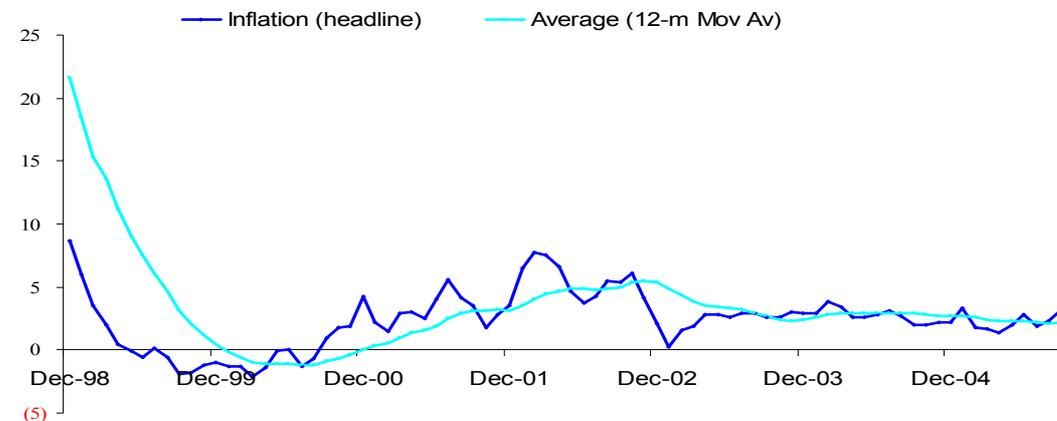
**Table 3: General government budgets**

% of GDP	1998	1999	2000	2001	2002	2003
Total revenues	22.0	22.0	21.9	23.0	22.9	22.4
- Tax revenues	12.3	12.9	15.6	15.6	15.7	19.6
Expenditure	30.2	33.3	30.9	31.5	29.1	26.9
- Capital Expenditure	5.7	5.8	6.6	7.4	5.6	4.1
<b>Budget deficit</b>	<b>-11.3</b>	<b>-11.3</b>	<b>-9.1</b>	<b>-8.6</b>	<b>-6.2</b>	<b>-4.4</b>
- Domestically financed	6.5	5.0	5.4	4.8	3.2	3.2
- Externally financed	4.8	6.3	3.7	3.8	3.0	1.2

Source: Ministry of Finance, INSTAT, Bank of Albania

In terms of price stability, Albania has shown impressive results (Figure 1). Inflation has been generally lower in comparison to other transition economies. Monetary policy continues to aim inflation within a 2-4 percent target. However, Albania's reliance on monetary targeting, which has not experienced any serious problem so far, may prove to be insufficient to maintain low inflation in the future. In particular, the signalling power of monetary aggregates targeted by the Bank of Albania (BoA) may start to deteriorate. Therefore, alternative regimes such as inflation targeting that could transmit central bank signals better are being considered. However, several external threats that may prevent the bank from reaching the target, independently from the regime in place should be borne in mind. Among other threats, the impact of euroisation on the effectiveness of monetary policy, is often cited.

**Figure 1: Consumer Price Inflation**

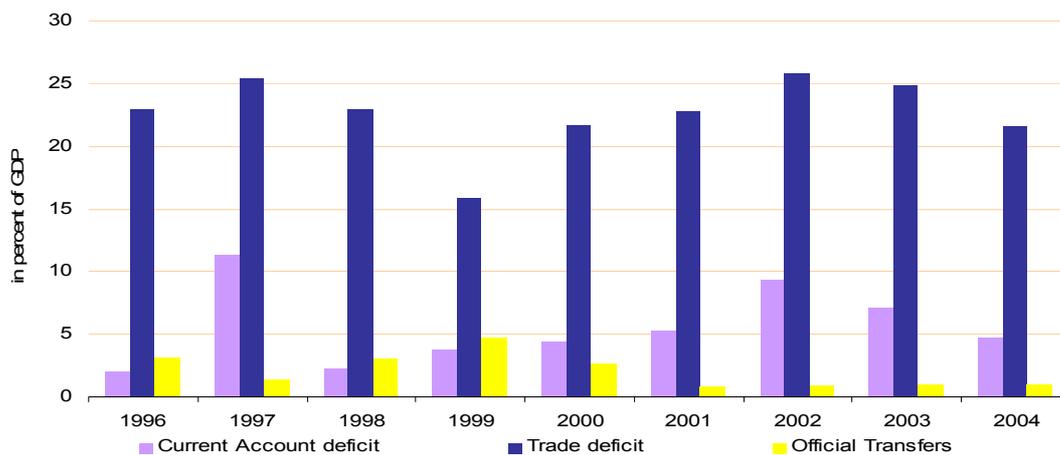


Source: Bank of Albania

With regards to the financial system development, the privatisation of largest bank in Albania, the Savings Bank, has been a catalyst for the recent increase in credit to the private sector, which still remains the lowest among transition countries. In the last couple of years there has been also a boost in the range of instruments that commercial banks offer to the public, like credit cards and provision of ATMs that deliver money in different currencies.

On the external side, large inflows of current transfers and positive service balances in recent years have helped dampen the rising trade deficits and resulted in a slight improvement in the balance of payments position, Figure 2. Although current account deficits have been large throughout most of the transition period, only recently its size has become a matter of concern. The current account deficit may still be sustainable in the short run, however its long run sustainability may be questionable if certain measures, such as structural reform that boost export competitiveness are not undertaken. Over the medium term, as the business climate improves, growth should be driven by rising foreign and domestic export-oriented investment.

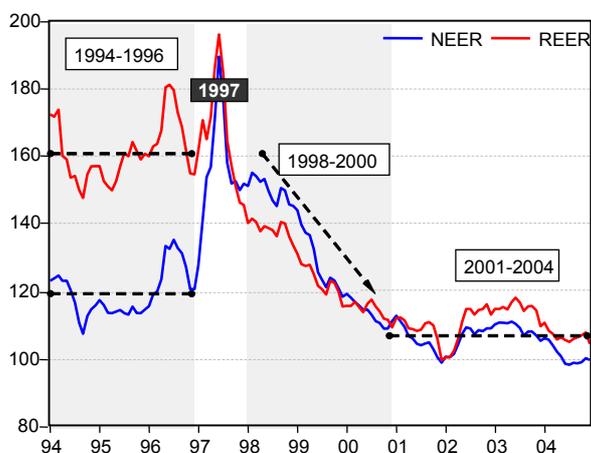
**Figure 2: Current Account Balance (as % of GDP)**



Source: Bank of Albania

Albania follows a floating exchange rate regime with interventions in the foreign exchange market restricted to maintain a certain level of international reserves. From Figure 3, we distinguish three periods in the Albanian Lek movement against hard currencies. Although the exchange rate pass-through is quite high, especially during depreciation periods, BoA so far has been reluctant to rely on direct interventions to meet its inflation targets. This is partly because of changes in fundamentals in periods of strong depreciations (1997) and the inadequate level of international reserves. From 2001 the exchange rate has shown noticeable stability and the exchange rate pass-through effects have also dropped.

**Figure 3: Nominal and real effective exchange rate estimates for the Lek (80% Euro and 20% USD).**



Source: Bank of Albania

Despite the significant macroeconomic achievements, the Albanian economy is still fragile and considerable progress is needed to establish an attractive framework favourable to investment and sustainable growth, driven by private sector development. Although Albania is well positioned to attract foreign direct investments, with its favourable geographical location, competitive salaries, and natural resources, foreign investors have been reluctant to commit their resources in an uncertain business environment (Table 4).

**Table 4: Western Balkans – FDI Inflows. 1997 - 2003**

	1997	1998	1999	2000	2001	2002	2003	Average 1997-2003
<i>Per capita - euro</i>								
Albania	14	13	12	50	74	46	42	36
Bosnia and Herzegovina	0	13	36	40	37	61	71	37
Croatia	106	187	310	266	392	234	282	254
Macedonia	7	53	15	96	247	41	20	68
Serbia and Montenegro	81	12	13	3	23	74	144	50
<i>Western Balkans</i>	55	52	78	79	129	98	133	89
<i>% of GDP</i>								
Albania	2.2	1.5	1.1	3.7	4.9	2.8	2.7	2.7
Bosnia and Herzegovina	0.0	1.3	3.3	3.2	2.7	4.4	4.9	2.8
Croatia	2.6	4.3	7.4	5.9	8.0	4.6	6.2	5.6
Macedonia	0.4	3.3	0.9	4.9	12.9	2.1	1.1	3.6
Serbia and Montenegro	4.4	0.8	1.1	0.3	1.4	3.6	6.3	2.6
<i>Western Balkans</i>	2.9	2.7	4.3	4.1	5.7	3.9	5.4	4.1

Source: "The Western Balkans in transition" EC DG for economic and financial affairs occasional paper no. 5.

### 3. Euroisation Measurement

After a short overview of the Albanian economy and its specific characteristics, we now turn to the measurement of euroisation. The relevant literature proposes several methods of measuring euroisation (see Box 1), but two of these measures that have become the benchmark are asset and liability euroisation. The International Monetary Fund (IMF) uses a form of asset substitution, the ratio of foreign currency deposits to broad money (M3), as a proxy for euroisation. Foreign currency liabilities are given out from foreign currency deposits hence, they are implicitly included in this euroisation measure. It is suggested that if asset euroisation is lower than 30 percent, then it does not interfere with monetary policy transmission channels (Baliño et al, 1999).

$$DIIMF = \frac{\text{Foreign Currency Deposits}}{\text{Broad Money}} \quad (1)$$

#### Box 1: Different types of euroisation/dollarisation

*1. Financial (asset) euroisation/dollarisation*

When a portion of financial assets held by the private sector, as a store of value, are denominated in foreign currency.

*2. Currency substitution*

When a portion of financial assets held by the private sector for transaction purposes is denominated in foreign currency.

*3. Liability euroisation/dollarisation*

Currency substitution of liabilities generally refers to the extensive use of foreign currency denominated bank loans.

*4. Real euroisation/dollarisation*

occurs when key prices such as wages, but also those of goods, are indexed to a foreign currency, but actual payment takes place in local currency. The everyday transactions take place mostly in local currency. Real estate and durable goods are usually quoted in foreign denominated currency.

Given the characteristics of the Albanian economy mentioned above: high uncertainty; high foreign inflows; and high market informality, asset euroisation is a biased proxy for currency substitution and does not provide a real estimate of the presence of foreign currency in the economy. The high rate of money circulating outside banks,<sup>5</sup> and the low rate of import payments through bank accounts, 40-44 percent on average in the last years,<sup>6</sup> imply a large circulation of foreign currency in cash. Thus, we adopt a wider definition of euroisation, which includes foreign currency in circulation outside banks.

The euroisation index (EI) is calculated as:

<sup>5</sup> The ratio of cash in circulation to M3 has been historically above 30 percent declining to 25 percent in 2005.

<sup>6</sup> Net export payments settled through the banking system are calculated from the Balance of Payments section, in the Bank of Albania.

$$EI = \frac{\text{Foreign Currency in Circulation} + \text{Foreign Currency Deposits}}{\text{Total Money}} \quad (2)$$

where, Total Money = Broad Money + Foreign Currency in Circulation and

Broad Money = Domestic Currency Deposits (DCD) + Foreign Currency Deposits (FCD) + Domestic Cash in Circulation (DCC).

The euroisation index can be separated in two components, asset substitution index (ASI) and currency substitution index (CSI), which are calculated as:

$$ASI = \frac{\text{Foreign Currency Deposits}}{\text{Total deposits}} \quad (3)$$

$$CSI = \frac{\text{Foreign Currency in Circulation}}{\text{Currency Outside Bank (domestic and foreign)}} \quad (4)$$

### 3.1 Asset Substitution Index

ASI is relatively easy to measure, because data on deposits is available from the central banks or the International Financial Statistics. This segment of the euroisation index is comparable with the IMF measure, since they are both based on FCD. From Figure 4, we observe a continuous and substantial increase in both asset substitution and IMF index for the period after June 2003. DIIMF has reached its highest level ever in Albania, 27.1 percent, in September 2005, while ASI is at its highest level, since July 1997. The rapid increase in foreign currency deposits appears to be mainly due to the increase in the level of deposits that households and individuals hold, see Figure 7.

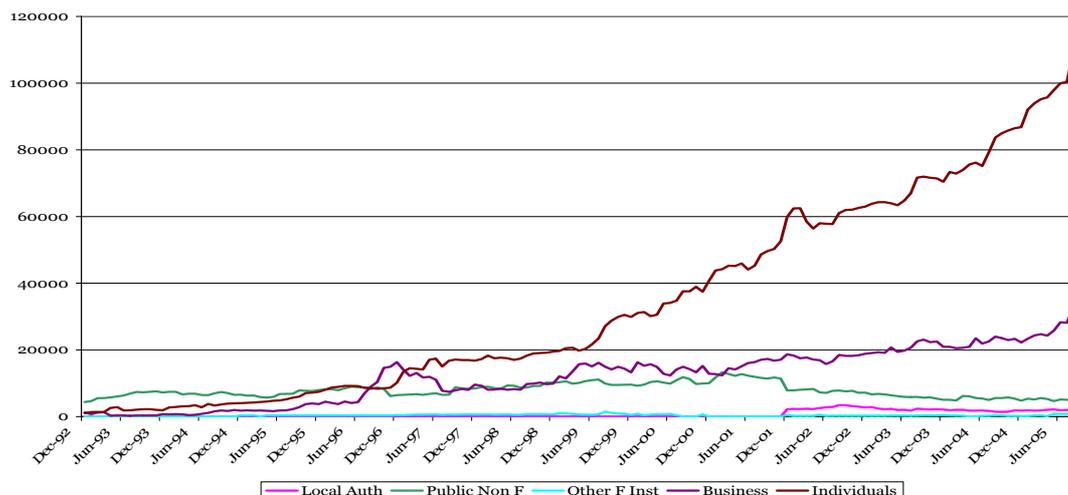
**Figure 4: Comparison of the Asset Substitution Index and IMF euroisation measure**



Source: Bank of Albania

We notice that there is a very high degree of correlation, 72 percent, between ASI and DIIMF, and the fluctuations in the ASI have been much higher than in DIIMF. Any differences in fluctuations between the two indexes would be caused by fluctuations in broad money and total deposits. Thus, it can be inferred that total deposits have higher volatility than broad money and individuals shift their portfolios between cash and deposits often.

**Figure 5: The main components of foreign currency deposits**



Source: Bank of Albania

In contrast with other countries in the region, Albania exhibits a moderate level of foreign deposits as a share of total deposits and of broad money (Tables 5 and 6). Countries like Bulgaria and Croatia exhibit much lower euroisation of deposits, even though estimated foreign currency in circulation is very high in these countries (Table 7).

**Table 5: Share of foreign deposits to total deposits (in %)**

COUNTRY	1999	2000	2001	2002	2003	2004	2005*
Albania	25.5	27.5	30.0	32.4	31.1	31.3	33.2
Bulgaria	56.1	66.3	62.6	47.1	32.5	26.7	26.2
Croatia	23.7	29.0	27.6	25.4	25.3	31.4	27.0
Hungary	19.5	18.2	17.5	16.5	14.1	15.5	14.8
Macedonia	83.4	87.6	70.3	64.2	56.5	48.6	45.4
Latvia	118.5	137.7	139.0	129.8	130.4	131.3	122.4
Lithuania	21.1	35.4	32.8	25.6	20.0	24.9	30.4
Romania	75.5	85.6	103.6	89.4	82.3	71.4	62.8
Slovenia	23.0	24.0	27.6	27.4	16.9	16.4	18.3

Source: International Financial Statistics Database

\*Until August 2005

**Table 6: Share of foreign deposits to broad money (in %)**

COUNTRY	1999	2000	2001	2002	2003	2004	2005*
Albania	18.7	19.6	21.3	22.1	22.4	23.1	24.8
Bulgaria	40.8	46.7	42.5	32.4	22.7	18.8	19.2
Croatia	21.3	26.4	25.3	23.2	23.2	28.9	24.7

Hungary	16.4	15.4	14.9	13.9	11.9	13.3	12.7
Macedonia	61.3	67.6	54.8	51.3	45.4	40.4	38.4
Latvia	74.8	91.5	96.1	92.8	95.3	100.8	96.8
Lithuania	14.3	25.6	25.1	19.5	14.7	18.7	23.6
Romania	37.5	39.9	44.2	41.3	39.2	36.2	33.8
Slovenia	21.5	22.5	26.1	26.0	16.1	15.5	17.4

Source: International Financial Statistics Database

\*Until August 2005

### 3.2 Foreign Currency in Circulation

Calculating the currency substitution index is difficult due to the need to measure FCC. Calvo and Vegh (1992) portray the following picture: “Often data on foreign currency circulating in an economy do not exist. Hence the importance of currency substitution is unobservable.” To estimate FCC several methods of measurement have been proposed using: money transfers (Feige, 2002; Feige et al., 2000, 2002); currency exchanges (Mongardini and Mueller, 2000); and macroeconomic factors (Reinhart et al., 2003).

**Table 7: Foreign Currency in Circulation for transition economies**

COUNTRY	FCC Per Capita	2001 (FCC as % of total currency)
Albania	46	14
Bulgaria	125	41
Croatia	117	35
Hungary	25	6
Macedonia	5	5
Latvia	1209	79
Lithuania	25	11
Romania	61	55
Slovenia	329	54

Source: Feige 2002, page 13

Feige (2002) uses reports and surveys from the country of origin of the money (US and Germany) on the destination of the currency once it moves out. He estimates that FCC in Albania was 14% in 2001 (Table 7), which is not very high compared to other countries in the region. Nonetheless, the exact location of dollars and euros is difficult to determine, because money might have circulated out the country where it was originally sent. Hence, this method of FCC estimation has considerable limitations.

Sojli (2004), based on the internal circulation of money, suggests that FCC ought to be calculated as:

$$\text{FCC} = \text{exchanges} + \text{transfers} + \text{customs} \quad (5)$$

These are all flow (net) variables, thus the knowledge of the stock of FCC in the beginning of the estimation period is needed. Sojli (2004) assumes that FCC in 1998 is the sum of the net remittances that have been transferred through Western Union from 1995 until 1998. This estimate is not very accurate because: first, any foreign currency coming to Albania between 1991 and 1995 is not accounted for and second, official channels of money transfers, like Western

Union or banks, were not widely used before 1998. Individuals preferred bringing the money personally in cash.

To estimate the current level of the stock of FCC in the Albanian economy, we conducted a survey of both individuals and businesses, in September 2005. Individuals were asked about their use of foreign currency for transaction and saving purposes, while businesses were asked about their overall use of foreign currency in day to day management of the firm and their expectations for the future (see surveys presented in Appendix A and B). More specifically, we asked both individuals and businesses on their level of savings and foreign currency holdings as a percentage of total savings/capital and total cash holdings. In this way, we can estimate the amount of foreign currency in circulation, without having to ask them for their exact amount of cash holdings. Once the initial stock level of FCC has been determined, then the measure of FCC can be updated periodically by the above set formula and included in the euroisation index. This will help the Central Bank to keep track of the level and trends in euroisation in the economy.

Given the inequality of wealth distribution in Albania, currency substitution could vary significantly among different wealth groups. For this reason, we take into account several wealth groups from the population based on the household survey of 2001 (Living Standards Measurement Survey (LSMS), INSTAT). We assume that income/wealth and cash holding have the same distribution. While wealth and income normally differ from each-other, since the market economy is only fifteen years old in Albania, the differences between the distribution of income, wealth, and cash holdings should not be high.

Based on Yefimova et al. (1998) and Ionin et al. (1998), we calculate that a sample of 2260 respondents would be appropriate for the purpose of this survey, 1635 individuals and 625 businesses. The majority of the individuals, 23.5 percent, and 41 percent of businesses were chosen from Tirana, given that it is the capital and the most densely populated area of the country. Nonetheless, there is a significant and fair representation of the rest of the country in the sample and rural areas are included, due to the high foreign currency inflow in those areas from remittances.

### *Individuals*

From the survey results (Table 8), we observe that virtually all individuals carry out their transactions in local currency. Only one respondent out of the whole sample claims that part of his/her expenditures is in foreign currency. This is in line with what a similar survey, in 2003, revealed: which is, most or all of daily transactions take place in local currency.

With regards to the distribution of households' portfolios, results again are not far from our existing knowledge on this issue (Table 8). 58 percent of individuals' liquidity is kept as cash in Leks. Lek deposits make up almost 36 percent of individuals' portfolios. The share of foreign currency holdings in cash is just over 1 percent, reflecting their low use in everyday transactions. Foreign currency

deposits make up merely 5.6 percent of the portfolio which is much lower than what is held by the banking system in Table 5 and Figure 7.

**Table 8: Lek vs. Foreign currency preference**

	Share of savings (%)	Future preference (in %)	Interest rate importance (1-5)
Lek cash	57.61	40.0	-
Lek dep.	35.51	37.7	3.5
FX cash	1.13	2.6	-
FX dep.	5.62	11.7	2.8
T-bills	0.12	2.0	2.4

The preference of relying mostly or exclusively on Lek is also confirmed to continue in the next 3 years. However, this preference could be fragile and subject to changes, if interest rate differentials between Lek and foreign currency deposits narrowed further.<sup>7</sup> Individuals seem to be fairly alert to all types of interests.

From Table 8, we infer that foreign currency in circulation constitutes 1.13 percent of individual savings (DCC+FCD+DCD+FCC). This allows us to calculate the amount of foreign currency in circulation, which is estimated to be 6,470 million Leks. This figure is much lower than the one that Sojli (2004) estimates and is mainly due to the fact that foreign currency is not used for small day to day transactions. Therefore, we now turn to the business side of euroisation.

### *Businesses*

We surveyed businesses from the services, construction and manufacturing sector, which constitute 75.1% of GDP. The results in Table 5 show that foreign currency dependence of businesses is much higher compared to households on both liability and asset sides. Revenues in foreign currency amount to more than 65 percent of the total revenue, and they are 50 percent or higher for each of the sectors investigated. This comes as a bit of a surprise after having found that consumers pay mostly in Leks. One explanation could be that the output of these businesses constitutes a small share of consumers' basket and is paid from savings. As a matter of fact, almost 70 percent of the Albanian consumer basket consists of food which is provided to a large extent by the agriculture sector not included in our business sample. Nonetheless, we may say there is a sample demand and supply mismatch.

Furthermore, from Table 9, we notice that firms incur costs in foreign currency, but they are not as high as revenues. A large share of assets and liabilities is held in foreign currency as well, and liabilities in foreign currency are higher than assets, especially for service businesses. On the other hand, almost 50 percent of the capital of these firms is held in foreign currency, which might mitigate the problems arising due to the discrepancy between foreign assets and liabilities.

<sup>7</sup> In September 2005, the spread between Euro and Lek deposits ranges between 1.68 – 3.19 percent for one and twelve month deposits, respectively.

**Table 9: Share of foreign currency (as a percentage of the total)**

	Total	Manufacturing	Construction	Services
Revenues	65.3	72.0	55.7	49.8
Expenditures	40.4	46.9	26.1	25.1
Assets	39.28	45.0	18.3	40.0
Liabilities	42.27	47.2	25.5	51.0
Capital	49.37	52.1	32.6	73.3
<b>Currency mismatch</b>	<b>41.0</b>			

Comparing the foreign currency share of revenues against that of expenditures or assets vs. liabilities there does not seem to be any dire mismatch to justify concerns of ‘fear of floating’. Nonetheless, looking at the disaggregated currency mismatch measure (sum of absolute value of revenue-expenditure difference for each firm) of 41 percent, the picture gets more concerning. While this is a very basic exercise, which needs more accurate quantitative corroboration, it points to a potentially serious flaw of the actual flexible exchange rate regime.

Businesses seem to lean toward more usage of foreign currency in the future - 30 percent expect euroisation to grow, 10 percent to decline and 58 percent to remain the same. This trend, however, seems to be slowing down compared to the historical behaviour of euroisation – 48 percent report an increase in euro usage, 9 percent a decrease, 42 percent no change. Finally, a large portion of businesses (62 percent) would prefer the adoption of euro.

We use the foreign currency share of revenues and expenses, to calculate the amount of foreign cash that businesses circulate. These two categories are cash related, because a very little proportion of the business transactions is settled through bank accounts, while debit cards are not used and use of credit cards has started only recently in Albania. Normally a company’s expenses are some other company’s revenues, Albanian or foreign (import payments). Hence to avoid double-counting only the difference between income and expenses is considered to be relevant for the FCC calculation.<sup>8</sup> From the survey results, we calculate that the currency mismatch between revenues and expenses is 41%. This figure is a percentage of total revenues. We assume that the total value of revenues for these businesses is the share of GDP that they hold.

The estimated GDP for September 2005 is 823,197.41 million Leks. Given that manufacturing, services and construction businesses constitute approximately 75.1 percent of Albanian GDP, or 618,221.25 million Leks in September 2005,<sup>9</sup> after taking money velocity into account, the amount of currency circulating in the businesses is 441,828.20 million Leks. Thus the level of foreign currency calculated from the businesses reaches a level of 181,149.56 million Leks, in September 2005.

<sup>8</sup> It can be argued that some of these expenses might be wages payments, but wages in Albania are generally set in Albanian Lek. On the other hand, some of the expenses might go into other non-business sector payments, therefore our measure might be downward biased.

<sup>9</sup> Datasource: Bank of Albania website.

**Table 10: FCC Calculation**

Estimated GDP September	823,197.41
Total revenue for manufacturing, services and construction businesses (75.1% of GDP)	618,221.25
Currency in circulation after velocity of money January 2006 (GDP/1.4)	441,828.20
Revenue in foreign currency calculated from the currency mismatch (41% of GDP/velocit)	181,149.56

### 2.3 Euroisation

An extreme form of euroisation is the indexation of wages and prices. The indexation of wages and prices in foreign currency normally occurs after extensive euroisation of assets and cash has taken place. It would be too ambitious to look for clear signs of this form of euroisation in Albania, when labour contracting procedures are still weak and negotiations between workers and employers are generally little organised. A recent survey shows that most of the wages in Albania are paid in local currency. However, both workers and employers pay attention to the exchange rate level when salaries are revised. This could be a weak form of indexation, reflecting the fears of exchange rate pass through even in short term. A stronger form of indexation is observed in the real estate market where virtually all prices and transactions take place in foreign currency. These early signs of extreme euroisation support the existence of a more excessive level of euroisation than the previously estimated moderate levels.

For the estimation of euroisation, we use the business survey implied FCC. The results on FCC, when using the businesses sample, are drastically different from those obtained from the individuals' survey. This does not come as surprise, given the above discussion and wide anecdotal evidence on the use of the foreign currency to settle major transactions instead of small day to day expenses.<sup>10</sup> One only needs to read the daily newspapers to realise that rents, car prices, flight tickets and holiday package prices are all quoted in Euros. Therefore, the FCC and euroisation measure based on the businesses survey reflects much better the level of foreign currency in use in the Albanian economy.

$$EI = \frac{FCC + \text{Foreign Currency Deposits}}{\text{Total Money}} = \frac{181,149.56 + 153429.28}{566162.12 + 181,149.56} = 45\%$$

$$CSI = \frac{\text{Foreign Currency in Circulation}}{\text{Currency Outside Bank (domestic and foreign)}} = \frac{181,149.56}{141477.93 + 181,149.56} = 56\%$$

The estimated euroisation level implied by the businesses' survey is high, approximately 45 percent. The amount of foreign currency circulating outside banks is about 56 percent of total currency outside banks, and it is higher in absolute value than what Sojli (2004) estimated. The difference might be due to the increase in remittances as well as an increase in trade in the last three years.<sup>11</sup>

<sup>10</sup> By law in Albania it is allowed to contract in foreign currency.

<sup>11</sup> From the Balance of Payments statistics, remittances and imports have doubled, while exports have tripled in absolute value from Sept '02- June '05.

### 3. Policy implications

Although euroisation in Albania to date has been regarded as moderate compared to other countries in the region (e.g. Croatia), our estimation shows that it could be significantly higher and cannot be disregarded for its inherent risks and implications on monetary policy. The major concern relates to the exchange rate risk that high euroisation imposes on the economy. In this environment, the central bank becomes rather sensitive to exchange rate volatility even under a free floating regime. On the other hand, free floating is indispensable for pursuing an independent monetary policy, which is a crucial argument for holding to individual money. One could then argue that euroisation restricts the monetary policy role as a shock absorber and therefore, the scope for keeping flexible exchange rates or even a domestic currency.

In the case of Western Balkans countries that eventually will have to give up their local currencies for the Euro, the efforts to promote confidence in the domestic currency could be further undermined by the limited time left to make use of the consequent benefits. Put this way, an earlier euroisation may seem a good alternative to discretionary monetary policy. This point is strongly made by Dornbusch (2001), "... even though membership in the European Union (EU) is clearly on the horizon, the larger candidate countries so far remain attached to discretionary exchange rate regimes, forsaking the readily available benefits of unilaterally adopting the Euro". Calvo (2001) also argues that liability dollarisation is *per se* a good reason to move towards *de jure* dollarisation because of the currency mismatch risks. Friedman, one of the most prominent advocates of flexible exchange rates, agrees that in the case of small countries: "... the best policy would be to eschew the revenue from money creation, to unify its currency with the currency of a large, relatively stable developed country with which it has close economic relations, and impose no barriers to the movement of prices, wages, and interest rates" [*Money and Economic Development*, (Praeger, 1973, p. 59)]. His debate with Robert Mundell, the famous promoter of single currency areas, is mostly about the large countries or areas that may not have a viable option of a credible anchor currency. Putting aside the global debate of flexible vs. fixed exchange rates, which is beyond the scope of this paper, one important point coming out of these discussions is that euroisation/dollarisation could be a good solution for small countries.

The idea of a rapid introduction of Euro is not new. It has been raised as early as ten years ago by several economists and politicians of the new accession countries and of the Western Balkan countries. The EU officials have not been particularly supportive of early euroisation. The main argument put forward has been the need of a nominal convergence before adopting the Euro in order to preserve the stability of European Monetary Union.

According to the traditional theory of Optimum Currency Areas (Mundell, 1961) certain conditions should be met before entering any currency area, the most important being labour, capital and goods mobility. In other words this means

openness and flexibility of markets that allow for other adjustments channels to substitute for the loss of monetary policy flexibility. Later on, the literature has pointed out that the issue of euroisation/dollarisation may not be a simple cost-benefit exercise between fixed and floating regimes,<sup>12</sup> and the answer could be far from definitive. The creation of the Euro-Zone seems to have defied the theoretical and empirical uncertainty of currency areas. Of course, EMU countries have been cautious about putting certain pre-conditions to increase the chances for Euro area success. These conditions known as ‘convergence criteria’ consist in, (1) price stability, (2) fiscal soundness, (3) exchange rate stability, and (4) long term interest rate convergence. Based on this precautionary approach, EU’s position on euroisation has been very clear: "... “euroisation” would run counter to the underlying economic reasoning of EMU in the Treaty, which foresees the eventual adoption of the euro as the endpoint of a structured convergence process within a multilateral framework" (European Commission, 2001). This means that countries outside the Euro-area are left only with the option of fixed and quasi-fixed exchange rates or currency boards. These alternatives, however, have proven to be unsustainable and in developing countries have often led to currency crises due to large and volatile capital flows (Obstfeld and Rogoff, 1995; Osakwe and Schembri, 1998).

The debate on euroisation/dollarisation was revived by some new versions of the currency areas theory by Frankel and Rose (1998). They argued that preconditions for entering single currency areas are endogenous rather than exogenous to these arrangements, i.e. integration and convergence occur after entry in a currency area. Rose (2000) also provides some econometric evidence that two countries sharing a common currency trade far more with each other than comparable countries with different currencies. His evidence is criticised on the grounds that his sample is mostly made of small size countries (Winkler, et al. 2004). However, this criticism does not challenge the validity of new OCA theory in the case of small countries.

While the debate about the real benefits of euroisation is far from over, at the risk of oversimplification we may conclude that theoretical and empirical arguments seems to be more compelling for small countries like those in Western Balkan. Therefore, we try a very rough exercise to see the balance of weight between costs and benefits for Albania. We do not examine all issues related to euroisation, hence do not provide a comprehensive evaluation of the pros and cons associated with Albanian euroisation. We try to asses the most salient arguments used to advocate or reject early euroisation, starting with the level of integration between the EU and Albanian markets that justify the benefits of entering an OCA in the first place.

#### *Trade, financial and business cycle integration*

The higher the degree of integration of an economy with the anchor country the greater the benefits of exchange rate pegging, as transaction costs diminish (Rose,

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<sup>12</sup> See for example the case of Mexico in the Special Issue of *Journal of Money, Credit and Banking* – May 2001 Part 2, “Global Monetary Integration”.

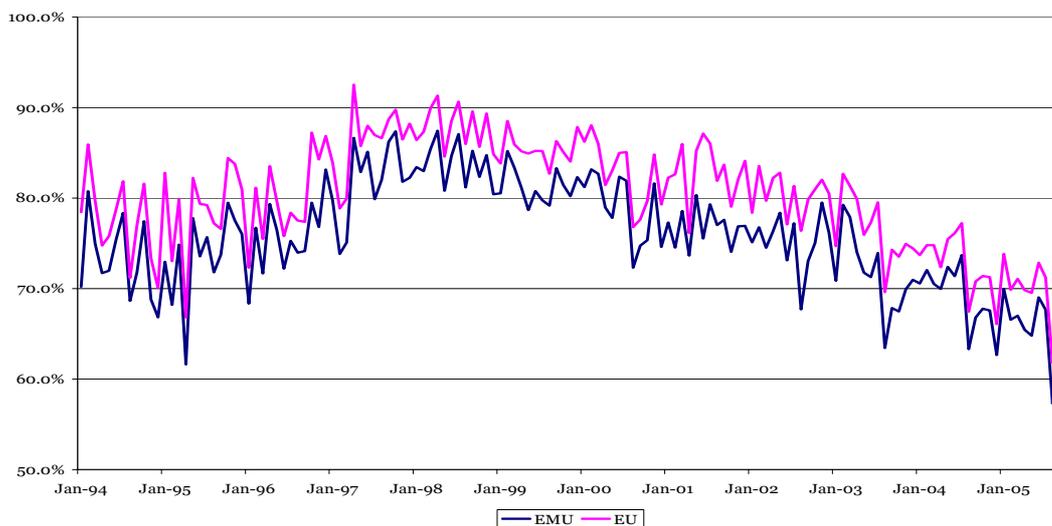
2000; Frankel and Rose, 2002). From Table 10, we see that the Albanian trade to GDP ratio has reached more than 60 percent, while more than 80 percent of total trade is with EU countries (Figure 6). Although, in relation to other countries in the region it may not seem the most open economy that could benefit out of an OCA, as exports are expected to increase with time the advantages of removing exchange rate uncertainty will become more and more obvious.

**Table 10: The ratio of trade to GDP and the trade concentration indexes**

Country	(Exp. + Imp.)/GDP	rank	Exp. Concentration Index (H, 0-1)	rank	Imp. Concentration index (H)	rank
Albania	61.28	19	0.292	3	0.063	16
Armenia	81.67	15	0.434	1	0.192	2
Poland	47.31	22	0.084	19	0.065	15
Turkey	58.63	20	0.094	17	0.078	8
Croatia	103.93	11	0.119	13	0.072	11
Czech Rep.	127.83	5	0.108	14	0.074	10
Romania	71.56	17	0.122	11	0.066	14
Serbia	67.51	18	0.091	18	0.071	12
Slovak Rep.	157.58	3	0.136	8	0.076	9
B&H	84.41	14	-	-	-	-
Bulgaria	116.19	7	0.104	16	0.154	4
Cyprus	40.88	23	0.188	6	0.090	6
Estonia	157.99	2	0.122	12	0.067	13
Hungary	114.5	8	0.130	10	0.087	7
Latvia	103.99	10	0.169	7	0.058	17
Lithuania	113.78	9	-	-	-	-
Macedonia	88.62	13	0.284	5	0.176	3
Slovenia	119.32	6	0.108	15	0.057	19

Source : Various

**Figure 6 – Albania’s share of total trade (Exp + Imp) with EMU and EU countries**



Source : Bank of Albania

### *Diversification of production and consumption*

Low concentration of production and exports could lead to more dire effects of a shock to the Albanian economy, because it does not offer any comparative

advantage that would provide long-term interest from foreign investors. Production is quite diversified, while exports mainly depend on the cheap cost of labour and not any specific well developed industry. This would be an argument against a free floating exchange rate.

As with regards to financial integration, a large share of foreign direct investments (5 percent of GDP) in Albania comes from EMU countries. Furthermore, several of the 17 commercial banks are branches of large European banks. The largest bank, that has approximately 70 percent of the deposit market, is an Austrian bank, Raiffeisen Bank.

Albania's highly concentrated trade with EU countries implies that it should keep the option of flexible exchange rates open to avoid the contagion of negative shocks from its main partners. However, given the high degree of integration of Albanian trade and financial markets with the EU countries, we can infer that business cycles ought to be correlated as well, if not now very soon in the future, when the markets will integrate further.

Moving beyond integration, the major drawback of entering a currency area is the loss of monetary policy flexibility to deal with asymmetric shocks. Monetary policy is a particularly valuable device when there are obvious differences in the business cycles between countries. There are good reasons to expect asymmetries in the business cycles of EU countries and Western Balkans. The economic structure of these countries is noticeably different, because Western Balkans countries are much more labour intensive economies and more commodity dependent than EU countries. However, the role of monetary policy depends on several factors starting from the effectiveness of monetary policy as shock absorber. In particular there are several structural developments that make the transmission mechanism very unstable on top of the uncertainty of understanding it in the first place. (See Box 2 for efforts in understanding and explaining monetary transmission mechanism in Albania.) Therefore countries like Albania may have to wait a considerable amount of time before they start to make an effective use of monetary policy tools. However, by then, most probably the economic structure will have converged towards that of EU countries reducing the importance of cyclical monetary policy.

#### **BOX 2: Understanding Albanian Monetary Transmission Mechanism: Some efforts**

Understanding of the Albanian Monetary Transmission Mechanism has led several authors to look closely at different stages of reform. A paper by *McNeilly and Schiesser-Gachnang* (1998) was among the first to explain the inflation process in the early years of transition. According to the authors the contribution of price liberalisation to overall inflation was large, a success which was later confirmed by the behaviour of core inflation. *Domac and Elbirt* (1998) used Granger causality tests to conclude that money and nominal exchange rates drive overall inflation, while net credit to government has a significant impact on the relative price of non traded services.

*Kalra* (1998) in an early effort to explain the effectiveness of monetary policy, used a simple two equation analytical framework covering the goods and money markets to explain relationships between prices, money, exchange rates and interest rates during 1993-1997. The paper showed that money demand was homogenous to the price level, inversely related to the expected

depreciation of the exchange rate and positively related to the interest rate and the level of economic activity. The author discovered back then the tendency of real exchange rate to appreciate until 1997. Also empirical evidence showed that adjustment to disturbances was fast. Later, *Rother 2000* reiterated some of these findings and went beyond in looking into how the persistent changes in relative prices may contribute to movements of the aggregate price level. The author investigated some of the factors that drive Albania's inflation performance and suggested that monetary policy should allow for some positive inflation.

Looking at the empirical evidence from another prospective through an examination of trends in the key macro variables, based on both monthly and quarterly data, *Muco, Sanfey and Luci*, (2001) show several things. First, there is only a weak correlation at best between monetary targets and either inflation or output. Second, quarterly series on cement and electricity production are loosely correlated with official (annual) growth rates in GDP, but a series on fuel consumption bears no relation to output. Third, exchange rate stability and price stability are closely related, indicating that the exchange rate is a key indicator for inflationary expectations. A vector autoregression model (VAR) shows the interaction effects between the changes in money supply and inflation. Some evidence of two-way causality is present, but in general, the results confirm that the link between money supply and inflation before 2000 was weak, and the level of inflation is largely a function of other variables.

*Samiei (2003)* attempts to examine monetary policy using an interest rate rule. Based on Taylor rule the author analyses whether the Bank of Albania has responded systematically to economic development in setting policy interest rate. Although he finds some support for this hypothesis, the results are only indicative given the structural shifts in the Albanian economy and data deficiencies. Nonetheless, the author recognises that while Taylor rule is based on interest rate response to demand shocks, inflation in Albania is substantially influenced by supply shocks. He recognises the monetary targeting as a necessity given the weaknesses of interest rate transmission mechanisms.

*Vladkova-Hollar (2000)* analyses closely the causes and consequences of the real exchange rate appreciation. Although a real appreciation and an initial decline in net exports seems consistent with other transition experiences especially in the context of strong external inflows and growth, a further appreciation under a plausible decline of inflows needs to be treated carefully and accompanied with an extended export base. Supported by tentative econometric analysis the author suggests that the impact of the appreciation on the trade balance of Albania has been small. She argues that the effect of real exchange rate on exports has been weak, while large financial inflows, namely remittances, have influenced the demand for imports pushing upwards real exchange rates.

*Muco, Sanfey and Taci (2003)* try to see the correlations between changes in money supply ( $M_1$ ), inflation, and the level of the exchange rate. They find very little correlation between money supply and the price level. For example, money growth was robust in 1994-95 when annual inflation was falling rapidly to single-digit levels, whereas money growth declined in 1997 when inflation shot up during the pyramid scheme crisis. Movements in the supply of money are likely to have been driven by changes in money demand rather than activist monetary policy by the central bank. However, the charts demonstrate a strong link between exchange rate stability and inflation. In fact, empirical evidence in *Haderi et al. (1999)* and *Muço et al. (1999)* demonstrates that the exchange rate and remittances explain much more of the variation in inflation than changes in the money supply does.

In a more recent attempt *Peeters (2005)* challenges the perception that exchange rate pass-through is the main channel of the monetary policy transmission mechanism in Albania. She finds that its importance has declined over time as other channels such as credit channel and wage channel are gaining some grounds.

If we retain the traditional OCA criteria exogeneity view, it is necessary to determine whether other adjustment channels and mechanisms exist, to substitute for the loss of monetary policy independence, which could potentially be valuable.

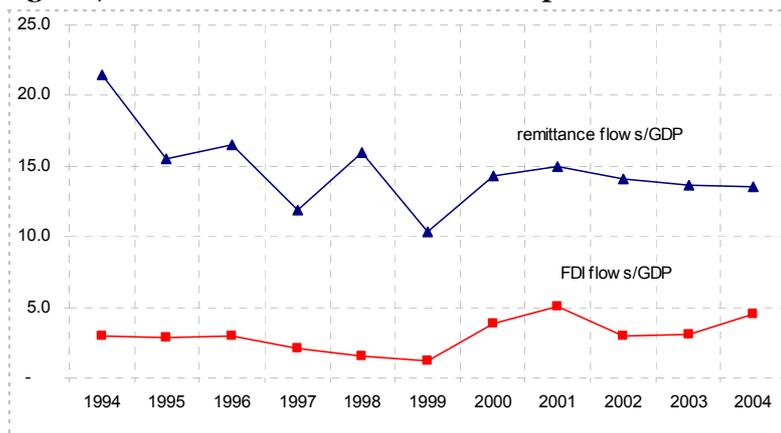
### *Price and wage rigidities*

Flexible prices and wages would be a good substitute for monetary policy, in times of shock. Shocks could be absorbed by changes in wages and prices, and changes in the interest rates would not be needed to boost the economy. It is an empirical fact that prices and wages are fairly inflexible in the short-run (depending on how often contracts between employees and employers are re-written and prices revised). Nonetheless, in Albania, there have been mixed signals about the flexibility of prices and wages. The speed of adjustment after major shocks in 1992 and 1997 could be interpreted as evidence of flexibility in either price and/or wage adjustments. This is partly due to low unions' power combined with a relatively liberal market economy approach. If such an adjustment mechanism is in place the loss of monetary policy tool becomes less concerning.

### *Factor mobility*

High factor mobility would help in taming the effects of a shock to the economy, because labour resources released due to a shock can move and work in other countries, and provide the income needed to help the economic recovery. Factor mobility in Albania is fairly high, due to a large proportion of the population living and working in the neighbouring countries, Greece and Italy, as well as in other countries in the EU. The economic impact of factor movements is large, since remittances and income from seasonal labour abroad form a large and continuous share of the Albanian GDP, as shown in Figure 7.

**Figure 7: Share of total net income from private transfers and labour abroad to GDP**



Source: Bank of Albania, Instat.

From this short analysis it seems the nominal or even real convergence issue between Albania and the Euro-Area does not pose excessive risk of destabilising either side to the point of offsetting the benefits of an early euroisation. In more technical terms two other often mentioned costs of giving up individual money

are the loss of seigniorage income, and absence of lender of last resort. Seigniorage, according to Schobert (2001), may not be that important for the discussion of costs and benefits of euroisation. However, the costs of introducing the new currency could be considerable, estimated at above 10 percent of GDP. The lender of last resort also is considered to be a very important safety net measure to be sacrificed in face of potential financial system crises. Both these costs could make the unilateral euroisation much less optimal compared to the regular path of adopting Euro. The option of unilateral euroisation it is not simply undesirable but also unrealistic. There might be several reasons for this especially the insufficient level of gross international reserves in Albania which can hardly cover the cash in circulation let alone other aggregates like M2 or even less M3.

Is there any third realistic option that enables the utilization of the advantages of an early euroisation? Lasseur's (2004) 'consensual' euroisation seems to be one solution. This proposal consist in an earlier agreement of euroisation with EU by giving up some rights on monetary policy decision-making of the euro-area, as an alternative to the adoption of euro under the regular path foreseen in the EU treaty. While the details of such proposal may need further research and refinements, it is a good example of how EU institution could accelerate the integration, especially of the late comers.

#### **4. Conclusions**

Euroisation is spontaneously taking place in many candidate countries like Albania, not simply because of monetary policy, or several other differences, as much as due to the close links these economies hold with EU - 70 percent of Alb. exp/imp with Italy and Greece, 30 percent of labour force is estimated to be working abroad. To ensure some flexibility these countries have let open the option of euroisation – holding FX deposits/loans, and/or carrying out transitions in euros. Therefore intentionally or unintentionally euroisation has become an accepted phenomenon among these countries.

A re-estimation of currency substitution level of the Albanian economy by including the currency in circulation has shown that the level of euroisation/dollarisation could be much higher than it was previously thought. In particular our assessment highlights the high reliance of businesses on foreign currency while local currency is mostly used in daily transactions. This dual currency economy bears high exchange rate risks usually categorised under the label of 'fear of floating' due to liability mismatches economic agents hold. In order to minimise these risks, controlling exchange rate appears to be an appropriate policy. However, pegging the exchange rate of a fast changing economy runs high risks of leading to costly misalignments. Therefore, while sharp changes of exchange rate need to be avoided, regimes like inflation targeting that allow exchange rate to adjust in line with its fundamentals, may strike a better balance between the above two sets risks.

However, there could be more. While for import-export companies a multi-currency balance sheet is common there are many other businesses and contracts taking place in foreign currencies simply due to speculative reasons, e.g. interest rate differentials. It is this type of transaction that should be avoided and restricted to minimise the risks of euroisation. Measures to reduce the speculative part of 'euroisation' may not be that different from measures to reduce cash economy. Here one could mention the enforcement of transactions in domestic currency especially of durable goods and long term contracts and of loans.

As EU integration of Balkan countries is approaching they will eventually face the decision of entering EMU. We have argued that an early adoption of Euro after joining EU for a highly euroised country like Albania could be beneficiary to anchor inflation expectation and eliminate exchange rate risks without sacrificing much of the available flexibility. In this regard, the regular path of adopting Euro through the Maastricht convergence criteria could be a lengthy and unnecessarily complicated process. Maintaining a stable exchange rate around a 'central parity' for a developing country could be a trivial exercise for at least two reasons. In an economy where most of the decisions are made in Euros, exchange rate may not necessarily be a reflection of fundamentals. Besides, exchange rate especially during ERM2 commitment could be subject to speculative attacks that weaken exchange rate links with fundamental further.

Concerning EU officials' worries that a premature joining of EMU could jeopardize the stability of Euro-Area, we have looked at some of the preconditions that OCA theories put forth for a successful merging such as, inflation differentials, business cycles synchronicity, fiscal policy, etc.. Our analysis of these elements, shows that Albania is characterised by flexible markets with a high degree of integration with those of the European Union meeting some of the criteria of OCA theories.

Regardless of which theory the analysis is based on for a small country like Albania the alternative of an early euroisation seems to be an appealing solution. *De jure* unilateral euroisation is always an option but it could be both technically and politically a complex issue. Therefore a 'consensual' euroisation that trades off some of the rights of joining EMU for more flexible convergence criteria should enter the agenda of the EU and new accession countries meetings.

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## **Appendix A - Survey of firms (Business Confidence Index)**

1. What is the sector of the economy in which you operate?
  - 1) Manufacturing
  - 2) Construction
  - 3) Services
  
2. Approximately, how much of your activity is carried out in foreign currency (in percent of total operations)?
  - a) revenues
  - b) expenses
  - c) assets
  - d) capital
  - e) liabilities
  
3. For the activities that you carry out in foreign currency, what currency do you use mainly (percent of total use of foreign currency)?
  - a) Euro
  - b) USD
  - c) Others
  
4. Please rank from 1 to 5, according to importance, what are the reasons for using foreign currency.
  - a) The specific activity (import/export)
  - b) Minimisation of exchange rate risk
  - c) Transaction/Procedural costs are lower if carried out in foreign currency
  - d) Interest rate differentials
  - e) Others, specify
  
5. What has been the tendency of your use of the foreign currency since your business started operations?
  - a) Increasing
  - b) Decreasing
  - c) The same
  
6. What do you expect the tendency of your use of the foreign currency to be in the future?
  - a) Increasing
  - b) Decreasing
  - c) The same
  
7. If you request credit from a bank you would prefer to have it:
  - 1) In foreign currency
  - 2) In Lek?

8. Please rank from 1 to 5, according to importance, what does your preference for foreign currency depend on?
  - a) Interest rates
  - b) The type of business
  - c) Exchange rate risk
  - d) Facilities and profitability
  - e) Other
  
9. Would the adoption of the euro as the legal tender in Albania help your business? Please explain your answer.
  - a) Yes
  - b) No

## Appendix B - Survey of individuals (Individuals' Confidence Index)

1. What is the percentage of the following expenses in your annual budget and which currency do you use for transactions?

		Lek	Foreing Currency
a) food	_____ %	<input type="checkbox"/>	<input type="checkbox"/>
b) utilities (electricity, water)	_____ %	<input type="checkbox"/>	<input type="checkbox"/>
c) clothes	_____ %	<input type="checkbox"/>	<input type="checkbox"/>
d) transportation	_____ %	<input type="checkbox"/>	<input type="checkbox"/>
e) services/holidays	_____ %	<input type="checkbox"/>	<input type="checkbox"/>
f) home	_____ %	<input type="checkbox"/>	<input type="checkbox"/>
g) other	_____ %	<input type="checkbox"/>	<input type="checkbox"/>

2. How do you think this percentage will change in the future (next 3 years)

	Up	Down	Unchanged
a) food	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) utilities (electricity, water)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) clothes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) transportation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) services/holidays	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) home	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3. Which interest rates are the most important to you, ranked from 1 to 5?

- Bank deposits in Lek
- Bank deposits in foreign currency (EUR/USD)
- Government securities
- Bank loans in Lek
- Bank loans in foreign currency
- Other \_\_\_\_\_

4. How do you hold your savings? Please indicate current percentages.

- Cash Lek \_\_\_\_\_ %
- Bank Deposits Lek \_\_\_\_\_ %
- Foreign currency cash \_\_\_\_\_ %
- Bank deposits in foreign currency \_\_\_\_\_ %
- Government securities \_\_\_\_\_ %
- Other \_\_\_\_\_ %

5. What is the ratio Lek/foreign currency of your current wealth?

6. How do you think this ratio will change in the future?

- Increase
- Decrease
- Will not change