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Stabilization, monetary policy and financial institutions in Albania

The wiiw Balkan Observatory

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This study has been developed in the framework of research networks initiated and monitored by wiiw under the premises of the GDN–SEE partnership.

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GLOBAL DEVELOPMENT NETWORK SOUTHEAST EUROPE (GDN-SEE)

Project:

Long term development in South East European countries

"Stabilization, monetary policy and financial institutions in Albania"

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1. Introduction

The performance of the Albanian economy during the last ten years has been something of a puzzle for macroeconomists. With the notable exception of 1997, Albania has enjoyed high annual growth rates and low inflation since 1994. This combination has been achieved in an environment where financial sector development is still at a very early stage and informal markets are flourishing. This paper attempts to explain this puzzle, and to assess whether high growth and low inflation are sustainable over the medium term. The paper also charts the way ahead for monetary policy in Albania, and in particular assesses whether a move to inflation targeting is either feasible or desirable.

It is by now well-established in the literature on transition economies that three broad factors – initial conditions, structural reforms and stabilization programmes – all play an important role in determining economic performance.[2] Section 2 of the paper assesses the contribution of each factor in the case of Albania. The legacy of extreme Stalinism for 45 years left Albania with very difficult initial conditions, and progress in structural reforms has been patchy at best, thereby putting a great weight on stabilization programmes. The section discusses in detail the performance of the economy in the context of two major stabilization programmes[3].

Section 3 examines monetary policy and the transmission mechanism to the real economy. Four channels are identified by which changes in nominal variables can affect the real economy: interest rates; exchange rates; credit rationing; and inflation expectations. We argue that none of these channels is likely to be an effective tool for monetary control in Albania. The reason is that financial institutions are at an early stage of development and cannot yet carry out the functions that operate in advanced western economies. Most transactions are still carried out in cash. Enterprises rely on own resources rather than banks for credit (Muço and Sanfey, 2000). The free-market for foreign exchange is flourishing. The stock market deals in Treasury bills only. For all of these reasons, any attempt to identify a clear transmission mechanism in Albania is likely to be fraught with difficulties.

Section 4 delves further into these issues by looking at the empirical evidence. An examination of trends in the key variables, based on both monthly and quarterly data, shows 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. This section also explores some of these issues using econometric techniques. A vector autoregression model (VAR) shows the interaction effects between the changes in money supply and inflation. Some evidence of two-way

[2] See, for example, Berg et al. (1999), de Melo et al. (1998) and Falcetti et al. (2000).

[3] Albania closed successfully the second Enhanced Structural Adjustment Facility (ESAF) programme, re-named in 1999 as a Poverty Reduction and Growth Facility (PRGF), during the first quarter of 2001. A new PRGF programme is expected to be signed in early-2002.

causality is present, but in general, the results confirm that the link between money supply and inflation is weak, and the level of inflation is largely a function of other variables.

Section 5 explores the merits of moving the central plank of monetary policy in Albania to inflation targeting. We argue that such a move could help promote the transparency and credibility of monetary policy, in an environment where financial institutions are becoming more sophisticated. Nevertheless, there are considerable obstacles to the smooth introduction of this policy, not least the lack of reliable statistics and information on current indicators.

Section 6 discusses some issues that will affect Albania' macroeconomic performance over the medium term, and section 7 concludes the paper.

2. Initial conditions, stabilization programmes and structural reforms

2.1 Initial conditions

Albania entered the 1990s with an economy deeply rooted in Stalinist economic practice. For 45 years, state ownership dominated, and private property was prohibited in all but a few cases. During Communist rule, Albania became a rigorously centralized economy; central planning replaced virtually all market mechanisms. Within the framework of five-year plans, all economic decisions on production, pricing, wage setting, investment and external trade were centralized. Changes in the plans from one five-year period to the next were minimal. Another principle of the Albanian economic "model" was the idealization of national self-reliance as a main orientation of economic policy. Extreme diversification of production was combined with poor technological performance and a weak traditional industrial development background, leading to gross inefficiency throughout the economy.

As in other East European countries, Albania's economic structure was strongly oriented towards industrialization. Starting from a low base, the share of the industrial sector in 1990 accounted for approximately 45% of net material product (NMP)[4] and provided employment for about 23% of the working population. Industrial production absorbed 42% of gross investment. The development of the sector was greatly hampered by concentration and centralization of production and by significant mismanagement. The internal industrial market was ruled by the monopolistic behavior of large, overstaffed plants, or *kombinats*. A similar situation existed in agriculture, long the most important sector of Albanian economic development. Albania's comparative advantage in agricultural production is due to its traditional heritage and cheap labour force. This sector accounted for roughly 33% of NMP and employed nearly 50% of the total working population. Construction, transportation, tourism and other services were relatively underdeveloped, and problems that had built up in these sectors erupted in the early 1990s.

[4] Data on the pre-reform period are from the *Statistical Yearbook of Albania* (INSTAT, 1991).

Prior to transition, economic policies were formulated according to the principles of quantitative centralized planning. Fiscal policy was used to mobilize resources from the state and cooperative sectors in order to maintain the planned level of investment, planned wage bills, social security system, and enterprise and price subsidies. This redistribution through the authority of the state budget was geared toward achieving the quantitative plan. Monetary policy was passive, used merely for administering monetary resources and mostly reallocating them according to requirements confined to the plan. Interest rate policy played no important role, and rates remained mostly unchanged. The exchange rate was fixed and set officially.

Albania therefore began market economic reforms from an extremely centralized economic system. As elsewhere in Eastern Europe, a significant decline in production characterized the initial phase of transition. As a result, the country's macroeconomic situation worsened (see Table 1). Output declined by more than 50% from the end of 1990 to mid-1992.[5] External debt became dangerously large at 30% of GDP. Furthermore, foreign exchange reserves were almost completely exhausted. The budget deficit reached 44% of GDP by the end of 1991 and widened to more than 50% in the first half of 1992. Monetary expansion was found to be an easy way to finance the subsequent large budget deficit, and the money supply in circulation doubled. At the beginning of 1992, broad money reached a record 69% of GDP, while pressure for wage increases intensified. At the end of 1991, inflation rose to three-digit levels with a 104.1% change from the previous year, and by early 1992, monthly inflation was 10%-15%.

<Insert Table 1 about here>

Although the starting point was a difficult one for Albania, this is true for almost all transition economies. In fact, a formal analysis of initial conditions across countries demonstrates that a number of transition countries, especially among the former Soviet Union, had even worse starting points. An index of initial conditions constructed by the EBRD (see EBRD, 2000), based on factors that include trade dependence on the CMEA, macroeconomic disequilibria, distance from the EU, natural resource endowments, market memory and state capacity, puts Albania's starting point on a comparable level to some of the larger central and eastern European countries such as Bulgaria, Poland and Romania. However, a measure like this is rather crude and mechanical and does not capture the peculiar intensity of Albania's isolation and extreme Stalinism. If these non-measurable indicators could be quantified, it would be clear that Albania had the worst initial conditions of any European country in transition.

2.2 Stabilization measures

Given the difficult initial conditions described above, Albania faced huge challenges in its stabilization efforts. During the last 10 years of transition, these efforts have been

[5] Data on the macroeconomic situation from 1990 to 1992 are taken from "Albania," *IMF Economic Review* 5 (1994).

supported by two three-year IMF programmes[6], the second of which closed in 2001 already transformed from an ESAF to a PRGF programme. Each one had its own characteristics although in general their goals were similar: low inflation and stable prices, sustainable growth and lower budget deficits, improvement in the external position, and financial sector reform.

The first stabilisation measures in Albania began with a one-year reform programme from mid-1992 to mid-1993 that introduced fiscal and monetary control combined with a comprehensive price and exchange system. The programme was generously supported by international financial and technical sources, including a stand-by arrangement with the IMF. Initial efforts were mostly aimed at stabilizing the deep macroeconomic imbalances described above, and had a strong "monetarist" flavour. The reduction of inflation to below 20 per cent was a key objective. Money growth was designed to be the principal nominal anchor of the programme, supported by a fiscal policy that had as a central objective the elimination of monetary deficit financing by the end of the programme period. In addition, incomes policy remained an important second anchor, giving a heterodox character to the followed strategy.

The first Enhanced Structural Adjustment Facility (ESAF) programme of the IMF was introduced in July 1993. This programme tried to initiate market economy reform by stabilizing the economy, liberalizing prices and trade, and privatizing and restructuring state properties. Macroeconomic stabilization was the first step. The primary goals included: decreasing the budget deficit and applying a hard budget constraint; reducing and monitoring inflation through strict control of money growth and tight credit policy; maintaining a restrictive income policy; reducing the foreign debt; introducing a floating exchange regime and maintaining domestic convertibility of the lek; creating a two-tier banking system and a system of non-bank institutions; and initiating a legal framework to establish a market economy.

Under this programme, monetary policy was based on direct instruments of monetary control. This decision was dictated by the poor state of the banking system, the external debt situation and the need to finance the large budget deficit. It is only recently that the consolidation of the banking system has allowed indirect instruments of monetary control, including the establishment of required reserves, a refinancing window and a liquidity requirement, to replace direct instruments. New private banks have played a key role in encouraging the use of indirect instruments of monetary control and inter-bank competition. At the beginning of 1996 some licenses on private banking activity were issued to several foreign banks, paving the way for a real market in that field.

The control of interest rates was an important plank of Albanian stabilization policy during the transition. Real interest rates turned positive in the first quarter of 1993 (see charts 1 and 2) when inflation declined but they remained under central bank control until the banking system began consolidating and monetary policy moved gradually

[6] Both programmes are reflected in a wide range of documents that can be found on the web site of the IMF.

towards the use of indirect instruments[7]. Along with the strengthening of the money and securities market (see below) interest rate policy gradually became more liberal and began to have some influence over medium- and long-term investment policy.

Chart 1: 12 Months Deposit Interest Rate

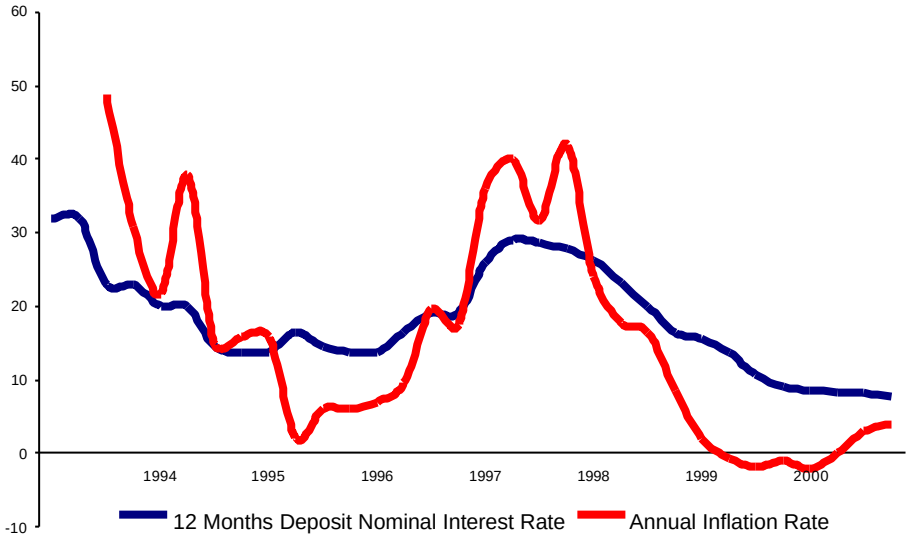
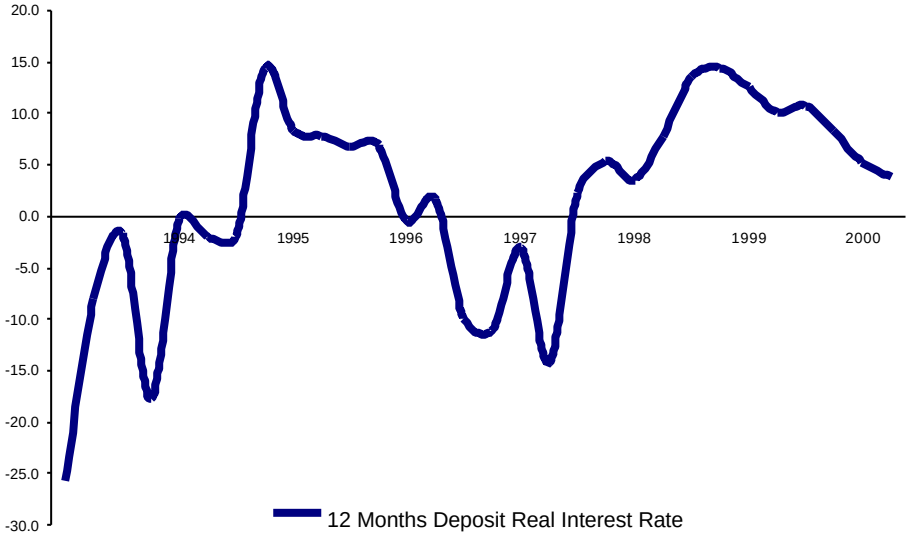


Chart 2: 12 Months Deposit Real Interest Rate



Another key component of monetary policy was the introduction in 1992 of a flexible exchange rate policy. Under this regime, the exchange rate is allowed to float

[7] The Bank of Albania started to eliminate direct control over interest rates at the beginning of 2000. Within a year the three controlled interest rates on 3 months, 6 month and 12 months deposits have been removed and replaced with indirect instruments of monetary policy.

freely, with occasional intervention to prevent large fluctuations. The main reason for implementing a flexible regime was the lack of foreign exchange reserves. After substantial, though gradual, depreciation in 1991-1992 the exchange rate remained relatively stable with an appreciation at the end 1993, mid-1994 and a slight change in the first months of 1995. By the end of 1995 and during the first months of 1996 a slight depreciation of domestic currency occurred. Central bank interventions had a significant influence on the operation of the market, particularly in the parallel market. The 1997 crisis in Albania and the collapse of pyramid schemes influenced another wave of depreciation, after which it returned within several months to normal values.

One of the most important targets of the stabilization programme in Albania was the reduction of the fiscal deficit and the gradual alignment of revenues and expenditures in the budget. The dramatic worsening of the fiscal position in 1991, when the cash deficit reached 44 per cent of the GDP (see Table 1), was the result of the sharp decline in output, increases in wages and social protection, soft budget constraint on firms and the weakness of financial discipline. During the first half of 1992 this large deficit was financed totally by the domestic banking system. Only by the end of 1992, after the short-term programme began applying austerity measures, did signs of improvement appear. In 1993 the deficit decreased again, reaching around 16 per cent of GDP while in 1994 it became 8 per cent of GDP, and 7 per cent in 1995. The new tax system, introduced gradually from 1991 to 1993, started to show its first results. The elimination of enterprise subsidies had also a positive impact on stabilization efforts. The improving trend was reversed in 1996 as a result of increased political tension and rising expenditure in advance of elections.

Stabilizing inflation was assisted by the improvement of the Net Foreign Assets of the Bank of Albania. In 1994 they reached 12.7 weeks of imports, the highest level from the beginning of the economic reform. In 1995 this figure showed a further improvement. The main factor that determined the raise of Net Foreign Assets has been the credits delivered by bilateral and multilateral creditors. The interest payments for the inherited external debt had an influence in moderating the growth of foreign assets. In August 1995 this problem was solved when the European Commercial Banks accepted the payment of only 20 per cent of the old total foreign debt of Albania, opening the possibility for more financial credibility of the country in international capital markets.

2.3 Structural reforms: a follow up of the second stabilization programme

In common with many other transition economies, Albania made rapid progress in the initial transition challenges of price and trade liberalization. Following some early changes in 1990 for fruit and vegetable prices, the first major liberalization of prices for goods was implemented in Albania in the last quarter of 1991. A number of adjustments of official wholesale prices were introduced as the share of price subsidies in the budget increased. The official monthly price index (CPI) for 1991 is an approximate estimation from the Institute of Statistics while a more reliable one was constructed in 1992 reflecting the price levels mostly in the black markets where the main prices for goods moved up very quickly. As a result the CPI increased more than 100 per cent during 1991 and 200 per cent in the first half of 1992 (see Table 1). Food shortages became even more common, and made the country more dependent on food and humanitarian aid.

In August 1992, as a first step of the short-term emergency programme, the government liberalized nearly 75 per cent of prices, simultaneously with the establishment of tight policies for domestic credit. In a two-year period, most of the few prices that still remained under control and continued to be subsidized were moved quickly close to cost recovery levels. This process continued for a very small number of items as bread and energy, as well as in services or the so-called non-tradable goods. Total price subsidies in 1993 dropped to 2.2 per cent of GDP from 3.6 per cent in 1992 and by 1995 represented an insignificant figure.

The process of liberalization extended also to the external sector and foreign trade, creating the conditions for the integration of the Albanian economy into the wider world. As noted above, the liberalization programme that started at mid-1992 legalized a floating exchange rate with an active market outside the banks and continued to deepen trade reform. Import and export licenses were abolished with the exception of the export of some food products. The traditional state monopoly on foreign trade was totally removed. No quantitative restrictions on imports existed while export licenses were eliminated together with all kinds of export taxes since 1994. In 2000 Albania become a member of the World Trade Organisation (WTO), thereby committing to further trade liberalization.

Albania's foreign trade policy is firmly oriented towards close cooperation and integration with the EU. To date, the main investors in Albania are the European Union neighbour countries at around 80 per cent of the whole trade. In terms of foreign investment, Italy and Greece together cover about 70 per cent of the companies that had invested in Albania so far. Italy is clearly the main economic investor in Albania during the transition.

Small-scale privatisation also proceeded rapidly in the early years of the first stabilization programme. The agricultural sector was almost fully privatised by the end of 1994, and was one of the first to respond to price signals, increasing the availability of food in the domestic market. The process of privatisation for SMEs was virtually complete by 1998, but large-scale privatisation has been much slower to take off and is only now gaining momentum (see Hashi and Xhillari, 1999).

The second three-year ESAF programme, signed with the IMF in May 1998, had a somewhat different approach to the first programme. In terms of monetary policy, certain policies were relaxed, although close monitoring of monetary control was maintained. In terms of fiscal policies this programme insisted more on the improvement of the income side and custom duties compared to the emphasis on expenditure reduction in the first programme.[8] In order to achieve greater social and public credibility, much more emphasis was put on institutional reforms. In early-2000 and in line with new IMF policy, the programme was re-named as a Poverty Reduction and Growth Facility (PRGF). The new emphasis gave even more flexibility to structural and institutional reforms. Financial sector reform was stressed, with the recent painful experience of the 1997 crisis in mind.

[8] Following the discussion and criticism of the IMF programmes for a detailed analysis of the nature of stabilization programmes of the IMF see Mussa and Savastano, 1999.

Financial sector reform has also proceeded slowly. Until 1995, a non-bank financial market in Albania did not exist. During 1995 a bond and Treasury bill market started to appear, and the government securities market start to contribute to the targets of both public debt policy and monetary policy. However this market remained embryonic for several years while the development and improvement of capital market is a clear goal for the near future. On May 1, 1996 for the first time in the history of Albania, the Tirana Stock Exchange was opened. The first major privatisation in the banking sector occurred in June 2000 when the National Commercial Bank was sold to foreign investors, and the largest bank, the Savings Bank, is now being prepared for privatisation in 2002.

The second programme ended successfully in the first quarter of 2001 paving the way for the next PRGF with deeper structural reforms and strong emphasis to strengthening further public administration and proceeding with privatization. According to the EBRD transition indicators (see Table 2) these are the areas where the country is furthest away from the standards of an advanced market economy.

Table 2: EBRD Transition Indicators, 2001

Small-scale privatisation	4
Price liberalisation	3
Trade and foreign exchange	4+
Large-scale privatisation	2+
Governance and enterprise restructuring	2
Competition policy	2-
Telecoms	3+
Electric power	2+
Railways	2
Roads	2
Water and waste water	1
Banking reform	2+
Securities markets	2-

Note: each transition indicator is measured on a scale of 1 to 4+, where 1 represents little or no progress, and 4+ represents the standards of an advanced industrialised economy.
Source: EBRD Transition Report 2001.

2.4 Summary: how successful were the reforms?

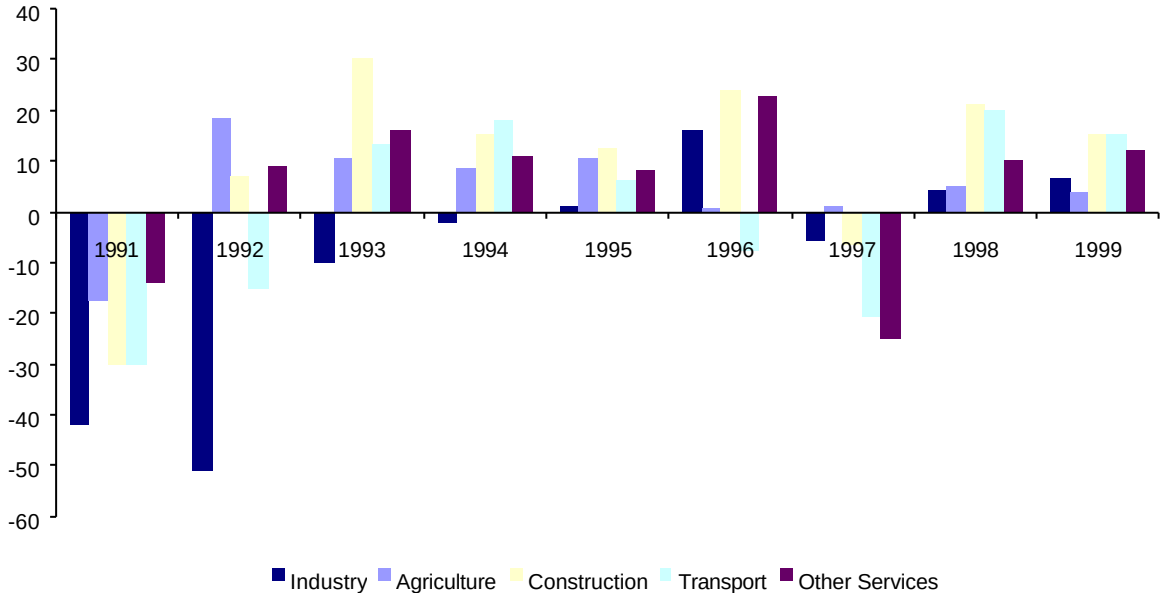
In terms of output and inflation, Albania has performed well relative to many other transition countries. There was a marked recovery in national production between 1993 and 1995. According to official statistics, GDP growth reached 11% in 1993, 7.4% in 1994 and 13.4% in 1995, although the latter figure is now regarded as over-estimated and was revised down later by the Bank of Albania. Inflation and the budget deficit were brought under control, following targets fixed by the medium-term stabilization programme. In 1993, the deficit decreased from 44% to around 16% of GDP, and in 1994, it dropped to 14% of GDP. Better performance was indicated in 1995, when the

deficit ended up at 8.7%. According to official data, the rapid fall of inflation in Albania, from 237% at the end of 1992 to 31% by the end of 1993, 16% at the end of 1994, and 6% at the end of 1995, indicated one of the best performances of Albanian economic reform.

During the first quarter of 1997, Albania entered a deep crisis. As a consequence of the collapse of several pyramid schemes and widespread popular unrest, the government had to resign. The political actions that followed brought the country to chaotic collapse, resulting in the presence of a multinational military force and new parliamentary elections in June 1997. The rest of 1997 indicated a recovery period after the crisis. Still, the year ended with a drop by -7% in GDP, 42% inflation, a budget deficit that accounted for -12.9% of GDP, and the highest deficit of the current account balance since 1991.

Following the introduction of the new ESAF programme and other international suport, GDP growth in 1998 reached 8% and inflation dropped to 8.7%. The budget deficit returned to the pre-crisis levels of -10.4% of GDP. However, unemployment increased at 17.5% and in 1999 reaches 18%. The budget deficit level continued to be high even during 2000 but slightly decreasing at around 9% of GDP, growth was persistently for the third consecutive year between 8 and 7 % while unemployment remained still high. Inflation, after minus levels in 1999 turned to be 4.2% in 2000.[9] A sectoral de-composition of GDP growth indicates the important role played by the agriculture and construction sectors (see Chart 3).

Chart 3:Sectoral Growth Rates (% change over the previous period)



Political instability during 1998 and the change of governments in 1999 did not lead to a reversal in macroeconomic performance. Difficulties caused by Kosovo refugees and

[9] All data throughout the paper are based on the Bank of Albania reports and publications, otherwise indicated.

damages from the war made 1999 a unique year, but problems were overcome with international help and the extraordinary hospitality demonstrated by the Albanian people during the Kosovo crisis. The year could be considered successful for Albanian macroeconomic indicators, including a GDP growth rate at 7.3 per cent and inflation rate close to zero. The exchange rate market remained relatively stable, with a small appreciation in domestic currency.

What happened after the second IMF program finished successfully and the new PRGF is about to be put in place? Available indicators of economic activity emphasize the same strong growth of the economic activity, consistent with a projection of GDP growth of 7.3 percent in 2001. Growth in exports and imports has been exceptionally strong during 2001, while the unemployment rate has fallen to its lowest level in four years, at less then 16 percent. The exchange rate has remained almost stable since end-2000 despite the parliamentary elections that took place in the middle of the year while the foreign reserve position is equally strong. The overall budged deficit in 2000 was 9.1 percent and the end of 2001 shows signals of being on track. The main concern still remains the electricity situation and the management of the energy crisis that the country has been experiencing for almost 10 years. The authorities have introduced a slight increase in electric energy prices but have not fully liberalized the sector. Electricity prices are still heavily subsidised.

The BoA has followed a moderate and flexible monetary policy with the aim of ensuring low inflation. In agreement with the IMF under the PRGF framework, the BoA hopes to keep an inflation target on a band of 2-4 percent. Still a ceiling on net domestic assets (NDA) and a floor on net international reserves (NIR) are maintained under the same framework.

Structural and institutional reform, however, did not progress much over the period. Large-scale privatization was proceeding slowly, and public and private governance were still weak. Implementation of the rule of law and the restoration of public order remain problematic. Despite its commitment to fight corruption and illegal activities, they are still present features of Albanian economic life. Current account figures also show weakness. The economy remained vulnerable to shocks (Muço 2001), external and internal markets are not well developed, a high degree of dependency on imports is present and exports are quite low. Meantime the energy sector still is in the middle of a deep crisis and in urgent need for further reform in privatization, management and new development strategies.

In addition, the process of institutionalization of the social life has proceeded rather slowly. Market institutions, especially in the financial sector, were very weak and slow to develop. The apparent macroeconomic successes in Albania were not seriously accompanied by a deep institutional reform. Institutional change implied a new constitution, political institutions of the country and the basic rules governing society.[10]

[10] See Roland (1994). In Albania the new constitution was introduced in 1998 but political institutions still suffer controversy, lack of democratic practices and amateurism in political decision-making. For a

Institutional change also implied the setting up of a new tax system, central bank, market regulation, and so on. Lacking the tradition of a market economy and a developed democracy, the case of Albania showed how important it is to realize significant institutional changes right at the beginning of the transition process. The level of implementation has improved in recent years (for example, in the area of tax law) but still needs more efforts.

The main conclusion drown by an overview of stabilization efforts is that the rapid introduction of a strong, sustained stabilization programme did not hurt Albania.[11] In terms of merely macro stabilization measures the success story continues despite the deep structural imbalances and unprecedented restructuring of the economy (Muço, 1998). However, one lesson that has emerged strongly across the region from the first decade of transition is that long-term growth is sustainable only if appropriate monetary and fiscal policies are accompanied by deeper structural and institutional reforms.[12] Stabilization programmes have a limited timetable, and the same measures that bring initial success in reducing inflation and macroeconomic imbalances can become contractionary in the medium and long run, especially on the supply side. In the immediate post-stabilization era, a strengthening of the financial system is one of the most urgent requirements.

3. Monetary policy and the transmission mechanism

One of the oldest issues in macroeconomics concerns the interaction between nominal and real variables. Put simply, the question is: how should monetary policy be used to help bring about sustainable growth and prosperity and low inflation? An understanding of the transmission mechanism is essential for policy-makers in all countries. However, lessons from advanced western economies may have little relevance to countries like Albania, where financial institutions are under-developed and informal markets for credit and foreign exchange flourish.

The BoA has pursued and fulfilled some performance criteria set in the ESAF programmes and later in the PRGF to reach the goal of a low inflation. But alternatively it has also used the interest rates as an intermediate target to achieve its inflation goal. During the first phase, almost during all two stabilization programmes the BoA used direct instruments to control interest rates. Given the limited role of credit in the transmission process, the BoA targeted deposit rates. The main direct instruments were ceilings on deposit rates offered by the state-owned banks. This strategy turned out not to be successful, especially when the Savings Bank remained the only state-owned one operating in the market and her monopoly position became clear.

This was among others one of the reasons why in 2000 the BoA switched to indirect instruments of monetary policy. Minimum rates on six-month deposits were

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background study on the political and institutional constraints to the economic reform see Muço,(1997) http://www.nato.int/acad/fellow/95-97/

[11] See Bruno and Easterly (1995) and World Bank (1996) for similar evidence from other transition economies.

[12] See EBRD (1999).

abolished in May 2000, soon followed by the end of minimum rates on 12-month deposits in July 2000. The removal of the minimum interest rate in three-month deposits in September 2000 completed the phased elimination of direct monetary policy instruments.

In July 2000, the BoA adopted multiple-price one-week repos of T-bills. The first rate set by the BoA was a maximum rate of 9 percent at that time in each auction. To determine market demand for this facility it BoA start using the information on bid rates. Later during the beginning of 2001 when the interest rates on repos were stabilized BoA start planning to offer fixed-rate repo transactions of T-bills and implemented it at the end of April 2001.

Following the extensive literature on transmission mechanisms, there are several channels through which the monetary policy would influence the economy[13]. Chart 4 gives a schematic representation of these channels. The chart is not meant to be exhaustive but it highlights four mechanisms that are of particular relevance for the Albanian experience.

The first traditional channel is through interest rates. This route, familiar from standard textbook IS/LM models, is considered as the *money view* of transmission mechanism and it is elaborated both by theoretical models (see for example Meltzer, 1995) and by central bank practice. What is strongly emphasized by theory is the real rather than the nominal interest rate which affects consumer and investor behaviour. Taylor (1995) has been one of the proponents of the idea that the interest rate channel is a strong monetary transmission mechanism. In the case of Albania this has been the main channel used by the monetary policy, although through direct control instruments from 1992 to 2000.

The second channel we consider is through the exchange rate. The main effect is exercised through exchange rate effect on net exports. Changes in the exchange rate can also affect the attractiveness of deposits in domestic currency and hence the flow of private transfers into the country. The channel is already taken in consideration in the monetary projections of the Bank of Albania (BoA) but little specific studies has been made (Kunst and Luniku 1998, Kalra 1998) to closely monitor the correlation between monetary policy decisions and export/import reaction through exchange rate response. However the behaviour of the exchange rate is actively monitored and occasionally the BoA intervenes in order to help maintain a certain level of imports or to make export prices attractive and to avoid any speculative attack coming through the informal market[14].

A third channel for monetary transmission is the *credit view* which considers financial phenomena that most probably play a role in the transmission of monetary

[13] For a detailed and excellent explanation on understanding transmission mechanism see the papers of the 1995 Symposium on the Monetary Transmission Mechanism in *Journal of Economic Perspectives*, Vol. 9, Number 4-Fall 1995.

[14] Econometric evidence in Muço, Papapanagos and Sanfey (1999) suggests that movements in the free-market tend to cause movements in the official rate, rather than vice versa.

policy, such as financial intermediation and credit rationing (Bernanke and Gertler, 1995). One of these credit channels is the bank-lending channel, which is based on the importance of the banks in solving asymmetric information in credit markets. Any expansionary policy that increases bank reserves and deposits create more room for expanding loans, hence affecting investment and output. A relatively long lasting contractionary policy could make this channel insignificant or a barrier to output growth.

Furthermore it is strongly argued (Mishkin 1996) that even financial crises could be the result of a contractionary monetary policy through 5 factors: 1) increase in interest rates, 2) stock market declines, 3) an unanticipated decline in the price level, 4) increases in uncertainty, and 5) bank panic. This description, which reflects the severe asymmetric information problems elaborated theoretically by Mishkin and Bernanke, has a clear example at the Albanian financial crisis of 1997. Most clearly factors 1, 4, and 5 were present and accompanied at a different extent and interacted with other specific country factors to cause the big financial crash of spring 1997 in the country[15].

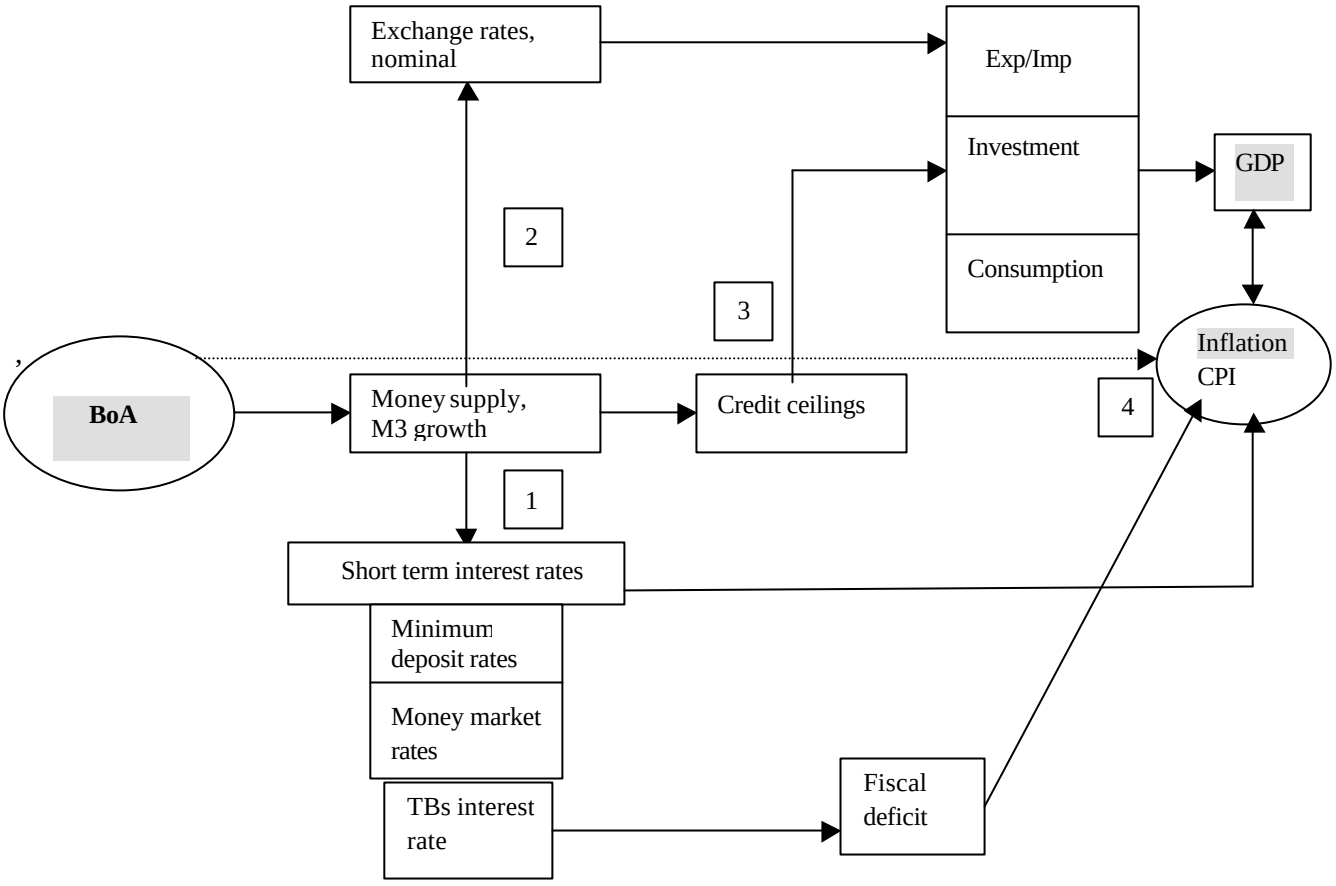
The final channel worth exploring is the role of inflation expectations. This is expected to be a very important channel through which the central bank could affect aggregate demand, spending and investment. Inflation forecasting allows the central bank to preannounce the price fluctuation level to the public affecting their expectations and therefore adjusting the demand behavior. Inflation forecast techniques are still very weak at the Bank of Albania and the statistical database that supports such an effort is missing. However, besides the improvement that are foreseen at the framework of a plausible inflation targeting strategy application, BoA has announced to the public at the first quarter of the year starting from 1998, a clear quantitative inflation target mostly in a band. This has been part of increasing the transparency of the monetary policy stance but also has helped to direct the inflationary expectations of the public.

The list of channels above is not meant to be exhaustive, and others may become more relevant in the future. For example, equity price channels, including wealth effects on consumption are unlikely to apply at present in the case of a transition economy like Albania. In this case when the equity market is non existent and the alternative forms of investment for individuals and businesses are very limited, this channel has limited relevance for our discussion. However a growing phenomenon that remains a future possible channel to be studied and understood is the role of housing and land prices. These factors are becoming increasingly important in the Albanian economy, which has experienced a boom in the construction industries during last three years. Unfortunately most of it is operating through unofficial banking channels and very little is known on how to affect this important sector of economy through monetary policy. There is anecdotal evidence that these sectors are growing based on informal lending or quite unofficial pre-paid demand by individuals.

[15] For a detailed explanation of pyramid scheme financial crisis in Albania see Jarvis, 1999 and Muço 1998.

Chart 4: Albanian Monetary Policy Transmission Mechanism, 1992-2000

1- Interest rates channel-*money view*
2- Exchange rate channel
3- Bank lending channel-*credit view*
4- Inflation expectations channel



4. Data and econometric results

4.1 Statistical correlations

An examination of some basic correlations among nominal and real variables can reveal some useful insights. Charts 5a-5c show the co-movement between changes in money supply (M1), inflation, and the level of the exchange rate. It is clear that there is 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 my 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. This is unsurprising in a relatively open economy like Albania where foreign currency circulates widely, both because of high inflow of remittances from Albanian working abroad and from smuggling and contraband. 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 do.

Charts 6a-6c explore the co-movement of changes in real GDP with measures of electricity and fuel consumption and also with cement consumption. It is inherently difficult to find a quarterly indicator of activity in the real economy that might act as a proxy for GDP growth (which is only estimated annually). An examination of the co-movements between different measures of economic activity and GDP indicates that there is a loose association between both cement production and electricity consumption and GDP, but virtually no correlation between fuel consumption and output.

Chart 5a: Annual Change of M1 in %

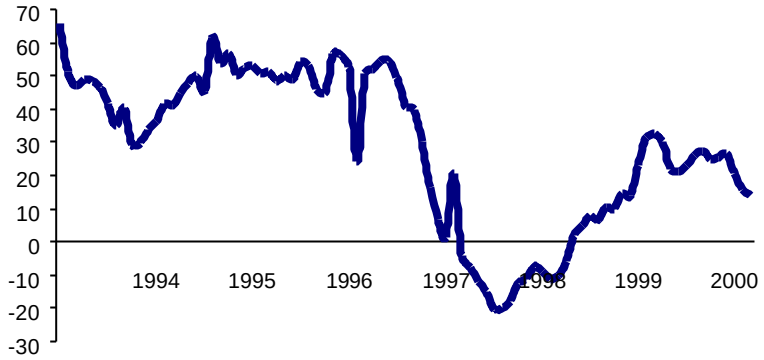


Chart 5b: Annual Inflation

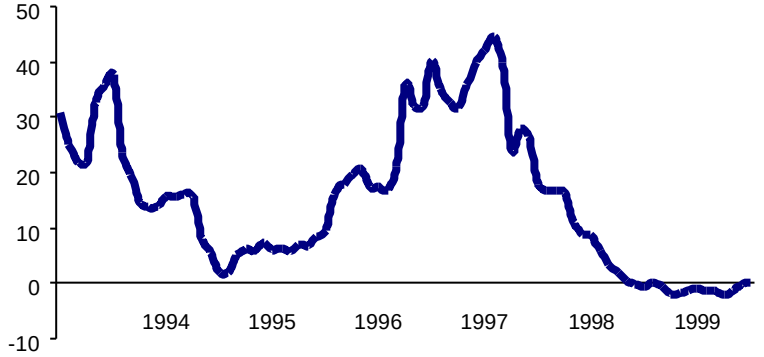


Chart 5c: Lek/USD Exchange Rate

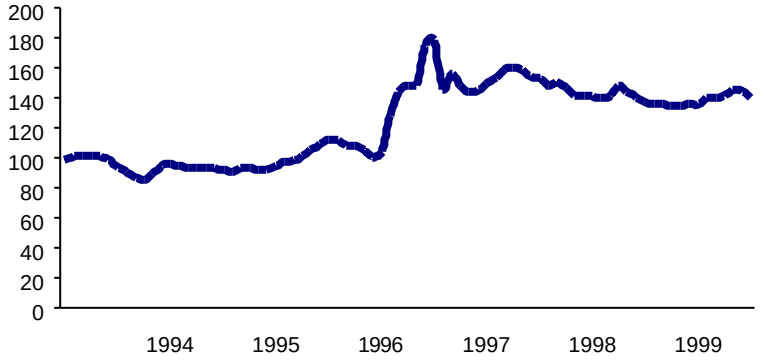


Chart 6a: Annual Change of Electricity Consumption (and real GDP)

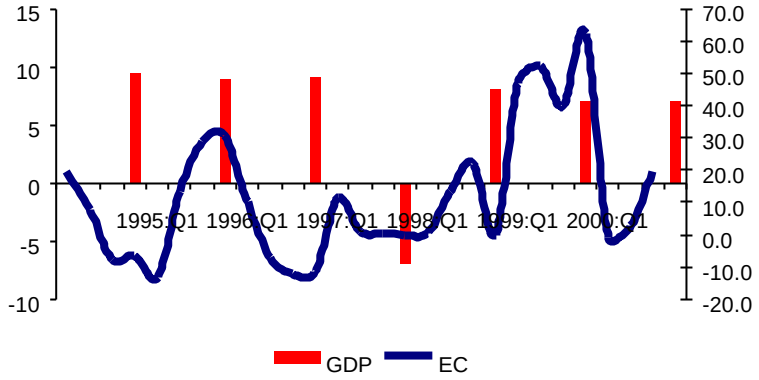


Chart 6b: Annual Change of Fuel Consumption

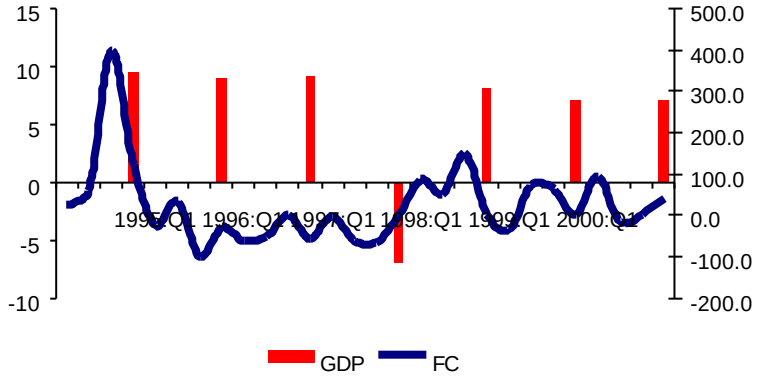
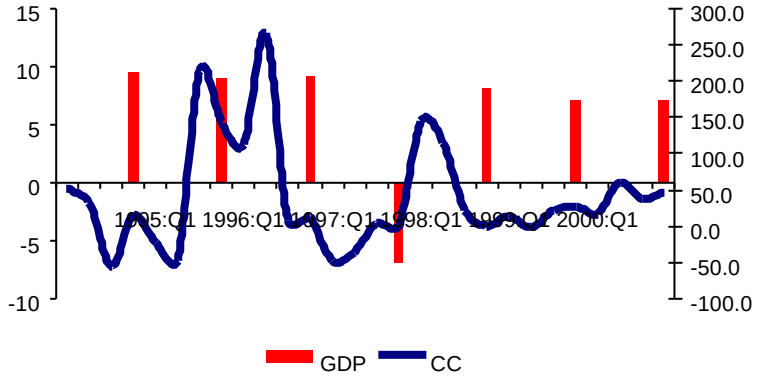


Chart 6c: Annual Change of Cement Consumption (and real GDP)



4.2 Econometric investigation

In this section we explore some links between the monetary policy implemented by the BoA and the Albanian real economy. For this purpose we will start by building up the reaction function of BoA to explain how the monetary authorities react to changes in the

economy. We will also try to see the extent to which the real economy is affected by monetary policy.

Since mid-1995, the BoA has set an M3 target in which the government's deficit is taken as given, and attempts to control the actual growth of M3 via a combination of a credit ceiling on commercial loans and adjustments of bank deposit interest rates. As far as the interest rate policy is concerned, the BoA aimed to keep administered interest rates positive in real terms in order to avoid movement out of domestic monetary assets and to prevent disintermediation. The year 2001 was the first year when interest rates on deposits were released and the monetary policy should follow open market operations and indirect instruments to reach the monetary targets.

The lending channel, through reserve requirements and credit ceilings is very difficult to be econometrically tested because first the reserve requirements has never been met, and second, there have been no periods of high credit so that we can see whether there is any correlation with output. Moreover the credit ceiling of BoA especially on state owned banks has been more decided upon credit performance rather than upon monetary policy objectives which makes the testing of the effects of this restrictive policy a little bit more complicated.

Since the transmission mechanism may not be very clear, we use an approach, which seeks to determine how instruments of monetary policy react to aggregate economic information (presumably with lags) as well as political factors. As we saw above BoA uses interest rates and money growth as instruments of monetary policy over which it exerts control we should expect that its reaction functions should look like:

$$\Delta M_t = a(L)[p_{t-1} - p^f_{t-1}] + b(L)[y_{t-1} - y^f_{t-1}] + \chi(L)POLDUM_t + d(L)\Delta M_t^w + u_t$$
$$\Delta R_t = a(L)[p_{t-1} - p^f_{t-1}] + b(L)[y_{t-1} - y^f_{t-1}] + \chi(L)POLDUM_t + d(L)\Delta R_t^w + u_t$$

Where:
- ΔM: annual change of broad money M3
- ΔR : 12 month deposits interest rate quarterly change
- L: lags
- $p_{t-1} - p^f_{t-1}$: unexpected annual inflation
- $y_{t-1} - y^f_{t-1}$: unpredicted output
- POLDUM: political dummy

The unexpected inflation (the first right-hand-side term) is generated as the difference of the actual inflation with predicted inflation. Predicted inflation in turn is calculated using a VAR approach with 12 lags of inflation and M3 annual growth. The unpredicted output is more difficult to calculate for several problems. First, we are forced to use approximate measures for the real economy because of lack of quarterly output data. In Albania GDP is measured only in annual basis also using approximation methods. Thus in our empirical work we use the change of cement consumption as approximation of changes in output. Although it captures only the construction sector of economy the growth of this sector have similar patterns with the growth of total GDP. Predicted values for the output are even more difficult to find and very unreliable so for

simplicity we will use the quarterly change of cement consumption as an approximation of the change of economic conditions. However, it should be mentioned that data availability rather than any theoretical or empirical framework dictates these choices.

We also have included a political dummy variable, which takes values of 1 around major political changes e.g. general election, and 0 otherwise. In Albania political changes have often been associated with uncertainties, which have translated into high inflationary expectations. Assuming that BOA is independent to pursue its goals we should expect that it also reacts in front of political uncertainties by restricting its monetary policy i.e. reducing M3 growth or rising interest rates.

We have not considered any reaction function involving the exchange rate as far as the exchange rate is floating. Although there are occasional interventions by BOA in the foreign exchange market those are more concerned smoothing short run inflationary bubbles. BOA still does not have enough foreign reserves to use exchange rate as an efficient monetary policy channel in long run.

The reaction functions are estimated using quarterly data from 1993 to 2000. The data are obtained from BOA and Albanian Institute of Statistic.

If we concentrate on the results of the first reaction function (Tables 1.1 – 1.3 in the Annex) we can observe that BoA reacts by reducing the M3 growth rate six months after an unexpected rise in inflation takes place. BoA seems not to respond to any real sector changes, although it is important to mention that these results should be interpreted with caution considering the small number of observation available and the approximate indicators for the real economy.

BoA also used to control the deposits interest rates of SOBs as a monetary policy interment. The results of Table 1.2 seems not to confirm the goal of BoA to keep the real interest rates positive as far as it reduces the interest rate in front of higher unexpected inflation. However, this may be because of mis-specification of BoA reaction function, since it generally reacts to the level of inflation rather than unexpected inflation. In fact if we look at Table 1.3 BoA responds quite fast in increasing the level of interest rate as the level of inflation rises.

We also experimented with an alternative approach to see how monetary policy affects the real economy. Following Begg (1997), we focus on the real interest rates effects of monetary policy on ouput. We also include unexpected inflation as an additional channel and again control for political changes through the political dummy. As indicators of real economy in addition to cement consumption we also use the electricity consumptin and the fuel consumption.

$$\Delta y_t = a(L)[p_{t-1} - p^f_{t-1}] + b\, POLDUM_t + \chi(L)\Delta R^w_t + u_t$$
$$\Delta y_t = a\, POLDUM_t + b(L)RR^w_t + u_t$$

where: ΔR: is interest rate of 12 month loans

RR: is the real interest rate of 12 month loans

We start by looking at the effects of the change of nominal interest rate have on the indicators of the real economy. As Tables 1.4 to 1.6 show (see Annex) generally the change of nominal interest rate of credit does not influence any of the above real indicators. This real indicators do not seem to react also to unexpected inflation or the political changes.

Theoretically as we saw in the previous section the ouput should react to changes in real interest rate rather than nominal. Repeat the same exercise using real interest rate we get the results in Tables 1.7-1.9. It still seem that none of the real indicators we are using react to changes in the real interst rate of credit, which is to be expected since, as noted earlier, the real economy does not rely heavily on credit from the banking system.

4.3 Vector autoregression models

The data used are monthly data on money supply and inflation provided by BoA. In general the sample starts from 1994:01 since by that time inflation was brought under control, and the latest data are from August 2001. The approach is the vector Autoregressive model (VAR). An alternative would be to estimate an autoregressive distributed lag model but this would require one to assume that causality goes from M3 to inflation and not vice-versa, an assumption that is unrealistic in the Albanian context, where direct instruments are very inefficient and indirect instruments are at early stages. The VAR model takes into account these two ways causality by considering both inflation and M3 change as endogenous.

First we choose the lag length to be included in the model. Different criteria give different lags to be included. We include twelve lags since we are dealing with monthly data. As before, a political dummy is also included. The results (see Table 2.1 in the Annex) show that there is not any strong causality running from inflation to change of M3, which is to be expected since BoA should react to unexpected rather than to actual inflation rates, as we explained previously in the reaction function exercise. A third factor, the political dummy, seems to positively affect both M3 change and inflation, which suggests that central bank behaviour over the period has not been completely free of political interference.

5. Inflation targeting: a possible alternative

The previous section indicates how difficult it is to understand the transmission mechanism in Albania. The widespread use of informal credit channels, the under-reporting of key variables such as exports and the general poor quality of data all mitigate against a good understanding of the role of monetary policy. Partly for these reasons, an alternative monetary policy regime has been discussed extensively at the BoA: inflation targeting.[16] Located near the Euro land and having almost 80 percent of its exchanges

[16] See for a detailed explanation and comparative experience Blejer at al. (eds.) 2000 and Svensson 2000.

with this area Albania looks closely at the monetary policy of EU. The ECB has already adopted an explicit target through an inflation band as an answer to the mandate of price stability in the Maastricht Treaty.

Without entering the fundamentals of monetary theories and the damage that inflation may bring to the long-run economic growth, monetary policy could encourage employment and growth in the long run mostly by controlling inflation. Moreover, the acceptance of inflation targeting is not an obstacle for a central bank to take actions to stabilise financial markets and employment in the short-run (Goodfriend, 2000)

In general recent experiences of inflation targeting represent the shifting from a rigid anchor of the exchange rate regime, usually a fixed one, to a more flexible regime. The level of flexibility has been different for different applicant countries, starting from a band to free float. This has increased the authorities' concern about possible inflation pressure raising inflationary expectations. Therefore their commitment to anchoring public expectations in a clear and straight target such as the rate of inflation is increased. Accordingly a relevant characteristic of this new strategy is the tendency toward rules, with a certain amount of discretion. This is a compromise on the old theoretical debate about rules versus discretion with the priority given to rules (Taylor, 1993). Inflation targeting allows flexibility as the answer to the real domestic (aggregate demand) and external shocks. In addition, inflation targeting uses the forward-looking approach that allows the central bank to avoid policies that are contrary to the target. Being a forward-looking policy this is very likely to have a stabilizing effect over financial markets.

The Czechs were the first transition country[17] that started to adopt this alternative to the monetary policy. This strategy may also be attractive for Albania. Moreover it is clear that monetary policies during transition encourage a shift towards this target. For several years the BoA has used the close control and monitoring strategy of monetary aggregates in Albania. The existing free float exchange rate regime makes easier the replacement of monetary control with targeting of inflation.

There is a strong belief that inflation targeting would contribute to a larger transparency and credibility of the monetary regime. From the institutional point of view it is worth noting that this new strategy would have a good impact in raising independence avoiding political pressure at the decision making of the Bank of Albania. On the other hand there are several technical and market based considerations, which could slow down the immediate decision of using the inflation targeting as the main monetary policy. These include:

- As argued earlier, transmission mechanisms are not well understood and therefore uncertainties are high, monetary transmission channels are not well known as a result of a very high informal economy.

[17] However, several publications show an increasing interest from Poland. See for instance Orlowski, 1998 and Dabrowski, 1999.

- An indirect instrument of money policy was only recently introduced. Securities markets are rudimentary and they still need time for monitoring the impacts and effects that accompany them.
- Inflation expectations are not formed yet by a symmetric information that ensures optimal decision making of agents in the market. Their reaction is still delayed with long and unverified lags.
- Public education with monetary policy transparency methods is still lacking.
- The Consumer Price Index used as a measure of inflation in Albania does not seem to be representative of consumption. Alternative indices are not in place yet and statistics on national accounts are not reliable.
- There is an unanswered question of setting the target. What is the optimal level of inflation, how should it be defined (as a band, an average or a point)?
- Inflation forecasting techniques have to be improved and made more accurate. Without inflation forecasting it is difficult to implement information technology.

All these considerations show that the preparation time for IT adoption in Albania is very likely to extend to the next half decade while the country will better prepare for a close operation with EU, have more stabilized markets and undertake deeper institutional reforms.

6. Financial institutions and sustained growth

It was mentioned early in the paper that without strong financial markets and institutions the success of stabilization policies and the effectiveness of monetary policy and transmission mechanism channels would be doubtful. But this is a conclusion that derived after almost ten years of transition experience.

In the beginning what was missing was the recognition of the importance of the so-called "Hayekian infrastructure". This is the set of laws, rules, and codes of conduct that underlie the market system. This infrastructure includes assignments of property rights, contract enforcement, the commercial code, the legal and financial systems, accounting conventions, and other institutional arrangements. These were almost neglected during the first 5 years of transition in Albania or undervalued. Institutional development was heavily delayed and financial markets were and still are the weakest markets in the Albanian economy. This behaviour is reflected in the real economy. "Without property rights and other institutions of a market economy, supply responses are muted. Freeing prices may brings imports to fill the shelves, but legal domestic production responds slowly, if at all, and unemployment increases if productive incentives are absent"[18]. This description fits perfectly the Albanian institutional development and its impact on the economy.

[18] These words are from a personal correspondence of M. Muço with Allan Meltzer during 1996 on the values and controversies that heterodox policies could bring to the economic reform in Eastern European countries, included already in Meltzer's comments on Michael Bruno's book *Crisis, Stabilization and Economic Reform: Therapy by Consensus*, Oxford:Clarendon Press, 1993.

How much are the economies like the one of Albania vulnerable to shocks or crisis at the financial sector and what is the real impact at growth? The crisis during 1997, for instance, started with large-scale market failures leading to a more rapid and general deterioration of the economic situation and to serious political crises. These developments point once again to the imperative of careful matching the design of monetary policy to the specifics of transitional environment which very often fail to meet the assumptions of textbook economic models.

When we talk about financial sector we bear in mind financial institutions, financial markets but also the payment and settlement system. Its development is considered in the worldwide reporting, essential in achieving strong economic growth in the near future (OECD, 1997). The situation and efficiency of the banking system is considered of a great importance for economic performance and reform achievements. Most central banks in transition countries at the Central and Eastern Europe are charged with some responsibility in the area of financial system stability. According to the evaluations made by the EBRD: "The weaknesses in banking system in transition economies stem from a combination of legacies of bad loans, political interference, and lack of skills and capital, with large macroeconomic shocks resulting from rapid disinflation and remonetization" (EBRD, 1997 Transition Report).

The main questions facing Albania now are: what is the role of financial sector in supporting transformations and how can maintain sustained growth and stability under financial sector restrains? A strong connection between financial sector performance and growth in a negative sense was experienced during the last crisis in Albania. What are some main relevant issues that should consider before discussing about the role of financial sector in supporting growth in transition? Financial linkages with growth are more difficult to quantify but some observations are possible. In any growth models identified factors that drives growth are private investment, labor, enterpreneurship and innovation. To promote high-quality investment and growth it is necessary to have well-functioning credit institutions and markets including all forms that mobilize savings properly and distribute them into productive private sector investment projects. This way growth could very easily be hampered by a non-efficient financial system.

From a financial prospective particularly from a central bank prospective there are some conclusions [19] on what could be the factors that are relevant for growth:

i) Macro and financial sector dependency

There is a clear interdependency between financial instability and macroeconomic crisis (Goldstain and Turner, 1996) especially in dealing with bank restructuring. Significant swings in the performance in the real economy, and volatile real interest rates, exchange rates, asset prices and inflation rates make it difficult for banks to asses accurately the credit and market risks that might be incurring. However, macroeconomic stability is not the only factor to ensure financial stability, thus more specific measures are needed. In creating the proper macro environment for a healthy financial system that could stem growth it is very important to adopt policies that preserve monetary discipline. At the

[19] At this point see for instance the conclusions of Koch,1998.

other side more warning is needed for not allowing a persistent exchange rate misalignment. Real effective appreciation accompanying the reduction of inflation has been present in Albania.

It is quite clear from the ongoing experience that the sequencing of the financial liberalization process, a fast or a gradual one, depends critically upon the state of financial markets and the accepted environment since at the very beginning of transformations. At the other hand there should be continuous efforts to monitor and strengthen the financial sector paying attention to the dynamic of economic and financial environment. Discussion becomes far more complex if one tries to find an optimal path for financial sector development when considering Albania. This case shows the complexity and interdependence in the economic reforms. The fact that financial markets are very weak in Albania may put in question the sustainability of the good stabilization results.

ii) Monetary policy and currency substitution

Monetary policy is again important in providing wrong or right signals during the process of banking sector reform. Monetary policy has to have to ensure that core functions of money are accepted by society. Currency substitution still represents a major macro and micro constraints in transition economies where the confidence in the domestic currency is low. In Albania, the present level of dollarisation is about 20 per cent. Open dollarization (the measurable component of dollars usually held in the form of deposit at commercial banks) presents a particular problem for the monetary authorities in hampering the efficacy of policy. A high level of dollarization may also jeopardize the development of banking sector.One element still to be considered and studied is the level of dollarization and US dollar usage versus euro usage in Albania. Nonetheless the majority of trade relations of Albania are within EU area, USD remains the main foreign currency and point of reference in the Albanian money markets. This seems to be connected mostly with psychological reasons, traditions and confidence. But it may have to do with traffics and illegal activities, which being mostly international, use the most internationally recognized currency. Domestic residents holding large amount of dollars at their “bags” or “under the mattress” or conducting financial transactions among themselves without using money introduce inefficiencies into financial transactions and weaken the growth of deposits at commercial banks (one component of national savings) and facilitate the avoidance of tax payments.

iii) Developing a private banking sector

Banking system may really contribute to growth if there must be a proper system of incentives to encourage productive lending and, even more important to avoid lending that may lead to credit problems, namely, bad loans. The banking sector plays a key role in a market economy by serving as an intermediary between savings and investment. At this point Albania has very much to do on improving these services. Banks should be essentially private sector entities in order to run business under commercial lines. State banks had no incentives to work with the real sector and thus there were not able to develop skills for evaluating investment projects and risks in the real sector. The banks had not developed credit risk analyses departments that could investigate investment

opportunities. But the private side of banking also needs further strengthening. The inheritance of bad loans (or non-performing) and the fast accumulation of new bad debts, to some extend may be unavoidable at the beginning of transition, may also led to a more cautious behavior by banks. Private banking system in Albania is quite new and it started to be established after 1992. Until 1996 only a few private banks were operating in Albania. Currently there are 13 banks at the private banking system with a wide geographical distribution of owned capital and it is only one state owned bank, Savings Bank which is under the process of privatizing. Although only one state bank it is keeping the monopoly position at the banking services market. It holds the majority of deposits, around 60 per cent and absolute majority more than 80 per cent of TBs market. Its decision is important for the government, as this is the bank that implements all government services at the whole geographical area of the country. Its activity has created a market distortion and its privatization is of the first priorities.

iv) Financial sector: other than banks

Without capital transfer and free movements of money it is impossible to overcome barriers created by years of low productivity and old technology. Financial sector in Albania, not only banks but also non-bank financial institutions should respond and adjust quickly towards chaotic markets and impose regulation and transparency. It is not an easy way under the lack of skills and capital but a good financial sector could generate money not only by printing but also by facilitating operations and instruments, which support growth. Under the circumstances when the lending level by banks is low, a good sign is coming from some quasi-bank microcredit activities which are growing very fast in Albania. BoA has been very prudential in trying to monitor these activities and get the proper information necessary for a healthy supervision process. Any sort of pyramid style activity could threaten with a financial crisis. Legislation in place is composed by the Nonbank Law, and the Savings and Credits Agencies (SCA) Law. Nonbank institutions are also licensed only for lending and are supervised by the BoA. A legislation passed by Parliament in May 2001 has assigned the BoA the role to license and supervise SCAs. According to the BoA 2000 Annual Report there are 36 SACs that exercise their activity allover the country

A Credit Information Bureau is still not in place despite several efforts made by BoA and commercial banks in Albania with the international technical support.

Also important is becoming the insurance market. Privatization of INSIG the biggest state owned insurance company is under way and two other private operators are in the market. The most problematic side of financial markets still remains the capital market. A new amendment Law is now on operation about the separation of Tirana Stock Exchange from the Bank of Albania and the revitalizing of Securities Commission life with the hope that some activities and perhaps the first company listing will appear soon.

v) A cash economy: how to avoid?

All actors at the payment system in Albania, individuals, businesses and government, are involved in cash transactions. This is a key institutional feature of the payments mechanism in Albania, which hinders the whole financial system development. Albania

as many other transition economies is clearly a cash economy since the fact that even the government payments of wages and salaries, social transfers, etc., are carried in cash and a large share of domestic revenues is in cash. This amount of cash is uncontrolled from the banks and is either in the hands of the public or is stored by the government waiting the next payment. The cash economy also deforms the signals of monetary policy and its transmission mechanism through lags and asymmetric information on money transactions. Developing a modern payment system remains a large institutional challenge for the financial reform in Albania. It needs a lot of investment in capital and human resources while any delay may put in jeopardy all other positive changes at the macro-stability of the country.

vi) Role of public finances and government regulation

Government has a very important role to play in strengthening financial sector and creating the proper framework for growth. Strong and healthy public finances could always be a positive determinant and stimulate banking sector reform. Releasing fiscal policy and helping de novo firms and other new businesses with pro-growth fiscal incentives could stimulate a better financial market performance. Government also could influence credit allocation to some important or strategic sectors that stimulate domestic production and growth. At the other side increasing efforts to limit unnecessary government spending could avoid large deficits, which influence negatively financial sector prosperity. Decreasing its credit size governments could leave more room for private sector development. The government budget deficit is at the highest level, 9.1 percent in 2000, compared to other transition and Southeastern European countries. Decreasing budget deficits and improving budgetary expenditure management is still one of the main macro problems to deal with in the next years.

vii) Political instability and social conflicts

Being at one of the unstable region of Europe made Albania a high-risk investment zone putting serious barriers to the capital movements. The low level of foreign investment in the area shows small room for new technologies to come. Oscillations in market reforms, financial crisis and social conflicts brought low credibility and performance. Financial markets should absolutely avoid these circumstances, as they are the more sensitive toward speculative attacks. The case is even worse when financial crisis happen.

7. Conclusion and policy implications

The main conclusion of this analysis is that Albania's impressive growth performance is not sustainable over the medium and long-run unless considerable financial sector development takes place. Monetary policy has an important role to play in Albania, but its effectiveness is hampered by the large informal sector and the poor quality of data and information. Our statistical analysis has failed to identify strong, consistent relationships between important policy variables.

For policy-makers, the following are the main recommendations:

- Moving to inflation-targeting has been successful in other transition economies and merits consideration in Albania. Moving cautiously and preparing step by step transition to inflation targeting, however, should be considered with other conditions to be fulfilled.
- High priority should be given to improved data collection and analysis not only at the Bank of Albania and INSTAT but nation-wide.
- The privatisation of the Savings Bank and of the state insurance company, INSIG, are top priorities and current momentum towards these goals should be maintained.
- More effort should be made to bring the informal sector into the formal economy. The very last example when the government failed to close the free exchange market and institutionalize it is another sign that the banking system is still unable and mature to face the around 1 billion USD transaction a year channeled to this marked.
- The introduction of a proper payment system and a functioning stock exchange can help promote greater financial intermediation.
- Experience shows that much more should be done to introduce and strengthen the micro-credit institutions along with increasing their prudential regulation legislation and monitoring their activities. They could influence and improve the lending activity and boost production but at the same time this non bank financial sector could contribute in establishing a flexible and wealthy financial sector that channels properly the savings to the economy.

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TABLE 1. *Economic Indicators during Transition*

INDICATORS/YEARS	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
GDP[1] •in current prices, in million lek •in constant prices, 1990	16,813 16,813	16,404 12,105	50,697 11,235	125,334 12,309	184,393 13,331	229,793 15,107	280,998 16,478	341,716 15,325	460,631 16,556	506,205 17,765	539,210 19,150
GDP GROWTH[1] •% change in constant prices industry agriculture construction transportation others	-10.0 -14.2 -5.4 -12.0 -10.0 -8.0	-28.0 -42.0 -17.4 -30.0 -30.0 -14.0	-7.2 -51.2 18.5 7.0 -15.0 9.0	9.6 -10.0 10.4 30.0 13.0 16.0	8.3 -2.0 8.3 15.0 18.0 11.0	13.3 6.0 13.2 21.2 18.8 13.5	9.1 13.6 3.0 18.4 -1.0 20.1	-7.0 -5.6 1.0 -6.3 -20.5 -25.0	8.0 4.1 5.0 21.0 20.0 10.0	7.3 6.4 5.0 15.0 15.0 12.0	7.8 na na na na na
GDP per capita, in USD[5]	…	…	211.0	381.5	610.8	737.8	808.0	684.0	906.5	1,080.9	1094.4
INFLATION[2] •average •end period	 104.0	35.5 104.1	226 236.6	85.0 30.9	22.6 15.8	7.8 6	12.7 17.4	42.0 42.1	20.7 8.7	0.4 -1.0	… 4.2
FISCAL DEFICIT[3] •in % of GDP	-6.1	-20.7	-58.6	-13.7	-9.0	-10.2	-12.8	-12.9	-10.4	-11.3	-9.1[6]
TRADE BALANCE[4] •in million USD	...	-308	-470.5	-489.9	-459.7	-475.0	-678.3	-534.9	-603.6	-662.8	-814.3
CURRENT ACCOUNT BALANCE[4] •in million USD	...	-213	-50.8	14.7	31.2	36.6	-62.4	-253.7	-45.2	-132.9	-151.8
DIRECT FOREIGN INVESTMENT •in million USD	…	...	32	58.0	52.9	70.0	90.1	47.5	45	41.2	143.0
UNEMPLOYMENT[2] •in % of total labor force	...	9.1	26.5	22.3	18.6	13	12.3	14.9	17.8	18.0	17

NOTES:

1. *Source:* Economic Developments Department and Foreign Aid Coordination and Ministry of Finances
2. *Source:* INSTAT
3. *Source:* Ministry of Finance
4. *Source:* Bank of Albania
5. *Source*: Ministry of Finance and IMF estimations
6. Estimation

Data Annex I: Bank of Albania reaction functions

Table 1.1

Dependent Variable: ADM3
Method: Least Squares
Sample(adjusted): 1994:4 2000:4
Included observations: 25 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.011510	0.017587	-0.654489	0.5227
UNEXPINF(-1)	-0.036318	0.147132	-0.246838	0.8084
UNEXPINF(-2)	**-0.463878**	**0.152168**	**-3.048463**	**0.0081**
UNEXPINF(-3)	**0.272927**	**0.155320**	**1.757185**	**0.0993**
UNEXPINF(-4)	0.089328	0.147343	0.606260	0.5534
QDCC(-1)	-0.010227	0.014075	-0.726583	0.4787
QDCC(-2)	-0.022910	0.014969	-1.530454	0.1467
QDCC(-3)	-0.008870	0.015401	-0.575922	0.5732
QDCC(-4)	-0.019557	0.013585	-1.439569	0.1705
ADM3(-1)	**1.029509**	**0.057548**	**17.88945**	**0.0000**

R-squared	0.965594	Mean dependent var	0.274406
Adjusted R-squared	0.944950	S.D. dependent var	0.097907
S.E. of regression	0.022972	Akaike info criterion	-4.419938
Sum squared resid	0.007915	Schwarz criterion	-3.932387
Log likelihood	65.24922	F-statistic	46.77448
Durbin-Watson stat	1.693452	Prob(F-statistic)	0.000000

Table 1.2

Dependent Variable: QDEPINT
Method: Least Squares
Sample(adjusted): 1994:4 2000:4
Included observations: 25 after adjusting endpoints
White Heteroskedasticity-Consistent Standard Errors & Covariance

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.000684	0.004842	-0.141329	0.8895
UNEXPINF(-1)	0.129528	0.107443	1.205558	0.2467
UNEXPINF(-2)	0.115862	0.138740	0.835097	0.4168
UNEXPINF(-3)	-0.211227	0.137899	-1.531749	0.1464
UNEXPINF(-4)	**-0.280174**	**0.069423**	**-4.035736**	**0.0011**
QDCC(-1)	0.000834	0.008073	0.103342	0.9191
QDCC(-2)	0.017080	0.009882	1.728344	0.1044
QDCC(-3)	0.015075	0.009918	1.519940	0.1493
QDCC(-4)	0.010502	0.009943	1.056202	0.3076
QDEPINT(-1)	-0.004687	0.161204	-0.029076	0.9772

R-squared	0.633946	Mean dependent var	-0.002680
Adjusted R-squared	0.414313	S.D. dependent var	0.023556
S.E. of regression	0.018028	Akaike info criterion	-4.904653
Sum squared resid	0.004875	Schwarz criterion	-4.417103
Log likelihood	71.30817	F-statistic	2.886392
Durbin-Watson stat	2.214723	Prob(F-statistic)	0.033749

Table 1.3

Dependent Variable: DEPINT

Method: Least Squares
Sample(adjusted): 1994:4 2000:4
Included observations: 25 after adjusting endpoints
White Heteroskedasticity-Consistent Standard Errors & Covariance

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	4.163017	1.686117	2.468996	0.0260
INF12(-1)	**0.258764**	**7.619384**	**3.396127**	**0.0040**
INF12(-2)	6.148213	7.853300	0.782883	0.4459
INF12(-3)	-5.584037	5.498735	-1.015513	0.3260
INF12(-4)	-10.09517	7.501726	-1.345712	0.1984
QDCC(-1)	-0.310977	0.981497	-0.316840	0.7557
QDCC(-2)	0.890589	0.850575	1.047042	0.3117
QDCC(-3)	0.955372	1.068564	0.894071	0.3854
QDCC(-4)	1.411164	0.825670	1.709114	0.1080
DEPINT(-1)	**0.643350**	**0.135901**	**4.733961**	**0.0003**

R-squared	0.942932	Mean dependent var	16.80800
Adjusted R-squared	0.908692	S.D. dependent var	6.739740
S.E. of regression	2.036563	Akaike info criterion	4.549579
Sum squared resid	62.21384	Schwarz criterion	5.037129
Log likelihood	-46.86973	F-statistic	27.53848
Durbin-Watson stat	1.777970	Prob(F-statistic)	0.000000

Table 1.4

Dependent Variable: DCCSA (annual change in cement consumption seasonally adjusted)
Date: 05/24/01 Time: 12:53
Sample(adjusted): 1994:4 2000:4
Included observations: 25 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.219458	0.186558	1.176348	0.2591
UNEXPINF(-1)	-1.616449	4.682042	-0.345244	0.7350
UNEXPINF(-2)	-3.541863	3.707431	-0.955341	0.3556
UNEXPINF(-3)	0.512984	3.831873	0.133873	0.8954
UNEXPINF(-4)	4.740520	3.370537	1.406458	0.1814
DCCSA(-1)	0.104294	0.310524	0.335866	0.7420
DCREINT(-1)	0.026243	0.032281	0.812942	0.4299
DCREINT(-2)	0.036653	0.031144	1.176882	0.2589
DCREINT(-3)	0.023845	0.033009	0.722396	0.4819
DCREINT(-4)	-0.015991	0.033181	-0.481947	0.6373
POLDUM	0.008661	0.274353	0.031570	0.9753

R-squared	0.316717	Mean dependent var	0.245861
Adjusted R-squared	-0.171343	S.D. dependent var	0.505944
S.E. of regression	0.547576	Akaike info criterion	1.933552
Sum squared resid	4.197759	Schwarz criterion	2.469857
Log likelihood	-13.16940	F-statistic	0.648931
Durbin-Watson stat	1.791706	Prob(F-statistic)	0.751493

Table 1.5

Dependent Variable: DCESA (annual change in electricity consumption)
Method: Least Squares
Sample(adjusted): 1994:4 2000:4
Included observations: 25 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.021593	0.047773	0.451995	0.6582

UNEXPINF(-1)	-0.607703	0.987567	-0.615354	0.5482
UNEXPINF(-2)	0.615740	1.084753	0.567632	0.5793
UNEXPINF(-3)	0.394416	1.077154	0.366165	0.7197
UNEXPINF(-4)	1.038299	0.994099	1.044462	0.3140
DCESA(-1)	**0.369997**	**0.204318**	**1.810890**	**0.0917**
DCREINT(-1)	-0.003766	0.008531	-0.441459	0.6656
DCREINT(-2)	-0.001555	0.008446	-0.184066	0.8566
DCREINT(-3)	-0.008713	0.008346	-1.043982	0.3142
DCREINT(-4)	**-0.016963**	**0.008534**	**-1.987752**	**0.0668**
POLDUM	0.053583	0.077448	0.691851	0.5003

R-squared	0.564422	Mean dependent var	0.104664
Adjusted R-squared	0.253295	S.D. dependent var	0.179716
S.E. of regression	0.155296	Akaike info criterion	-0.586783
Sum squared resid	0.337637	Schwarz criterion	-0.050478
Log likelihood	18.33479	F-statistic	1.814122
Durbin-Watson stat	1.866248	Prob(F-statistic)	0.149596

Table 1.6

Dependent Variable: DCKSA (annual change in oil consumption)
Method: Least Squares
Sample(adjusted): 1994:4 2000:4
Included observations: 25 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.164629	0.145254	-1.133389	0.2761
UNEXPINF(-1)	-4.408147	3.275518	-1.345786	0.1998
UNEXPINF(-2)	1.940960	3.632418	0.534344	0.6015
UNEXPINF(-3)	6.082610	3.553142	1.711896	0.1090
UNEXPINF(-4)	0.664281	3.535498	0.187889	0.8537
DCKSA(-1)	**0.389239**	**0.201939**	**1.927505**	**0.0745**
DCREINT(-1)	0.025421	0.030225	0.841072	0.4144
DCREINT(-2)	-0.002909	0.027965	-0.104027	0.9186
DCREINT(-3)	-0.000920	0.027922	-0.032958	0.9742
DCREINT(-4)	-0.022375	0.028006	-0.798915	0.4377
POLDUM	0.125328	0.257196	0.487287	0.6336

R-squared	0.560423	Mean dependent var	-0.054764
Adjusted R-squared	0.246439	S.D. dependent var	0.593598
S.E. of regression	0.515290	Akaike info criterion	1.812008
Sum squared resid	3.717335	Schwarz criterion	2.348314
Log likelihood	-11.65010	F-statistic	1.784877
Durbin-Watson stat	2.339007	Prob(F-statistic)	0.156086

Table 1.7

Dependent Variable: DCCSA
Method: Least Squares
Sample(adjusted): 1994:4 2000:4
Included observations: 25 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.326633	0.676484	0.482840	0.6347
RINT(-1)	0.032863	0.036994	0.888329	0.3855
RINT(-2)	-0.013148	0.045873	-0.286621	0.7775
RINT(-3)	0.009033	0.045744	0.197463	0.8456
RINT(-4)	-0.034985	0.036892	-0.948308	0.3549
DCCSA(-1)	0.228350	0.205814	1.109499	0.2811

R-squared	0.196996	Mean dependent var	0.245861

Adjusted R-squared	-0.014320	S.D. dependent var	0.505944
S.E. of regression	0.509554	Akaike info criterion	1.695002
Sum squared resid	4.933263	Schwarz criterion	1.987532
Log likelihood	-15.18752	F-statistic	0.932233
Durbin-Watson stat	1.928923	Prob(F-statistic)	0.482264

Table 1.8

Dependent Variable: DCKSA
Method: Least Squares
Sample(adjusted): 1994:4 2000:4
Included observations: 25 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-1.218481	0.689587	-1.766972	0.0933
RINT(-1)	0.060690	0.036670	1.655021	0.1143
RINT(-2)	-0.028464	0.045447	-0.626302	0.5386
RINT(-3)	0.013714	0.045425	0.301906	0.7660
RINT(-4)	0.002258	0.036633	0.061629	0.9515
DCKSA(-1)	**0.441686**	**0.161384**	**2.736855**	**0.0131**
R-squared	0.422694	Mean dependent var		-0.054764
Adjusted R-squared	0.270772	S.D. dependent var		0.593598
S.E. of regression	0.506902	Akaike info criterion		1.684567
Sum squared resid	4.882051	Schwarz criterion		1.977097
Log likelihood	-15.05708	F-statistic		2.782299
Durbin-Watson stat	2.357052	Prob(F-statistic)		0.047531

Table 1.9

Dependent Variable: DCESA
Method: Least Squares
Sample(adjusted): 1994:4 2000:4
Included observations: 25 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.129777	0.230284	-0.563552	0.5797
RINT(-1)	0.002397	0.012090	0.198250	0.8450
RINT(-2)	0.000605	0.014901	0.040635	0.9680
RINT(-3)	-0.002595	0.015090	-0.171983	0.8653
RINT(-4)	0.007352	0.012117	0.606770	0.5512
DCESA(-1)	**0.477658**	**0.208001**	**2.296423**	**0.0332**
R-squared	0.308287	Mean dependent var		0.104664
Adjusted R-squared	0.126257	S.D. dependent var		0.179716
S.E. of regression	0.167988	Akaike info criterion		-0.524285
Sum squared resid	0.536179	Schwarz criterion		-0.231755
Log likelihood	12.55356	F-statistic		1.693606
Durbin-Watson stat	1.951047	Prob(F-statistic)		0.184540

Data Annex II: Vector Autoregression Models

Legend:

INF12-Annual Inflation Rate,

ADM3-Annual Change of M3,

AMD3SQR – AMD3 squared, Const-Constant,

POLDUM-Political Dummy variable (takes 1 in periods of electoral campaigns and 0 otherwise)

Table 2.1: VAR (12,12)

Sample(adjusted): 1994:12 2001:06
Included observations: 79 after adjusting Endpoints
Standard errors & t-statistics in parentheses

	INF12	ADM3
INF12(-1)	0.857073	0.011904
	(0.13093)	(0.10431)
	(6.54583)	(0.11412)
INF12(-2)	-0.129097	0.136125
	(0.16953)	(0.13506)
	(-0.76151)	(1.00787)
INF12(-3)	0.303874	-0.043341
	(0.16795)	(0.13380)
	(1.80933)	(-0.32391)
INF12(-4)	-0.237802	-0.192065
	(0.16398)	(0.13064)
	(-1.45016)	(-1.47013)
INF12(-5)	0.114432	-0.050224
	(0.15981)	(0.12732)
	(0.71606)	(-0.39447)
INF12(-6)	0.035912	0.034079
	(0.14603)	(0.11634)
	(0.24592)	(0.29291)
INF12(-7)	0.055833	0.137647
	(0.14321)	(0.11410)
	(0.38987)	(1.20642)
INF12(-8)	0.132443	-0.094209
	(0.14139)	(0.11264)
	(0.93674)	(-0.83635)
INF12(-9)	-0.125251	-0.061056
	(0.13735)	(0.10943)
	(-0.91192)	(-0.55796)
INF12(-10)	0.098757	0.049183
	(0.13585)	(0.10823)
	(0.72694)	(0.45442)
INF12(-11)	-0.066307	0.153317
	(0.13552)	(0.10797)
	(-0.48929)	(1.42005)
INF12(-12)	-0.188124	-0.074644
	(0.10830)	(0.08629)
	(-1.73698)	(-0.86508)

ADM3(-1)	-0.074450	0.701683
	(0.17358)	(0.13829)
	(-0.42891)	**(5.07400)**
ADM3(-2)	-0.190015	0.353278
	(0.20336)	(0.16202)
	(-0.93438)	**(2.18051)**
ADM3(-3)	0.337154	0.040154
	(0.21314)	(0.16981)
	(1.58182)	(0.23647)
ADM3(-4)	0.025273	-0.162432
	(0.21135)	(0.16838)
	(0.11958)	(-0.96468)
ADM3(-5)	0.140163	0.056209
	(0.21000)	(0.16731)
	(0.66743)	(0.33596)
ADM3(-6)	-0.348016	0.167420
	(0.20911)	(0.16660)
	(-1.66427)	(1.00494)
ADM3(-7)	0.250004	-0.002519
	(0.21442)	(0.17083)
	(1.16596)	(-0.01474)
ADM3(-8)	0.216483	-0.119661
	(0.21112)	(0.16820)
	(1.02538)	(-0.71141)
ADM3(-9)	-0.409710	-0.149411
	(0.20777)	(0.16553)
	(-1.97198)	(-0.90264)
ADM3(-10)	0.056998	-0.111312
	(0.21120)	(0.16826)
	(0.26988)	(-0.66154)
ADM3(-11)	0.001660	0.259555
	(0.20637)	(0.16441)
	(0.00804)	(1.57869)
ADM3(-12)	0.079373	-0.046228
	(0.15492)	(0.12342)
	(0.51236)	(-0.37456)
C	-0.008917	-0.002354
	(0.00953)	(0.00759)
	(-0.93604)	(-0.31018)
POLDUM	0.012145	0.006703
	(0.00703)	(0.00560)
	(1.72792)	**(1.19703)**

R-squared	0.972959	0.979029
Adj. R-squared	0.960203	0.969137
Sum sq. resids	0.026219	0.016642
S.E. equation	0.022242	0.017720
F-statistic	76.27849	98.97155
Log likelihood	204.3269	222.2820
Akaike AIC	-4.514604	-4.969164
Schwarz SC	-3.734786	-4.189346
Mean dependent	0.106263	0.265370
S.D. dependent	0.111493	0.100866

Determinant Residual Covariance	6.91E-08
Log Likelihood	427.0590
Akaike Information Criteria	-9.495165
Schwarz Criteria	-7.935528