COORDINATION OF PUBLIC DEBT MANAGEMENT AND RUNNING MONETARY POLICY IN CROATIA[1]

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Abstract

This paper deals with the issue of the coordination of public debt management and running monetary policy in Croatia, and draws attention to the importance of this kind of coordination for macroeconomic stability. Particular attention is paid to the management of public debt and the running of monetary policy in Croatia as practiced to date, and the problems that have arisen the while. Also given are the most important measures that the Croatian National Bank has taken to make it easier to manage the public debt and achieve better coordination with the Finance Ministry. There is more detailed discussion of the introduction of open market operations, the most important step taken towards better coordination of the running of monetary policy and the management of the public debt. Since the introduction of open market operations, interest rates on the interbank market and on the government bonds market have oscillated far less and have stabilized at a lower level. This should facilitate public debt management and provide for greater predictability in the planning of debt management costs. The final section discusses the importance of the further development of the government bonds market for the improvement of coordination in Croatia. The conclusion makes concrete proposals for the improvement of coordination: the achievement of an at least approximate consensus about the optimum combination of fiscal and monetary policy and the establishment of mechanisms for regular exchanges of information between the Finance Ministry and the Croatian National Bank for the purpose of harmonizing fiscal and monetary policy.

Key words: Croatia, public debt management, running monetary policy, government bonds market, open market operations

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[1] The views expressed in the paper are the personal views of the writer and do not necessarily reflect those of the institution in which she is employed.

1 Introduction

Since the matter of coordination of public debt management and the running of monetary policy has been insufficiently treated in scientific and professional-interest writing, and since practice shows that in fact it is very important, it seems a worthwhile challenge to endeavour to sum up certain aspects of this coordination.

The first part of the paper discusses the links between public debt management policy and monetary policy and their basic objectives. Also discussed is the meaning of the independence of the central bank in running monetary policy, and examples drawn from several countries of threats to the independence of the central banks are given.

In part two, several possible solutions are offered for the coordination of public debt management and the running of monetary policy, and attention is drawn to certain specific features of this coordination in transition and developed countries. Also briefly discussed are the most common causes of conflicts between public debt management policy and monetary policy.

Part three exhibits coordination to date of public debt management and monetary policy running in Croatia. The degree of Croatian National Bank (CNB) independence is evaluated, and there is a brief discussion of the main obstacles in the way of accomplishing better coordination of public debt management and running monetary policy in Croatia.

In the continuation the most important measures that the CNB has undertaken to facilitate management of the public debt and better coordination with the Finance Ministry, and detailed reference is made to the introduction of open market operations, the most important step taken towards coordination of running monetary policy and public debt management.

The fourth part deals with the importance of further development in the government securities market for the improvement of coordination in Croatia for it has turned out that coordination is much better in countries that have already carried out important financial reforms, in which the government has reduced central government budget deficit to a reasonable minimum and that have in addition a well developed market for government securities.

In the final part of the work, pertinent proposals are made for the improvement of coordination between public debt management and the running of monetary policy in Croatia.

2 The connection of public debt management policy and monetary policy

There is no doubt that public debt management policy and monetary policy are connected, and thus numerous papers have pointed out the importance of the structure of public debt for being able to conduct an optimal monetary policy over the short- and long-term (Cosimano and Gapen, 2003). In many transition countries, it is the structure of the public debt and not the level that is the chief reason for financial crises and general macroeconomic instability (Mihaljek, 2002). When the structure of the debt is discussed, it is logical to ask what debt structure would be appropriate for the achievement of stable economic development in some country. The answer to this question is not easy to find and it on the whole depends on the direction and strength of the correlation between inflation, real economic growth and interest rate (Missale, 2000). In his analysis, Missale concluded that for harmonisation with monetary policy, the basic objective of which is to preserve price stability, the optimal debt structure is a combination of long-term debt at a fixed rate of interest and inflation-indexed debt. Such a combination of debts has a favourable effect on the stabilisation of the deficit, which is for him the basic objective of debt management.

2.1 Public debt management

Public debt management can be defined briefly as a set of procedures undertaken and decisions made for the sake of obtaining the financial resources necessary for the government. Some of the most important decisions adopted are concerned with the size of the debt, the debt servicing period, the currency structure and so on. It is highly important here to pay attention to the risks and costs that derive from such decisions.[2] It is very important for every country to have a long-term debt management strategy, which should be developed with reference to the overall macroeconomic situation in the land.

The basic objective of public debt management policy in most countries is to meet the needs of the government for financial resources while taking on only a reasonable level of risk. However, in some countries, minimisation of the costs of debt management is privileged. A highly rated objective in many lands is active support to the macroeconomic policy of the country. Many theorists think that debt management is also essential for the handling of taxation policy (Barro, 1997), for the existence of a debt gives the government greater degree of freedom in running economic policy and reducing the effects of distorting taxes and the growth of the money supply, particularly in periods of economic shocks (Cosimano and Gapen, 2003). Still, it can be said that today, instead of the onetime greater focus on the budget for the sake of avoiding major tax changes, debt managers are more attentive to reduction of interest charges on the public debt and to avoidance of major fluctuations in the trends in such costs (Wolswijk de Haan, 2005).

The legislative and institutional framework of public debt management must be such as to enable those charged with managing the debt to realise their objectives effectively. It should also provide investors with certain guarantees that funds invested will be safe. For the sake of the maximum degree of responsibility in the process of debt management, additional legislation is often passed to limit the amount of the public debt (Carracedo and Dattels, 1997).

2.1.1 Institutional arrangements for public debt management

There are three basic institutional arrangements for public debt management.[3]

The finance ministry manages the public debt and is responsible for tactical, strategic and many other functions (Slovenia, Italy). The central bank here is responsible only for technical aspects of debt management, such as the sale of debt instruments and running the system of payments and settlements.

[2] For more on this see IMF and World Bank (2003).

[3] See: Carracedo and Dattels (1997).

The central bank has the most important role in formulating the debt management policy and is responsible for strategic policies and short-term public debt management (Denmark). This provides a certain degree of central bank discretion in debt management, which is important when it is wished to harmonise public debt management and the running of monetary policy.

Many functions of public debt management are carried out by a special debt management office or agency (as in Sweden and Ireland). This is an approach that ensures total separation of fiscal and monetary policy from debt management policy. Such offices have on the whole been founded only in the last twenty years or so, always excepting Sweden, which has had such an office since 1789.

There are no strict rules for the division of given debt management functions. The finance ministry and central bank are always, to a greater or lesser degree, involved in debt management affairs, and in some countries, as well as them, debt management affairs are handled by an independent agency. The definition of the status of such an agency is not always very easy, and the degree to which it is really independent can vary, depending upon the current statutory regulations.

The debt management through a separate agency model has its advantages and drawbacks. Via such an agency, one of the most important aims of debt management can certainly be achieved – paring down costs, for the persons who work in such an agency are usually highly specialised and very well acquainted with the state of the market, and are thus the more capable of predicting any changes in this state that there might be. In setting up such an agency, the government sends a clear signal that it does not consider debt management part of the running of monetary policy, for which the central bank alone is responsible, but a separate mater that has a great significance for government finances.

By contrast, in countries in which the financial market is insufficiently developed, a special debt management agency can complicate rather than help in the better coordination of public debt management and monetary policy running.[4] Accordingly in such countries special agencies tend not to be set up, rather public debt management is kept inside the finance ministry, in close collaboration with the central bank (Kalderen, 1997).

It should be said that, irrespective of the institutional solution chosen for debt management, this does not totally exclude other institutions, for in many cases individual functions and activities are intertwined and supplement each other. For this reason good collaboration among these institutions and coordination of their activities are very important.

2.1.2 Transparency of and responsibility for public debt management

Division of responsibility among Finance Ministry and central bank and, if it exists, the special agency is very important with respect to the conduct of all the matters related to debt management. Transparency and clear rules for running central bank and finance ministry operations are off essential help in the resolution of conflicts between monetary policy and debt management policy and reduce investor insecurity, diminish their trans-

[4] From this it can be concluded that the current public debt management approach in the Finance Ministry is for the moment completely fine.

action costs and, ultimately, help the government to reduce the costs of debt servicing (IMF and World Bank, 2003).

The objectives of debt management should be clear and accessible to the public, and all methods used to quantify risk and costs should be explained in detail. It is crucial that all information about budgetary activities, including how they are financed, should be constantly accessible to the public. And that is why it is best for all data about the domestic debt programme to be published regularly. Developed countries devote great attention to making sure of transparency in debt management policy and so do countries that have only recently entered the EU, such as Hungary, which regularly publish programmes for the auctions of government securities.[5]

The government should regularly publish information about the currency and interest structure of the debt and financial assets and the structure of maturities. It is particularly important to inform the public about all conditional liabilities of the government, and the tax treatment of government bonds when the government issues them for the first time. All activities related to debt management should be subject to annual independent auditing. In some countries there is actually an official body for the scrutiny of all government transactions, and it draws up regular reports about the legality of the way in which these transactions have been carried out.[6]

2.2 Monetary policy: the importance of the independence of the central bank

It is the basic objective of the monetary policy of most countries to preserve price stability, for this stability is the foundation for the achievement of economic growth, a high degree of employment and improvement in living standards.[7]

In many undeveloped countries the central banks are under strong governmental influence, one of their roles being to loan to the state at minimum rates of interest. Of course, such financing of the government is completely against market principles, which require that all, including the government, must meet their financial needs on the market, on equal terms. The Treaty of Maastricht in Article 107 forbids central banks to finance the government and guarantees the independence of the European Central Bank (ECB) and the central national banks of all the member states. No central bank of any EU member country is allowed to seek or receive instructions from the government or any other institution of the EU, and all these institutions must refrain from exerting any influence on the policies of the ECB or the national central banks (Treaty on European Union, 1992, Maastricht). It is interesting to point out that in debates about the obligations and responsibilities of debt and monetary management institutions stress is always laid on the importance of central bank independence from the finance ministry or any institution charged with public debt management. Why this independence is so important can be demonstrated well from the example of Italy

[5] See: http://www.akk.hu.

[6] In Croatia there is a special government body for control of the way budgetary resources are spent – the State Auditing Office, set up by the Croatian Parliament, while there is also the parliamentary committee for the assessment of conflicts of interest with respect to government officials.

[7] This goal of running monetary policy is mentioned in Chapter 2, Article 105 of the Treaty of Maastricht.

in which during the 1970s because of the long-term expansionist monetary policy and the ability of the central bank to lend to the government the monetary aggregates rose greatly. For this reason in 1981 an important decision was make to keep the finance ministry and the central bank apart in institutional terms, after which the powerful growth of monetary aggregates was halted.[8] This same or a similar scenario existed in many other countries, and it can be concluded that for the realisation of the basic aim of monetary policy – the preservation of price stability, the independence of the central bank from the finance ministry or a separate institution for government debt management is of great importance.

The most important spur to the separation of debt management policy and monetary policy derives from Maastricht, which prohibits a government to borrow money from the central bank. In spite of this there are still political pressures on central banks and their monetary policies, and even the ECB because of its interest rate policies and the strength of the euro is still the target of criticism from governments of EU member states.[9]

One of the most drastic examples of a threat to the independence of a central bank occurred in Germany in December 2004 when the finance minister, because of the enormous budgetary deficit, urged the Bundesbank to sell its whole gold quota from the European Central Banks Agreement and thus provide the government with about a billion euros. The Bundesbank did not succumb to the pressure, however, and the bank's council adopted a unanimous resolution not to sell gold in 2004. Even in a developed and democratic country like Finland there are occasional pressures on the central bank. At the end of 2003, the finance minister proposed that the central bank should be bound by law to transfer the whole of the profit it makes (instead of the half as hitherto) to the state. But this proposal did not pass, because the Finnish central bank and the ECB deemed that such a measure would reduce the ability of the central bank to prevent financial crisis in the country and the environment (Brione, 2005).

Although it might from this be concluded that the requirement of central bank independence is far from being consistent with any connection with public debt management or debt management policy coordination, this is in fact not the case. In spite of the requirement of independence, it is not the case that the central bank should have nothing to do with public debt management. On the contrary, among the functions of the central banks of developed countries are those that relate to a certain responsibility for debt management. Naturally this responsibility must not be in opposition to the basic objective of the central bank, the maintenance of price stability.

At a minimum this responsibility includes:

- an advisory function; the central bank will inform the finance ministry about liquidity of the banking system, the trends in interest rates, monetary and credit aggregates. This information is very important for decision making about the way of financing the deficit and for achieving the objectives of monetary policy;
- function of issuing agent – in many countries the central bank manages the auctions of government bonds and organises and runs the clearance and payment system;

[8] See: Santini (1997).

[9] See: Brione (2005).

- function of fiscal agent – the central bank carries out payments and collections on behalf of the government and thus works as a government treasurer.[10]

Thus the central bank can perform certain functions related to public debt management for in this way it will better coordinate with public debt management policy and ensure the realisation of its objectives. It is most important that in so doing it does not in any way finance the government, and the government must not exert any pressures on the central bank with respect to the running of monetary policies (interest and exchange rates).

3 Possible solutions for the coordination of public debt management and running monetary policy

3.1 Basic preconditions for good coordination

The basic preconditions for good coordination are the development of the financial market, the independence of the central bank and the transparency of fiscal policy.

What coordination in a given country is like depends on the ability to meet these preconditions.

In most countries there are formal and informal solutions for coordinating and exchanging information among fiscal and monetary agencies, and explicit and implicit coordination approaches. Explicit approaches are necessary in countries that do not have a well enough developed market for government securities. Implicit coordination exists in countries with developed financial markets and is conducted in order for debt management objectives to be harmonised with those of running monetary policy. Coordination is much harder in countries in which the financial market is undeveloped for then the sources of financing the government are limited, which also limits the independence of the central bank.

If all the circumstances are ideal, the process of harmonising the objectives and actions of these policies can be implemented without major problems. Then the financial market will function as a disciplined mechanism sending timely and accurate signals to the decision makers and making it easier for them to harmonise their policies. Since it is rather hard to achieve ideal conditions, it is needful to create appropriate arrangements for the coordination of pubic debt management and the running of monetary policy.

3.2 Specific features of coordination in transition countries

In economies in transition, in which the financial markets are usually not well enough developed, the development of this market is the common objective of the monetary and financial authorities, and monetary management and public debt management need not be totally separate. If, as in Croatia, these segments are separate, there must be good coordination of the objectives and instruments of monetary and of debt management policy.

Why such coordination is important can be seen from the following table.

[10] See: Blommestein and Thunholm (1997).

Table 1 Budgetary restriction and coordination of policies

Fiscal policy		Debt management		Monetary policy	
D_t	=	$(B_t - B_{t-1})$	+	$(M_t - M_{t-1})$	(1)

Source: Sundararajan, Dattels and Blommestein (1997:7).

What is clear from the table is that it is necessary to have coordination among these policies for the main elements of fiscal policy (size of the budgetary deficit), debt management (issue of public debt) and monetary policy (rate of rise in money aggregates) are all interlinked. Expression (1) shows that the budgetary deficit in the current period (D_t) must be financed either by the net sale of bonds ($B_t – B_{t-1}$) to the public (banks, corporations or individuals) or by central bank loans, resulting in a rise in the money supply (M_t-M_{t-1}). It has to be said that this greatly simplifies reality for in most countries the money supply is not created only by the government borrowing money from the central bank, and in the case of Croatia is not created at all in this manner. Still, this model is the base for the understanding of the interdependence of these important policies. Until these policies can be completely divorced from each other, the need for them to be coordinated rises. There are three examples of coordination, with differing implications.

1. The monetary authorities are able to determine the money supply and thus the magnitude of the monetary aggregate M_t t=1, 2, 3…, in line with their objective, control of inflation. The deficit then depends on monetary objectives and financial possibilities. Such a solution requires the central bank to have operational autonomy in the determination of the monetary base and in addition that there is a high enough degree of coordination and fiscal discipline for fiscal balance to be maintained.

2. The fiscal authorities determine the size of the deficit D_t, t=1,2,3…, and the monetary authorities subsequently ensure the amount of monetary aggregate necessary to finance the budgetary deficit. The consequence is that the basic objective of the central bank, which is the maintenance of price stability, can be jeopardised, particularly when the fiscal deficit is high as compared with the stabilisation objectives and when the opportunities for debt issues outside the central bank are very restricted. This is typical of many countries in transition.

3. Fiscal and monetary authorities make decisions independently of each other concerning the magnitude of the fiscal deficit and the monetary base. In well developed markets for government bonds, the deficit is financed in a non-inflationary manner – by the selling of bonds, B_t, t=1,2,3…, outside the central bank, to commercial banks, non-banking institutions and individuals. In such a situation the interest and exchange rates are set in line with current trends in this developed financial market.

The situation described in the third case would be desirable, but it often not very realistic in transition countries for, because their financial markets are undeveloped, it is impossible to determine the deficit and independently affect the money supply. Transitional countries that still have a situation like that described in the second example must for the sake of coordinating fiscal and monetary policies concern themselves not only with the harmonisation of the objectives of these policies but also of the development of the financial market.

By way of conclusion to this part of the paper it can be said that in transition countries stabilisation and the development of the financial market are the common aim of monetary policy and debt management policy, and these two policies need not be strictly separated, but if they are, there must be good coordination of all the activities through which the objective is to be reached.

3.2.1 Institutional and operational arrangements for better coordination

The coordination of fiscal and monetary policy and debt management policy is impossible without concrete institutional and operational arrangements, the most important of which are[11]:

- restricting the central bank in its lending to the government, reducing potential conflicts between central bank and finance ministry
- founding a certain body to coordinate the scope of debt issues in the primary market and the objectives of monetary policy
- operational arrangements concerning exchange of information and forecasts of trends in the government balance sheet
- joint action of central bank finance ministry in fostering development of the secondary market for government bonds.

Secondary markets that function well are for important for the finance ministry for they stimulate demand and are able to absorb quite large bond issues without major difficulties. For this reason in many countries the central bank and finance ministry undertake joint activities to encourage the development of a secondary market.[12]

In the transitional phase, which is still occupied by Croatia, the central bank should go on developing open market operations, which requires everyday direct contacts with market participants and vigorous coordination of all the instruments for running monetary policy. Also very important is exchange of information between central bank and finance ministry in order to be able to keep up with and forecast trends in the balance sheet of government revenue and expenditure.

In the developed phase, in which the financial market is already quite deep, the objectives of running the monetary policy and public debt management can be separate because good coordination is achieved by market operations and market signals, and the further development of market institutions and instruments increasingly reduces the possibility of clashes.

As for working on the primary market, there are three arrangements for debt management and monetary management.

[11] Ibid.

[12] The example of Slovenia, in which through collaboration between finance ministry and central bank an organised OTC treasury bills market was launched.

1. The primary market is also used for monetary management and public debt management, but with different instruments.[13] The monetary instruments are central bank securities (in the case of the CNB these are central bank bills), special central bank deposits (mandatory reserves), special issues of treasury bills or loan auctions, and for the management of the public debt, only government securities are used.

2. The primary market is used only for the issue of government securities, and the central bank works only on the secondary market, in operations with high-quality government securities on the open market. This kind of solution is employed in most of the developed countries.

3. The primary government securities market is used for both monetary and debt management. This model, because of the lack of development in the secondary market, is employed in most of the transition and developing countries.

The greatest need for coordination exists in the third arrangement, which is typical of the developing country, while the second arrangement requires a lower degree of coordination between monetary policy and debt management policy. It is best for transition countries in which the government securities market is not developed enough to choose the first option, in which it is most important clearly to define the common and the individual responsibilities of monetary policy and of public debt management policy. It would seem that the problem in Croatia is that it has chosen this model, but yet has not clearly defined the common and the individual responsibilities of debt management and monetary management.

3.3 Developed countries

Coordination of debt management policy and monetary policy is an omnipresent theme in developed countries, and the criteria in Maastricht ordering every EU member state to limit its budgetary deficit at 3% of GDP, its total public debt to 60% of GDP and to keep inflation at the lowest possible level (about 2%) are along these lines. These percentages are not chosen at random. If one starts from the assumption that member states of the EU on average have a nominal rate of growth of GDP of about 5%, which is the result of a 3% real growth and an average inflation of 2%, the relation between the 3% and the 60% is much clearer. For the 3% is exactly 5% of the 60%, and looked at economically, for a state with a nominal growth of GDP of 5% and a budgetary shortfall of 3% of GDP over the long run the public debt will stabilise at the 60% level (Orban and Szapary, 2004). Although these convergence criteria are not arbitrarily set, the choice of them is called into question in many EU countries, and for several reasons. The most important reasons are that these criteria are fairly restrictive for the actual members of the EU, and that countries are very different in their economic structures and starting conditions, and so what is optimal for one does not have to be so for another economy (Švaljek, 1997).

It is hard to meet these criteria without good collaboration and coordination between fiscal, monetary and debt management policies. The lack of coordination among these pol-

[13] This model is formally still applied in Croatia, but the last auction of central bank bills was held as long ago as April 23, 2004, and Croatia is accordingly drawing close to the second model, employed by most of the developed countries.

icies can lead to macroeconomic instability and insecurity for the private sector as well as to inflation greater than planned, which will result in all those responsible for the policies losing credibility. For illustration, if, for example, current government spending is not financed from current taxation and non-tax revenue of the government but by high deficits and public debts, then aggregate demand can rise very sharply, and with it inflation. Hence it is desirable for the government, under the same conditions as all other sectors, to take out debt only on the market. Still, excessive government borrowing from the banks is often a key factor affecting general monetary expansion, and for this reason certain fiscal adjustments to halt this expansion are necessary. If adjustments are not made, and certain measures to halt monetary expansion are taken, the private sector will pay the highest price, being squeezed out of the loan market. In this manner economic growth can be slowed down, and this is the ultimate consequence of poor coordination of these important policies.

Most of the developed countries pay great attention to issues of the coordination of monetary policy and debt management policy. In the UK, for example, the central bank advises the treasury in matters of coordination and on behalf of the treasury carries out market operations with government bonds. In Ireland a working group at the highest level of the finance ministry, the central bank and the debt management agency meets regularly in order to harmonise monetary policy and debt management policy as well as possible. In Sweden the debt management office is legally obliged to meet and negotiate with the central bank about monetary policy. In Sweden there are two commissions for coordination, for domestic and foreign debt (Crona, 1997).

Thus, in spite of the financial market being highly developed in these countries, and coordination being largely achieved by the operation of market mechanisms, there is still need for the coordination of these important policies.

3.3.1 Foundation of working groups for coordination

For the sake of coordinating debt management and running monetary policy, in many countries formal or informal working groups are set up. These groups have an important role in reducing or entirely obviating conflicts in the aims of central bank, finance ministry and debt management agency; they are composed of senior representatives of all these institutions. The remit of such coordinating bodies differs from country to country, but most of them have the following activities in common:

- planning the sale of government bonds, including the establishment of quarterly and annual objectives, for which it is necessary accurately to value government revenue and expenditure. It is also necessary to pay attention to the aims of monetary policy
- collaboration and consultation with financial institutions about their preferences to do with the characteristics of existing debt instruments
- discussion of the use of debt instruments for monetary purposes and about the modernisation of the government securities market
- debates about necessary changes in the primary market, including the procedures and frequency of auctions and the planning of the introduction of new instruments (Leite, 1992).

Apart from such mixed working groups, the central bank will often found its own internal group for monetary management, which is supposed to make sure of the harmonisation of the differing factors that affect the trends in bank reserves and the money supply so that the stability of the monetary supply should not be distorted. Everyday implementation of market interventions is usually assigned to the monetary operations department of the central bank.[14] As the market develops, so also develops the need for day-by-day exchange of information among the departments for the implementation of monetary operations and institutions for public debt management.

3.4 Why conflicts arise and whether they can be avoided by better coordination?

Conflicts arise between debt management policy and monetary policy because debt management is primarily aimed at finding a compromise between costs and risks, while monetary policy is usually aimed at preserving price stability. We list below the most frequent areas of potential conflict between debt management and monetary policy.

Level of interest rates. In conditions of large rises of monetary aggregates and dangers of inflation the central bank will often, for the sake of preventing inflation, take measures that tend to lead to a rise in the interest rate. This can be opposed to the intentions of the fiscal authorities to borrow on the domestic market under conditions as favourable as possible.

Rising government borrowing on the financial market. Central banks often warn governments that any borrowing, not matter what the purpose, can have monetary effects that must be taken into consideration. For example, the sale of large quantities of government securities can lead to too great a rise in government deposits, and hence to danger of too great a rise in government spending, and to inflation. And so it is important that the central bank obtains prompt information about planned borrowing and intervenes in time so as to achieve its fundamental goal – the preservation of price stability.

The similarity of monetary policy instruments and debt management policy instruments and their working in the same segment of the market. The issue of similar instruments for different purposes (instruments of monetary policy are issued for the sake of managing the liquidity of the system, and public debt management instruments for the sake of acquiring the financial resources that the government needs) confuses players on the joint market creates an unnecessary rivalry between these instruments. If central bank securities and government securities are issued at the same time, there can be a conflict of monetary authorities and the institution for the management of the debt, in the sense of coordination of their maturities. For this reason it would be desirable to limit the maturity of central bank securities to shorter periods (at best 1-3 months)[15] and the maturity of government treasury bills should be longer (3 to 6 months). This kind of approach will considerably reduce the direct competition between the treasury bills and the central bank securities. For this reason the CNB too has stopped issuing central bank bills (or CNB bills) with a maturity date similar to that of the treasury bills of the Finance Ministry. Now

[14] There is a department of this kind in the CNB as well.

[15] This is a period that is long enough for the achievement of the aims of monetary policy – liquidity management.

the CNB may issue central bank bills with short maturity terms (35 days) and the Finance Ministry treasury bills with longer maturities (91, 182 and 364 days).

It is very hard to avoid conflicts between these two policies completely, for sometimes there real objectives are opposed (particularly to do with the level of interest rates) but with better coordination of their activities and the determination of joint aims these conflicts could be made much less frequent.

3.5 Development of the government securities market as precondition for better coordination

The development of the government securities market has a positive effect on the achievement of the objectives of monetary policy and the public debt management policy for it ensures greater transparency and predictability of the public debt management policy, which then makes it easier to conduct monetary policy. There are several ways in which the government securities market and the accomplishment of public debt management and monetary policy are connected, as can be seen below.

- As agents for the collection of financials resources for government purposes, persons who manage the debt are interested in the proper functioning of the government securities market and its efficiency, all with the objective of minimising the debt servicing costs.
- As institution competent for the implementation of monetary policy, the central bank endeavours to promote effective establishment of interest rates as important element of the transmission mechanism for monetary policy. Since the central bank will often intervene via the government securities market, the proper functioning of this market is important for the accomplishment of the aims of monetary policy.
- Monetary, fiscal and other regulatory authorities have a joint interest in the development of an effective government securities market, for the sake of achieving macroeconomic stability (Dattels, 1995).

The development of an effective government securities market is in the interests of both the public and the private sector and we can consider it a public good that is useful to all who pay taxes because it ensures lower debt servicing costs, and it is useful to the whole financial sector, for it promotes safe and effective forms of saving and investment.

It is very important, for good functioning of the market, to choose a market structure that best corresponds to the needs and capacities of the individual country. Market structures are increasingly tending to change and from auction-agency markets are in practice increasingly operating as dealer markets. In many countries this trend is encouraged by the government, in whose interest it is that there should be specialised primary dealers of government securities, who make it easier to carry out monetary operations and debt management operations.[16]

Since new kinds of government securities are constantly appearing (derivatives, options) and since the technology is increasingly progressive, the market structure has to

[16] Ireland has a particularly well organised system of primary dealers for government securities.

adjust, and the majority of developed markets have electronic trading systems. In some countries, differing market structures serve different market segments, and, for example, appropriate systems are introduced to encourage small investor investment in government securities.[17]

Countries in which government securities are largely held and traded by the household sector should have an auction-agency market, which is transparent and enables low transactional costs, while in countries in which government securities are mostly held by specialised institutions with large portfolios, who want transactions to be carried out at once, the best solution is a dealer market (Dattels, 1995).

In eurozone countries securities are often sold via a syndicate of financial institutions, which is a good alternative to auctions for countries with insufficiently developed financial markets as well. In countries in which there is no liquid secondary market the government will find it hard to set a price that will be acceptable for a new issue of securities, and then the syndicates are very effective in minimising the risks of selling government securities.[18] Today, however, there are more and more countries that make use of a network of primary dealers for the distribution of government securities. Thus during 2007 the Finance Ministry is planning to introduce a system of primary dealers, for it thinks it will thereby achieve greater market liquidity, which helps in the establishment of reference yield curves, ultimately resulting in an optimisation of the costs of government borrowing (Ministarstvo financija, 2007). This Finance Ministry intention can be considered a step forward in coordination with monetary policy, for better market liquidity and fewer interest rate oscillations are in the interest of the CNB. In Slovenia through collaboration between central bank and finance ministry, in 2002 a system of primary dealers for treasury bills was introduced, and in as little as six months, the costs of government borrowing fallen by two percentage points. Not only have interest rates fallen, but the yield curve has become less steep, in fact almost horizontal, which means that the maturity premium has also reduced (Dolenc, 2003). The introduction of primary dealers brings a number of advantages, but certain risks as well. There is no doubt that through this system of sale of government securities, a broad investor base is secured, and the liquidity of the market is improved. But if such a system is chosen, there must be objective criteria for the selection of primary dealers, and their rights and obligations must be clearly determined so as to prevent any possible abuse (Glaessner and Ladekarl, 2001).

4 Coordination in Croatia to date: planned activity or an uncontrolled process?

Coordination of goals, instruments and institutional solutions in the management of the public debt and in monetary management is particularly important in transition countries like Croatia. In countries where there is a strict institutional division of goals and responsibilities for the management of the debt and for monetary management and that have a well developed financial market, this coordination is accomplished by the work-

[17] In Spain, for example, the Madrid stock exchange has introduced a computer system that enables rapid access and transparent trading to small investors, and in Italy the Rome stock exchange has introduced an electronic auction market for the "patient" retail trading of government securities.

[18] This technique for selling government securities is applied in Croatia as well.

ing of market mechanisms and the importance of formal coordination is much less. Since the market in Croatia is still not well enough organised or arranged, it is necessary to have better coordination of debt management and monetary policy running, particularly at the operations level.

It would seem that in Croatia, ever since the establishment of independence, not enough attention has been paid to coordination of public debt management and the running of monetary policy. In the last fifteen years, these two important policies have been run independently, although the instruments used (central bank and treasury bills) have been very similar and operated in the same segment of an insufficiently well developed financial market. This kind of separation between debt management and monetary policies is totally acceptable and even desirable on condition that good coordination between the two policies is effectuated. Coordination of the objectives, instruments, institutional and operational arrangements between public debt management and running the monetary policy are important not only for avoiding potential conflicts of jurisdiction but also because by joint action, exchange of information and technical collaboration it is possible to speed up the process of market building, expand the room for manoeuvre of fiscal and monetary policy, encourage saving and as a result of all of this support the macroeconomic stability of the country (Babić et al., 2001).

Nevertheless, it has to be admitted that in the last few years a major move in the direction of coordination has been achieved, both formally and practically. Formally this was most produced by the existing CNB Law, which prohibits direct government borrowing from the CNB. Nevertheless at the same time, the ability to carry out open market operations was opened up, and this in an indirect way expanded the ability of the government to borrow on the local market. It can also be concluded that a step forward from the point of view of coordination was embodied in the decision of the CNB to abolish the regular issue of central bank bills with the same maturity as that of the treasury bills of the Finance Ministry[19]. It can also be said that this measure was probably motivated by the joint wish of the CNB and the Finance Ministry to that these securities should not compete with each other, that the demand for treasury bills should be increased, and that public debt management should be oriented more to the domestic market.

In the relations between the Finance Ministry and the CNB today, the greatest problem is lack of adequate communication as well as the distrust that occasionally appears between the two institutions. Although in joint communiqués during formal meetings the good collaboration is stressed, in practice things are often quite different. In May 2005 the Finance Ministry reacted extremely intemperately to the decision of the CNB Council to increasing the marginal foreign currency reserves for foreign debts from 30 to 40%. The CNB often drew attention to the rise in foreign debt (Rohatinski, 2004; 2005), which could well endanger the country's financial stability, and since these warnings were not heeded, the CNB took appropriate measures. Still, the Finance Ministry uttered opinions that before the introduction of this measure the CNB should have consulted the ministry and that it had been late in passing this measure that at the moment when the government

[19] The last regular auction was held on April 23, 2004, and within the fine adjustments operations it was possible to issue central bank bills with very short maturities (35 days).

was more and more addressing the domestic market might have affected the rise of interest rates and a renewed resort to foreign borrowing (Finance Ministry 2005). By contrast, the CNB viewpoint is that the stated restrictive measures of monetary policy were taken to meet the basic elements of the policy defined in the existing stand-by arrangement with the IMF. One of these elements was the issue of the foreign debt that had in the last few years grown rapidly and that from 13.5 billion euros at the end of 2001 had increased to about 29 billion at the end of 2006, rising as a proportion of GDP from 61 to 85%. It is in the interest of the whole of the domestic economy that the Government and in particular the Finance Ministry should be more actively involved in addressing the problem of high foreign indebtedness. In the CNB it is thought that all the measures taken have the exclusive objective of preserving monetary stability, which is in everyone's interest, and that the CNB, whenever monetary conditions permitted, did everything to enable the government to borrow money on the domestic market (Rohatinski, 2005).

In spite of the existence of the collaboration committee between the Finance Ministry and the CNB, and the Croatian National Bank Law that binds the Finance Ministry to make regular reports to the bank concerning all transactions of the central government budget and all operations related to the public debt[20], collaboration has never been good enough and definitely needs improving. For example when the monetary projections of the CNB are being constructed, it is very important to have timely delivery of the relevant data on all current and planned transactions of the budget. And yet it has happened that the CNB has not received such information on time, which cast doubt on the reliability of its monetary projections.

In recent times positive signals have been observed in the coordination between the CNB and the Finance Ministry, particularly to do with certain arrangements connected with the money market. Because of the increasingly significant money surpluses that appear from time to time in the accounts of the state, the Finance Ministry plans to locate these surpluses on the money market, and thus consults with the CNB. The government receives an interest of 0.68% for money that it keeps with the CNB, and by lending the money surpluses on the money market it can obtain a much better rate. The CNB has nothing against this, for it thinks that lending the surpluses on the money market rather than spending them can have the result of additionally reducing the interest rates and in addition is an indication of more rational behaviour on the part of the government and better cash management.[21] It should be said here that these improvements are definitely connected with the introduction of the centralised system of the government treasury, which is being increasingly computer enhanced and in future should make sure of a still more rational management of the cash of the government treasury, which should also have a positive effect on public debt management Before the introduction of the treasury system, there were thousands of accounts in which budgetary resources were held, and it was possible that the state was having to borrow on the market even when it had resources avail-

[20] Article 34, Croatian National Bank Law (OG 36/01)

[21] The level of government deposits in the CNB is constantly on the decline and thus in December 2005 they came to 604 million kuna, while in December 2006 they were only 293 million kuna, which can indicate better liquidity management.

able, which because of bad liquidity management it did not make use of. With better liquidity management the need for government borrowing has been reduced, and above all for short-term loans to maintain current liquidity, which are very expensive and in addition increased the costs of managing the public debt. Better management of government cash also reduces the potential danger of monetary expansion and the need for CNB interventions, the liquidity of the corporate sector is improved and the chances of it being squeezed out of the financial market are reduced.

The issue of harmonising public debt management policy and the running of monetary policy has a powerful reflection on the state of liquidity in the banking system and affects the development of the primary and secondary market for bonds. The total value and time of the issue of government securities will not always coincide with the needs of the CNB's monetary policy, and it can happen that the government will issue certain securities even when there is a market shortage of liquidity. The CNB then has to adopt some measure to ensure additional banking system liquidity. For this reason it is highly important that the bodies responsible for debt management and for fiscal and monetary policy should regularly exchange information about current and future government financial resources requirements. Such harmonisation of the running of monetary policy and the policy of public debt management is at the moment quite limited, and exchange of information is mostly implemented between the governor and the minister, while exchange of data among the individual departments of the Finance Ministry and the CNB is at a very low level (Svjetska banka and Ministarstvo financija, 2005). It should also be said that current coordination is better in the sphere of the money market, which is very largely thanks to the introduction of open market operations. Interest rates on the money market are constantly going down, and this is reflected in the capital market. Still, there is work to do on better coordination of the Finance Ministry and the CNB during the issue of kuna denominated bonds, every issue of which has a powerful effect on the liquidity of the financial system, and timely information about all issues related to the issue of them is exceptionally important for financial system stability.

Instead of a conclusion to this part of the paper it can be said that in spite of certain improvements in the last few years, coordination to date between public debt management and monetary policy has been more of an ad hoc and unsystematic nature than a planned activity. Of course, because of the difference in the basic objectives and functions of the two institutions, sometimes it is impossible to avoid conflicts, but they would certainly be rarer if there were better collaboration between them.

4.1 The independence of the CNB and obstacles to coordination with the Finance Ministry

The CNB has achieved a very high level of autonomy, and occasional attempts at pressure need not be taken seriously since this happens in many other, much more developed, countries. The CNB has a statutory foundation for its independent conduct of monetary policy. Of course, independence ought not to imply isolation and self-sufficiency in the CNB, for it can accomplish its aims only in collaboration with other institutions. Hence it is important once again to stress that better coordination with the CNB and the Finance Ministry has to be achieved, and a first step in this direction should be the achievement of an at least approximate consensus on the optimal combination of fiscal and monetary policies.

It has turned out many times that only independent institutions can be good collaborators, without having to jeopardise their basic functions. Thus in the Croatian National Bank Law there are clear provisions about borrowing at home and abroad, but nothing about the financing of this borrowing, and the occasional pressures along these lines are without basis. Collaboration and coordination of monetary and fiscal policy, and so public debt management policy, are very important for the conduct of a consistent economic policy.

The existing obstacles in the way of better coordination are as follows:

- The occasional lack of promptness in delivering data to the CNB about revenue and expenditure of the government and about planned borrowing; these are exceptionally important for forecasting the liquidity of the financial system. For precise forecasts, two elements are crucial: the trends in cash outside the banks and the trends of government kuna denominated deposits.
- Although communication between the CNB and the Finance Ministry does exist, it is still not good enough, and there are occasional mutual recriminations via the media, which are sometimes unworthy of such institutions.
- The financial market is still not developed well enough, particularly the government securities market. It should be said however that thanks to the introduction of open market operations the market for government securities has become much more vigorous in the last few years. To encourage further development of this market the CNB and the Finance Ministry could jointly initiate the introduction of government securities primary dealers, which in Slovenia has proved to be outstandingly good.
- Fiscal policy is still insufficiently transparent, although improvement is to be expected in the coming years. At the beginning of 2007, for the first time, the Finance Ministry published a Public Debt Management Strategy for the coming three years, and a calendar for the issue of government securities for 2007[22]. Still, the Strategy does not have detailed elaborations of risk management models, which are very important for keeping debt management costs down. Ireland could serve as a model for us; its strategy includes high quality risk management, and the Irish debt management agency monitors the trends in interest rates on the financial market and borrows only when it assesses the interest rate as being favourable, and will often refinance debt issued at a higher rate of interest with a debt at a lower rate.[23]

The CNB has often warned that it is not well enough informed about government policy, although the CNB Law lays down the government's obligation to supply the central bank with all proposals and reports that relate to the objectives, operations and tasks of the CNB, including drafts of laws, before they are sent to Parliament. The CNB should also, according to this law, give its opinion on all these proposals.

[22] (http://www.mfin.hr/str/143/).

[23] Thanks to this kind of management, debt servicing costs in 2004 were about 350 million euros lower than the resources earmarked for the purpose (http://www.ntma.ie/Publications/2005/Annual_Report_2005.pdf).)

If there were better communication about fiscal and monetary policy and better quality and more frequent communication with the public from the CNB and the Finance Ministry, as well as better presentation of their objectives and tasks, then probably there would be fewer misinterpretations of some of the activities of these important institutions.

4.2 Measures of monetary policy for better debt management

In the last few years the CNB has taken a number of measures to facilitate public debt management without having its basic objective, preservation of price stability, jeopardised. Thus through a decision of the CNB Council in October 2004 the rate of the mandatory reserve was reduced from 19 to 18%, which made it easier to accomplish the issue of government bonds with which the Finance Ministry is endeavouring to replace some of the excessive foreign debt with domestic borrowing. With kuna collected from the CNB, the government bought the foreign currency necessary for the repayment of the Samurai- bonds that had fallen due in mid-December 2004, and with this purchase it also neutralised the effect of the issue of bonds on domestic monetary trends. In January 2006, the mandatory reserve rate was again reduced, from 19 to 17%, which made sure of sufficient quantities of liquid resources for the accomplishment of the issue of kuna denominated bonds of the Finance Ministry in December 2005 and February 2006. Such measures are fully in harmony with the practice of developed countries, and are also in line with the long-term policy of the CNB, which is aimed at the gradual reduction of the rate of the mandatory reserve.

In its measures the CNB always endeavours to support the government in its attempts to finance budget deficits without resort to new foreign debts (HNB, 2006). For the sake of greater government financing on the domestic market instead of additional borrowing abroad, a decision of the CNB in February 2005 resulted in a reduction of the minimum rate of coverage of foreign liabilities of banks with foreign currency claims from 35 to 32%. This set free about 4 billion kuna, which provided the banking system sufficient liquid resources for the purchase of the government bonds issued in April to the value of 3 billion kuna, without squeezing the other sectors out of the financial market. If the government had not then met its current requirements on the domestic market, it would have covered them with an issue of 500 million Eurobonds on the foreign market, thus exacerbating an already too large foreign debt (HNB, 2006).

For the sake of institutional and operational independence, the central bank may not adopt measures directly aimed at the reduction of the costs of debt management, and yet this independence does not prevent it from achieving better coordination with the Finance Ministry or from taking measures to make it easier, indirectly, to manage the debt. In line with this, in April 2005, the CNB launched operations on the open market that, although taken above all for the advancement of monetary policy, can make it much easier to manage the public debt. The introduction of this instrument facilitates Finance Ministry borrowing on the domestic financial market and tends to increase demands of the banks for treasury bills of the Finance Ministry (HNB, 2006). Apart from that, new changes in the regulations about minimum bank liquidity have released additional liquid resources for the short-term refinancing of government Eurobonds that fell due for redemption in 2006.

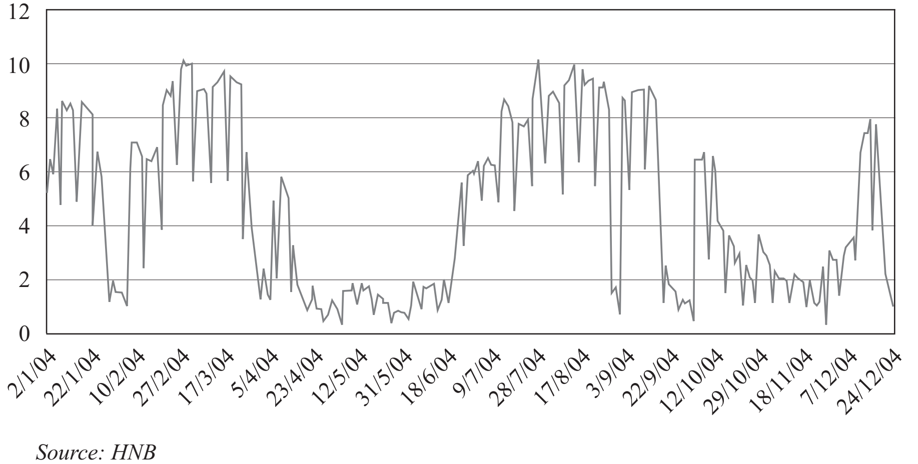
In the transitional phase that is still that of Croatia, the CNB should further develop its open market operations, which requires everyday direct contact with participants in the market and vigorous coordination of all monetary policy instruments. At the same time one should take care of the forecasting of trends in short term liquidity in the financial system, which is very essential for the running of open market operations. For precision of forecasting, it is important to exchange information between central bank and finance ministry, in order to be able to track and forecast trends in the balance sheet of government revenue and expenditure.

At the end of this part of the paper it can be said that the CNB with all its measures to date, measures undertaken to make the management of the public debt easier and to substitute domestic for the mounting foreign debt, has achieved halfway results, which, without the support of other entities charged with economic policy, was to be expected. It would be most important for those responsible for fiscal policy, with the support of the CNB, to take over as soon as possible a more active role in the settlement of external disequilibrium problems and the concomitant vulnerability (CNB, 2006).

4.3 Introduction of open market operations – an important step on the way to better coordination

Some analysts characterised the very announcement of the CNB that it would introduce open market operations as a desire to take over the function of debt management. But on the contrary, the fundamental function of open market operations is to smooth down the great fluctuations of interest rates on the money market. The overnight rates in the last few years oscillated in a range from 1 to 11%, which directly makes it impossible to form reference interest rates for short-term and long-term sources of funds, without which there can be neither development nor deepening of the financial markets (Rohatinski, 2004). The following figure shows these great oscillations during just one year, 2004.

Figure 1 Trends in overnight interest rates during 2004 (in %)



Source: HNB

Since stabilisation of the interest rates is an essential precondition for quality public debt management too, the Finance Ministry is also very interested in introducing OMO and should collaborate with the CNB and exchange all information to make them easier to carry out.

Table 2 shows the basic kinds of OMO, and all the other important elements essential for those taking part in the operations.

Table 2 Open market operations

Kind of operation	Instruments		Frequency	Maturity	Implementation
	Creation of liquidity	Withdrawal of liquidity			
Regular operations	Reverse repo	–	Weekly	One week	Auction
Fine adjustment operations	Reverse repo operations	Repo operations	Irregular	Not standardised	Auction
	Direct purchases of TB	Direct sales of TB	As required		Bilateral agreement
Structural operations	Direct purchases of TB	Direct sales of TB	Irregular	Not standardised	Auction
	Reverse repo operations	Repo operations	As required		Bilateral agreement

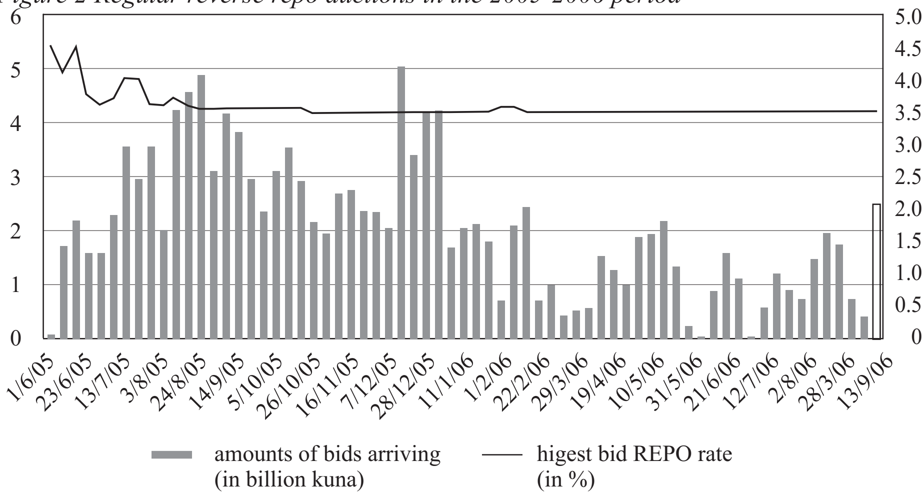
Source: HNB

The most important OMO are actually the repo operations that are carried out once a week via auctions, in which as only the treasury bills of the Finance Ministry without any foreign currency clause will at first serve as the collateral. Later these operations can be expanded to kuna denominated securities of longer maturities, such as government bonds.

On the day of the auction the banks have to telephone in their bid or supply it via the Reuters dealing system by at the latest the time announced in the auction announcement. The minimum bid is of a million kuna. The CNB will accept bids arriving up to the time when the anticipated amount of liquidity it wishes to withdraw from the banking system has been reached, or alternatively the amount it wishes to release into the banking system. Up to the time of the establishment of a settlement system on the principle of delivery of securities on payment, the transfer of the money is carried out via the CLVPS (Croatian Large Value Payments System) and the transfer of securities via the Central Depositary Agency on the principle of delivery of securities without payment. In July 2005 the application of the settlement system of delivery of securities concomitantly with payment began, and this is very important for the development of OMO, and in general for the expansion and development of the secondary market and the appearance of a larger number of different market participants.

Since OMO were introduced in April 2005, when there was a very high level of liquidity in the money market, the first eight regular repo auctions went by without any transactions at all, and it was only at the ninth auction that the value of the bids arriving was a symbolic 10 million kuna. It was expected that the number of bids would be greater in the periods when the level of liquidity in the money market fell. This really did happen, and auction after auction the total amount of bids moved in line with the situation respecting the liquidity of the banking system.

Figure 2 Regular reverse repo auctions in the 2005-2006 period



Source: HNB

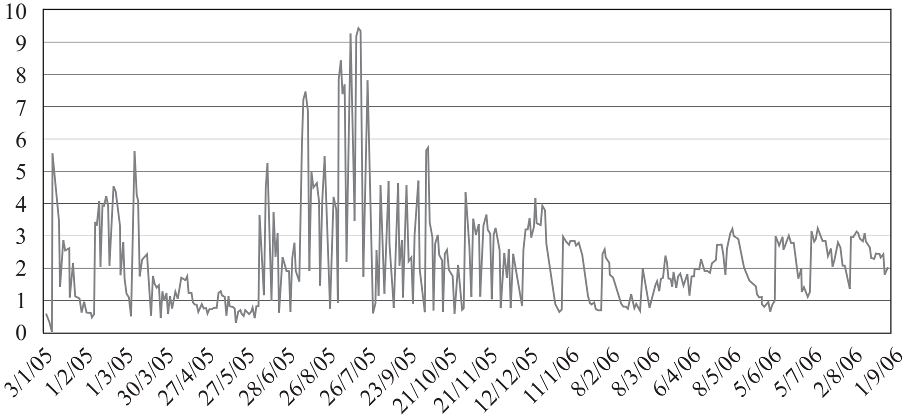
It can be seen from the figure that the values of bids coming in oscillate, and the amounts of bids were the greatest during the summer and in December, when the requirements for cash are the highest. Nevertheless, in 2006 the values of bids were not high even during the summer months, which shows high liquidity in the financial system. In spite of the government during 2006 considerably enlarging its borrowings from domestic banks[24], this was not reflected in the regular reverse repo auctions, probably because they were largely short term debts that were at once used for the payment of outstanding liabilities falling due. Of course, it would not be good for the government constantly to increase its borrowing on the domestic market (although because of the great rise in the external debt the government is increasingly oriented to domestic market borrowing) for this can lead to a shortfall in liquidity and an increased participation of banks in the repo auctions, and hence to monetary expansion and inflation. In this case the CNB would have to react with restrictive measures of monetary policy, and the highest price would then have to be paid by the private sector, which might find itself being squeezed out of the financial market.

[24] In March 2006 the level of internal government borrowing from the banks rose by about 2.6 billion kuna over the March figures.

Luckily, no such scenario was played out during 2006, and it is to be hoped that with sensible government spending and still better collaboration between the Finance Ministry and the CNB it will not happen.

Perhaps it is too early to make any hard and fast conclusions, but it would seem that OMO have produced good results already. Since their introduction in April 2005, the interest rates on the money market have shown smaller oscillations, as visible in Fig. 3. During summer 2005 these oscillations were still great, but by October they had fallen essentially, and since November 2005 the rate has not exceeded 4.15%.

Figure 3 Overnight interest rate in the 2005-2006 period (%)



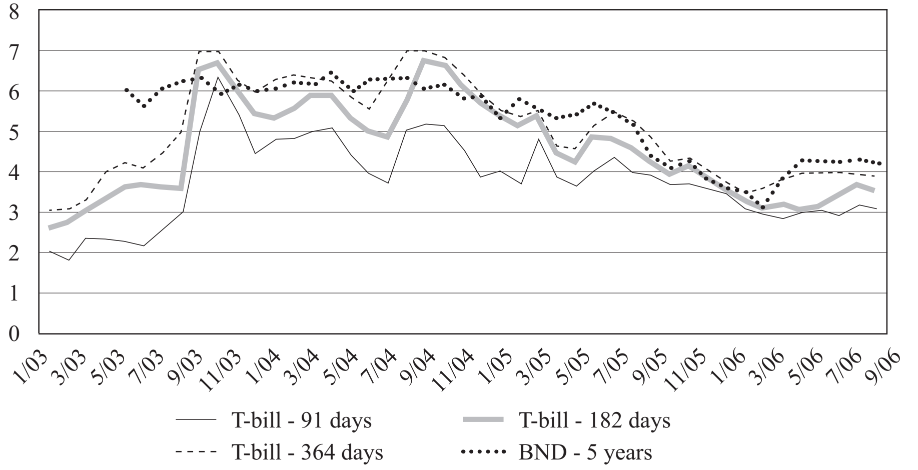
Source: HNB

The stabilisation of the interest rates achieved with longer implementation of OMO positively affects the debt management policy. With the stabilisation of the overnight interest rate, the interest rates on treasury bills and bonds have also been stabilised, as well as reduced, as can be seen in the following figure.

Figure 4 shows that up to mid-2005, until the introduction of OMO, then, interest rates on treasury bills oscillated very considerably. It can also be seen that at the beginning of 2003 the government borrowed on the money market selling treasury bills at an interest rate of about 2.55% and yet by the end of 2003 this rate had risen to a high 7%, which necessarily was reflected on the growth of management costs for the total public debt. After the CNB started OMO in April 2005, the demand for government securities rose, and the interest rates on government securities oscillated far less, and gradually stabilised at around 3.85%, which resulted in a reduction of the costs of debt servicing.[25]

[25] On June 14 2005 the interest rate on treasury bills with a maturity of 365 days was 5.25%, and on September 5 2006 only 3.85%.

Figure 4 Yields on treasury bills and kuna denominated bonds in Croatia in the 2003-2006 period (%)



[a] *For treasury bills – average monthly rate; for bonds – according to price of the last day of trading in the month.*

Source: HNB

Open market operations open up the possibility for the government to borrow more on the domestic market, with ever more favourable conditions, while the CNB will have to keep an eye on the growth of monetary aggregates not leading to destabilisation of the exchange rate, growth in inflation and the squeezing of other sectors out of the borrowers' market. For this reason it is completely clear that the indirect monetarisation of part of the fiscal deficit via OMO does not reduce the onus on the state to reduce its deficit considerably, for only such a reduction can open up a space for OMO. If the government had in the recent few years made greater efforts to reduce the budgetary deficit, then the CNB would probably have made a decision to introduce OMO earlier (Rohatinski, 2004).

The development of OMO will lead to a gradual accumulation of a certain amount of government bonds in the CNB portfolio, and it will manage them actively, all of which will have a positive effect on the development of the government securities market. Open market operations are effective in improving the functioning of the money and capital markets, and will lead to an improvement in the short-term liquidity of the banks, for they will be able to refinance their short-term liabilities at the CNB.

The public gained the impression, after the announcement of the CNB's intention to carry out OMO that it was a concession to the Government that was no longer directly able to borrow at the central bank. Such ideas are legitimate and it is true that the measure will help the Government to switch its borrowing for the financing of its needs more to the domestic market, but it is also true that it will help in the development of the domestic financial market and the stabilisation of the foreign debt, which during the last few years has grown so enormously as to become the basic macroeconomic problem in Croatia.

All this leads to the conclusion that the introduction of open market operations is a measure that is useful for the whole of the economy and that we have in this way come a step closer to the EU, in which most of the member states have for many years used such operations. It is most important here not to forget that OMO are an instrument of monetary policy only, and not a debt management policy, and hence the management of government securities in the CNB portfolio will be motivated exclusively by monetary considerations. Through the introduction of OMO the CNB is not taking a more significant role in debt management, and the Finance Ministry will still have the main role in and full responsibility for this. In introducing open market operations the Croatian National Bank has only laid the foundations for future better coordination, and any other involvement of the CNB in debt management would be nothing but a conflict of interests.

5 The importance of further development of the government securities market for the advancement of coordination

Experience shows that coordination between central bank and finance ministry is much better in countries that have already taken essential steps to financial reform and that have a well developed government securities market. A great problem in transition countries is the prevailing application of non-market although effective monetary instruments such as the mandatory reserve, which slows down the development of an efficient and deeper market for government securities. Still it seems that in recent years a major step forward in the development of a market for government securities has been taken, which has been aided by the CNB reducing the rate of the mandatory reserve; in 2000 this was still 30.5% but is today 17%. Of course, the CNB also paid attention to the preservation of the monetary stability of the land when it made its decisions concerning reduction of the mandatory reserve.

Croatia has a developed legislative framework for the development of a modern and deep financial market, but this is not enough, and a lot of effort has to be put into the development of new financial instruments, and the government also needs to make a contribution to this. We still have a poor financial structure with a dominant role played by the banks and an insufficiently developed secondary market to ensure greater liquidity of financial instruments.

The development of the domestic market of government securities is frustrated by excessive reliance on Eurobonds and the prevailing share of euro-linked bonds in the domestic market. Still, since 2000, major advances have been made. The market for kuna debt instruments has been made deeper and liquidity on the secondary market is increased, primarily thanks to the development of institutional investors, the most important of which are the pension funds. A great shortcoming until quite recently was the insufficient transparency of the government securities primary market, and this will be improved by the publication of the calendar of security issues by the Finance Ministry.[26]

[26] See: http://www.mfin.hr/str/143.

In spite of the existence of a well-organised Zagreb Money Market[27], it accounts for only about 30% of total transactions, and the remaining 70% are done through the interbank money market. To protect market share, the ZMM started to develop a new system of trading that should enable its transformation into a hybrid bourse for trading in money and government securities. For the moment our money market is in fact just an overnight market in which trading goes on in money that is surplus to the mandatory reserve, and not a place for trading in short-term securities.

The most important stimulus to the development of the domestic market in government securities was injected by pension reform and the foundation of a number of pension funds that all, according to the Pension Funds Law, have to have a large part of their assets invested in government securities.[28] Perhaps it is not the happiest of approaches to oblige the funds to make certain investments if they are not in harmony with the market principles of operation, but this is sometimes necessary in countries that are only just developing a financial market and in which there is still a great aptness for moral hazard, and in most financial institutions risk management has hardly become viable.

The introduction of OMO is a new stimulus to the development of the government securities market. How vigorous the development of the government securities market is can be seen from the great interest elicited by the four issues of government kuna-nominated bonds. The demand for these kuna bonds was thrice the value of the issue, and the government soon found purchasers for a much bigger issue. The most important reason for such a great interest was the very high rate of interest, and those who had a surplus of cash did very good business. Such positive signals that come from the government securities market can considerably help the Finance Ministry in the creation of its debt management policy in the future. Obviously in making decisions about borrowing the government will have to rely increasingly on the domestic market, and with ever more favourable rates of interest on the domestic public debt.

A big problem of the Croatian financial market is that the retail sector, which has a big potential for such investments, is not given the opportunity to invest in various government securities.[29] The retail sector is still completely neglected, and yet it could invest considerable resources in various kinds of government securities, but only if a good infrastructure is developed for the sake of a simple access to the market with a safe system of trusteeship. Hungarian experience might provide us with a model. One of the important objectives of the Hungarian debt management agency is to maintain several channels of distribution for direct sale to the retail sector. Thanks to this, the share of the small investor in the purchase of government securities is about 10% of the domestic debt, far from negligible. However, for the man in the street to make still greater in-

[27] The ZMM started working in 1990 pursuant to the Money Market and Capital Market Law (OG 51/93). Supervised by the CNB, it operates as an independent joint stock company owned by its 24 shareholders (22 banks and 2 insurance companies).

[28] The fund must put at least 50% of its assets into long-term debt securities issued by the Republic of Croatia and the CNB.

[29] According to CNB data, at the end of 2005 the retail sector had about 15.6 billion kuna of savings and time deposits in kuna (which are growing all the time) and 73 billion kuna worth of savings and time deposits in foreign currency, a large amount of which could be invested in government bonds.

vestment in government securities, they are on sale the whole time via 2,800 Hungarian post offices.[30]

In all countries with a developed market of government securities the internal debt is greater than the foreign, while in Croatia, at the end of 2004 already, the foreign debt was 54% of the public debt, and the internal debt 46%. Yet the situation changed during 2005, which was very largely due to the increased sale of government bonds on the local market during the previous two years. Some experts think that foreign credit rating agencies give better ratings to countries that have a greater degree of domestic debt in the total public debt (Svaljek, 1998). As against this, some think that the rating and solvency of a country are unaffected by whether the borrowing is in the domestic or the foreign market. In spite of this, it would seem that in a situation of such a high foreign debt, it is nevertheless better to replace part of the foreign debt by domestic, for this will encourage the development of the domestic financial market. Still, greater government borrowing on the domestic market brings with it greater debt management costs. So it would be best of all to reduce government borrowing to the lowest possible level, and if a larger amount is unavoidable, it is better to be oriented to the domestic than the foreign market, for it shows a greater interest in government securities, and there is then a reasonable expectation that interest rates will fall.

When interest rates on government securities sold on the domestic market drop, the main reason for greater borrowing abroad, which is at the moment the low interest involved, will vanish. For example, the Samurai Bonds are sold in five series, at an interest rate of from 1.23 to 4%, while the interest rates for securities sold on the domestic market has in the last few years between 4.25 and 6.87%. Of course, with such conditions it would be frivolous to rely totally on the domestic market, because this would greatly increase the costs of servicing the debt. But by the same token the share of foreign in total public debt should not be too great, because this has an adverse effect on the foreign indebtedness of the country and increases the foreign currency risk in repaying the debt.

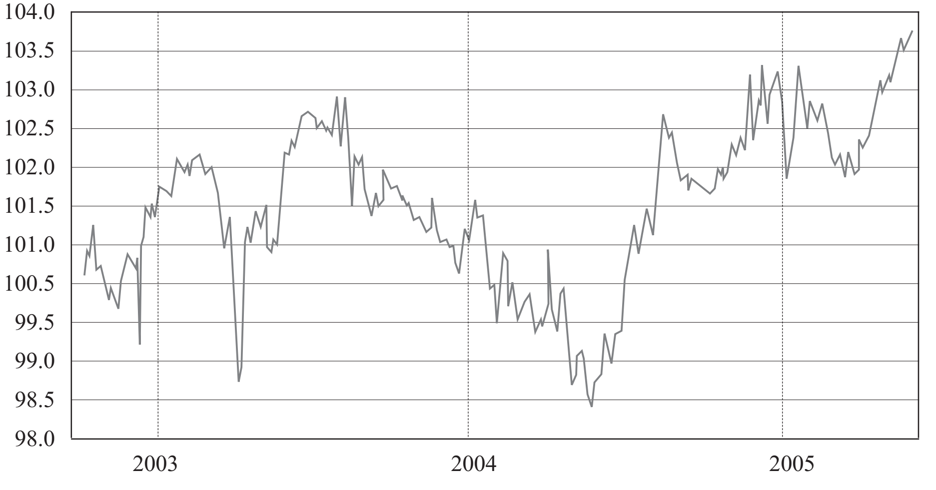
Just how vigorous the development of the market for government securities has been is shown by the fact that the Zagreb Bourse at the end of 2002 introduced a special bond index, CROBIS, which is often revised to include as many government bonds as possible.

Figure 5 shows that prices achieved in trading in government bonds oscillated a fair amount, but also it is possible to see a considerable rise in the index since mid-2004, which indicates increasing interest in government bonds. In the first half of 2005 regular trade in all securities quoted on the Zagreb Bourse reached more than 85% of all the deals in 2004, showing that the domestic financial market is increasingly vigorous (www.zse.hr).

An additional positive impetus to the development of the domestic market for government securities was given by the decision of the Zagreb Bourse on July 22, 2005, to abolish bourse commission to the end of the year, for as early as July, the revenue planned for 2005 had already been earned. The abolition of commission brought big savings to all members of the bourse, and reduced the transaction costs of all investors. This could give an additional stimulus to increased trading and the financial attractiveness of the Croatian capital market and better regional positioning before entry into the EU.

[30] www.akk.hu

Figure 5 Trends in the CROBIS index, 2002-2005



Source: Zagrebačka burza, 2006

Thus it can be said that there is without doubt great potential for the further development of the government securities market. According to a World Bank study (Anusic and Madarevic-Sujster, 2003) the assets of the pension funds alone should be 2015 have achieved a value of 15% of GDP and by 2030 almost 22% of GDP. The other non-banking financial institutions, particularly the insurance companies and the investment funds, are growing much more strongly and also creating a strong base of investors in government securities. If we add to this non-institutional investors, it is clear that a base does exist, and the government, i.e. the Finance Ministry, must create new instruments that with the differing characteristics will appeal to all these investors.

6 Conclusion

The basic conclusion of the paper is that good coordination of debt management and monetary policy running is very important for the overall macroeconomic stability of the country. In Croatia total separation of these important policies occurred before the preconditions for such a separation had been created. Splitting off public debt management from running monetary policy is a desirable process, but in parallel with this splitting better coordination between the two important policies should have been created, and some other important preconditions satisfied, the most important of which is achieving a certain level of development in the financial market, above all in the government securities market.

In the last few years, certain positive steps have been taken in coordination, but still this is not enough. Although there are formal provisions concerning coordination in Croatia, in practice they are not implemented consistently, and from this point of view both Finance Ministry and CNB should put in extra efforts. The first step in this direction should be the achievement of an at least approximate consensus about the optimum combination of fiscal and monetary policy. The next step should be the establishment of mechanisms for the regular exchange of data between the CNB and the Finance Ministry for the sake of harmonising fiscal and monetary policy. In line with this, the Finance Ministry and the CNB should jointly work out an agreement with which as the competent bodies of the state they can officially create such a mechanism.

Both these bodies should put extra efforts into encouraging the government securities market. By introducing open market operations the CNB set out in this direction, and the Finance Ministry by creating new instruments should make use of the great financial potentials of the retail sector and accordingly give a fillip to the government securities market. It has been seen that existing instruments do not meet the requirements of even the big institutional investors, and the development of new instruments is necessary, adjusted to the needs of all potential investors. In this manner the shallow market for government securities will be deepened. Since in the last few years every new issue of government bonds showed that the market was crying out for new securities, it is certain that the conditions of new issues will be ever more favourable for the government, which should considerably contribute to easier public debt management and lower servicing costs. In order to foster the development of the government securities market and greater liquidity in it the Finance Ministry and the CNB should together develop a system of primary government securities dealers, which has been proved highly effective in many countries.

When the market for government securities develops enough, the importance of formal coordination of public debt management and the running of monetary policy will decline, for this coordination will be achieved via market mechanisms.

It can be concluded that the introduction of open market operations in April 2005 was also a good step towards improving coordination in management of the public debt and the running of monetary policy, for since then the interest rates on the interbank market have oscillated far less and are at a lower level. The demand for treasury bills and bonds is ever greater, and data shown in the paper have already shown that stabilisation of the interest rates on the interbank market led to stabilisation of interest rates on the government securities market too, which should provide greater predictability in planning debt management costs. Still, it has to be said that for the making of final decisions about the effects of the introduction of OMO on the policy of debt management a more detailed analysis is required, and the CNB and the Finance Ministry could together carry out such an analysis and show what possibilities there are for the further development of open market operations.

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