DEBT MANAGEMENT IN THE CZECH REPUBLIC: FORMATION IN THE NINETIES AND THE CURRENT STATE

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Introduction

The state debt management has undergone a lot of substantial changes in the course of the economic transformation in the Czech Republic. The outstanding amount of the initial debt was very small at the beginning of the Nineties, reaching less than 16 per cent of GDP in 1993. Consequently, the attention of policymakers to state debt management was rather low at that time. The main focus was directed towards setting economic transformation policy. However, the increase in the outstanding debt for the last five years and the negative outlook for the future has led the policymakers to increase their interest in this area and has also contributed to the continuous modification and improvement of the debt management procedures aiming to bring the current Czech practice closer to the standards common in the EU.

Debt management in the Czech Republic has been a subject of many changes and is still "a work in progress". This topic is very broad due to specific features of the Czech economic transformation. Therefore, we will focus on just two fundamental issues in this paper. In the first part, we will discuss broader issues connected to debt management focusing on the interaction and the institutional arrangement of the fiscal and monetary policies. The passive coordination of the fiscal and monetary policies and the creation of the State Treasury management are the current topics frequently discussed in the Czech Republic. The Czech State Treasury and debt management is not a completed task, but it is both continuously developing and subject to many structural and institutional changes. The second part of the paper deals with the state debt development during the years 1993-2003 and describes the main features and factors standing behind debt development, giving a deeper insight about the currently-used debt management setting and instruments.

Our aim is to stay close to the practice of debt management in our country; leaving untouched the wide theoretical literature about this topic. The reader of this paper should be able to find herein basic knowledge about the current state of debt management in the Czech Republic with a particular accent on the broader economic transformation issues.

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We would like to thank to Luboš Janda, William D. Kerr, Yngve Lindh, Ivana Matalíková, Pavel Soukup and Jan Syrovátka for helpful comments and suggestions.
The views presented herein are those of the authors and do not necessarily reflect those of the Czech National Bank.

1. Coordination of monetary and fiscal policies in the state debt management

One of the most relevant questions, that is particularly important for transforming and "catching-up" economies, is the passive coordination between monetary and fiscal policies in the debt management issues. The coordination of policies is crucial because the policy objective of monetary authorities, fiscal authorities and debt managers may conflict and may require the articulation of shared objectives respecting the independence of the monetary and fiscal authorities at the same time.[1] Fiscal policy is usually used for the allocation and redistribution of resources and the stabilisation of the economy. In some countries, the stabilisation task is also delegated to the monetary policy authority that can react faster and usually in a less distortional way. The basic aim of the passive coordination of the monetary and fiscal policies is reaching a long-term balanced economic growth. In practice, this condition implies setting a fiscal deficit at such a level that can feasibly be financed – on the one hand, using capital market operations that do not lead to a creation of an unbalanced allocation of resources in the economy – and on the other hand, avoiding the creation of the need of direct lending from the central bank to the government and at the same time not generating excessive foreign debt. In the short run, it is necessary to focus our attention on the combination of the monetary policy and the state debt management to achieve and maintain stable financial conditions (including also the price stability).

The passive coordination of the monetary and fiscal policies is also very important in the small open economy for the development of the domestic financial and capital markets. The existence of well-developed, domestic financial and capital market is a necessary condition for the effective realisation of the monetary and fiscal policies. On one hand, this is because it provides sources of financing the fiscal deficit at the market (and therefore not distorted) prices; on the other hand, it allows for the central bank to carry out the monetary policy using indirect and market-oriented monetary operations. Moreover, the existence of a developed financial market imposes self-discipline on the monetary and fiscal authorities in their responsibility of assuring the stable financial environment and leads to maintaining effective and stable conditions on these markets. For example, the necessity to pay the full market price for debt servicing may work as an effective limit to excessive fiscal deficit growth.

The state debt management, therefore, represents one of the key areas of the fiscal and the monetary policies. The meaning of this task follows not just from the crucial impact of the state debt management on the financial market development, but also on the most important macroeconomic variables. In economies with less developed financial markets or in an earlier stage of transformation, a relatively consistent coordination of the monetary and fiscal policies targets with the debt

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[1] For a more details about this topic see, for example, Sundararajan, Dattels and Blommestein, *Coordinating Public Debt and Monetary Management*, IMF (1997).

management targets is required. The imperfect or absent coordination of these targets may even lead to an emergence of the macroeconomic instability in developing economies. In contrast, in a case of developed financial markets the mutual coordination of the above-stated targets is assured to a certain extent (under careful institutional separation of the individual policies) by the market forces. However, the passive coordination is still essential at some level.

Generally speaking, it is possible to identify in the transforming or catching-up economies the following basic phases of the coordination process development:

- *non-existence of domestic market for government debt*, when the central bank finances the fiscal deficit or it is fully or partially financed from borrowings abroad. The "Broad money programming" system is usually used for setting a balanced mix of monetary and fiscal policies,
- *creation of the short-term government bond markets*, when the financial market is still underdeveloped and the interest rates are regulated administratively by the central bank; indirect (market-oriented) monetary policy tools are gradually introduced,
- *early stage of the domestic financial market development*, when there is already a space for the central bank to affect the interest rates using market instruments. In the setting of the monetary policy, the so-called "reserve money programming" plays a substantial role, and also the market interest rates carry out progressively a more important signalling function for the economic decision,
- *fully developed domestic financial market*, where the interest rates are fully flexible, the liquidity of government debt instruments is provided by market forces and the central bank uses indirect market-oriented tools for influencing the overall banking sector liquidity. The institutional independence of the central bank, which is perceived by the market players as a guarantor against non-balanced or inflationary trends of economic development, is crucial in this phase. The institutional independence that is given by a law has to be backed by the so-called "realisation credibility", that means a practical coordination of the monetary and fiscal authorities activities that is accompanied by a prudent fiscal discipline. No matter how independent the central bank seems to be according to the central bank law, in practice, the central bank is allowed to push forward only a monetary policy that is transparent and accepted by the government and the public.

The need for the coordination between monetary and fiscal policies in the area of debt management follows from the interaction and general influence of monetary policy on the state debt management and vice versa. The central bank influences the state debt management in many ways. One of the most obvious one is the setting and concrete *direction of the monetary policy and the monetary tools and operations used* to reach the monetary policy objectives. A relaxed monetary policy allows the debt financing at low interest rates, but increases the probability that interest rates will be increased in the future as a reaction to growing inflation pressures. On the other hand, a restrictive monetary policy may increase to an excessive degree the debt-servicing costs; harm the economic growth perspectives and lead towards higher fiscal deficits.

Contrariwise, the state debt management influences the monetary development. If the market players perceive the debt accumulation as disproportionate, the credibility of the fiscal and monetary policies mix is endangered and an increase in interest rates naturally follows. If the capital account is fully liberalised, higher interest rates attract the inflow of the foreign liquidity. This inflow has to be consequently sterilised by the central bank's operations to stem the inflation pressures in the economy. The sterilisation operations are costly to the central bank and may negatively affect its profits and hence also directly the government budget if the central bank's profit is a common-budget revenue source.

One of the possible solutions for monetary policy and debt management policies is a *sufficient passive coordination of both policies*. There are two ways of financing a government deficit: one is through a debt issuance; the other is through an increment of the central bank monetary base. We can therefore speak about the debt- or the monetary-financing of a government deficit. In addition to these two ways of a debt financing, there exists another possibility[2] – that has been substantially used by the transition economies – namely selling government assets.[3] The privatisation revenues have played or are still playing a very important role in practically every transforming economy. The standard way of describing the interaction between fiscal, monetary and debt management policies can be simplified in the following equation:

$$\underbrace{D_t}_{\text{fiscal policy}} = \underbrace{(B_t - B_{t-1})}_{\text{debt management}} + \underbrace{(M_t - M_{t-1})}_{\text{monetary policy}}$$

This relationship is often stated as a starting point for the discussion about the public debt management and monetary policies. We can derive several basic situations that can – assuming the existence of a fiscal deficit – emerge. These situations depict the basic foundations for the policies coordination. The fundamental features are whether a central bank can provide a direct lending to a government or not, and what is the degree of the financial market development. If

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2 We ignore the other theoretical "solution" – outright or partial repudiation – as depicted in, e.g., Gray (1996), since it is not the case feasible for a stabilised economy. However, Gray (1996) lists some of the possible ways of repudiation: devaluation of the currency in the fixed exchange rate system, enforced unilateral extension of the short-term debt instruments maturity, introduction of a general prohibitive tax on financial assets or interest profits and a restriction of capital flow mobility.

3 At the beginning of the transformation from a planned to a market economy, the vast majority of the real capital stock was owned by the state – including all factories and their equipment, land and existing agriculture producers and, in the case of the Czech Republic, also the majority of housing. The Czech governments substantially used the revenues from the privatisation to cover current or capital expenditures. The existence of privatisation receipts that improved the budget revenues is the main reason why there is not so direct a link between actual fiscal deficits and the outstanding debt in these economies.

the central bank can provide a direct credit to the government, as is common in the early stages of transformation, we can identify two basic scenarios:

- in the *first case*, the central bank is fully independent in its monetary policy, which means that it can freely decide (and then influence) the change in its monetary base. This monetary base increment – unless it is covered by a foreign currency accumulation – creates a space for the direct credit to the government. This situation calls for an intensive coordination between fiscal and monetary policies,
- in the *second case*, it is a matter of the relatively less autonomous central bank and the government having relatively open possibilities to finance the debt by direct lending. The central bank doesn't set up autonomously its target for monetary base and the effort for the price stability could be endangered if the fiscal deficit is higher than would be consistent with the prevailing economic conditions.

  These two scenarios are connected to the situation in developing countries without a suitably developed financial market, where the state debt financing using the financial/capital markets is somehow limited. In both cases the central bank isn't fully autonomous and doesn't have its clear target expressed in the price-stability terms. The danger of political pressures to favour short-term gains or objectives rather than long-term ones is relatively high. It is necessary to solve the conflict between monetary and fiscal policies by reaching agreements, for example, on limits of direct lending to government and/or about the maximum budget deficit,
- the *third case* is currently the most relevant for the Czech Republic, when the direct lending from the central bank to government is subject to a strict institutional separation of fiscal and monetary authorities. The monetary policy cannot legally provide a credit to the government and therefore the fiscal deficit has to be financed using market issues of state debt. An excessive debt increase may influence the interest rates and trigger certain crowding-out effects.[4] An increase of domestic interest rates may not be fully compatible with the given monetary objectives: it can, for example, have significant implications for the exchange rate development. Even when the fiscal and monetary policies are institutionally separated, it is naturally desirable to passively coordinate them in the context of the debt management, in order to prevent the emergence of negative situations that can harm the economic stability.[5]

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[4] However, in the case of the Czech Republic the link between an increment of the outstanding debt and interest rates may be disrupted by the existence of an excessive liquidity in the banking system. This fact is one of the limits for the development of the crowding-out effects in the Czech economy.

[5] The Czech Republic has a very good experience in this field so far. The practical fulfilment of this coordination is done in the official working group for debt management issues where experts from both institutions – the Ministry of Finance and the Central Bank – can discuss actual problems and topics (more details will be given later in this paper).

2. State debt management as a part of the State Treasury management

One of the clearest definitions of the debt management states that *"... [the] sovereign debt management is the process of establishing a strategy for managing the government's debt in order to raise the required amount of funding, to achieve its risk-and-cost objectives, and to meet any other sovereign debt management goals the government may have set, such as developing and maintaining an efficient market for government securities."*[6] The economies which are subject to substantial institutional and structural changes, such as the transition economies, should take into account the possibility to include this task into the system of the State Treasury management in fulfilling the general definition stated above. This opinion doesn't reflect just the experience of many developing economies, but also the Czech transformation experience from the Nineties. Continuous modification of the state debt management in the Czech Republic was connected to the changes in the overall system of the State Treasury management.[7]

The State Treasury management is a topic that is closely related to the debt management – at least in the Czech Republic. Therefore, we find useful to sketch the basic functions of the treasury management and the relevance of the State Treasury as they pertain to the debt management issues.

The State Treasury Management can be broadly characterised as a system of effective control and management of government finance. Among its main functions could be included budget execution, cash management, debt management, accounting and financial information systems and some other functions (for example a formulation of the budget and tax policies in the context of the overall macroeconomic policy). The main functions of the State Treasury are usually institutionally implemented in the Ministry of Finance. However, certain functions can be delegated to different institutions that are not directly influenced by the government (or by politicians). Some of them – for example, issues connected to the state debt management – can be delegated to a Central bank or other independent agency or body (the Debt management office). The institutional setting is determined by the history of the individual country and differs significantly among countries in the definition, structure and explicit target of a State Treasury management.[8]

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6 IMF-WB: *Draft Guidelines for Public Debt Management* (2000), p. 4.

7 During the transformation process there was, unlike for other countries, no one-shot substantial reform of the State Treasury management system. At the beginning of the Nineties, the original State Treasury management was already in many aspects modern and it was not necessary to built a completely new system.

8 Several basic State Treasury systems can be identified – among the best known ones are the British, the French, the continental (German, Italian, Dutch), the American, the Latin American, the Far Eastern and the system of formerly centrally-planned economies – more detailed treatment can be found, e.g., in EC: *Comparative Review of the Hungarian State Treasury*.

Looking closer at the individual functions of the State Treasury, it is obvious that practically all of them have a direct or intermediated relation to the debt management.

The implementation of the government budget includes a wide process starting with a financial planning and following a drawing of the allocated financial sources that are approved by the valid budget act. This process can be carried out centrally at the Ministry of Finance or at corresponding competent ministries or decentralized bodies at lower levels of government, and includes the phases of breakdown, checking and drawing of the allocated financial sources. In the Czech Republic, the Ministry of Finance in Cupertino with individual government departments provides the implementation of the government budget. The Czech National Bank is involved in keeping the government's accounts and maintaining the banking payment system. The implementation of the government budget has a direct link towards the state debt management because it includes providing of sufficient financial sources for the realisation of the approved government expenditures.

The cash management is another function of the State Treasury. Activities that are connected with the cash management include monitoring of state revenue and expenditure flows and outstanding amounts of the government accounts. This function is primarily linked to the existence of a single treasury account (STA). The single treasury account is usually kept by the central bank, and so it is in the Czech Republic. The daily Cupertino between the Ministry of Finance and the Czech National Bank leads to predictions of the STA positions and also the liquidity development is continuously checked on a daily basis. CNB carries out free cash market operations based on the instructions from the Ministry of Finance and on the Ministry's behalf to manage the liquidity on the STA (to cover the deficit or to use the surplus). The cash management has therefore the direct relations to the state debt management.

An accounting and financial information system function is another task of the State Treasury. It consists of monitoring of the treasury operations development using an accounting system that is the core element of the effective financial information system of the government. Also this area – namely the accounting part – is a standard task for the central bank that helps with the fiscal administration. The accounting function is related to the other State Treasury functions; the most obvious one is the implementation of the government budget and of the cash management, however – vicariously – also of the debt management issues.

The last but not least function of the State Treasury is the debt management. The main task, as it has already been stated above, of the debt management strategy is the debt cost minimization at acceptable risk level (some of the ways of reaching this target are described, for example, in Leong, 1999). Besides this main objective in debt management, other alternative goals can be found in developing or transition economies. Their importance is given, for example, by the degree of financial market development, the level of monetary and fiscal policies coordination, etc. The debt management is closely linked also to the state guarantees management and the so-called government's hidden debts. This area is very important in the transition economies and the Czech Republic is no exception.

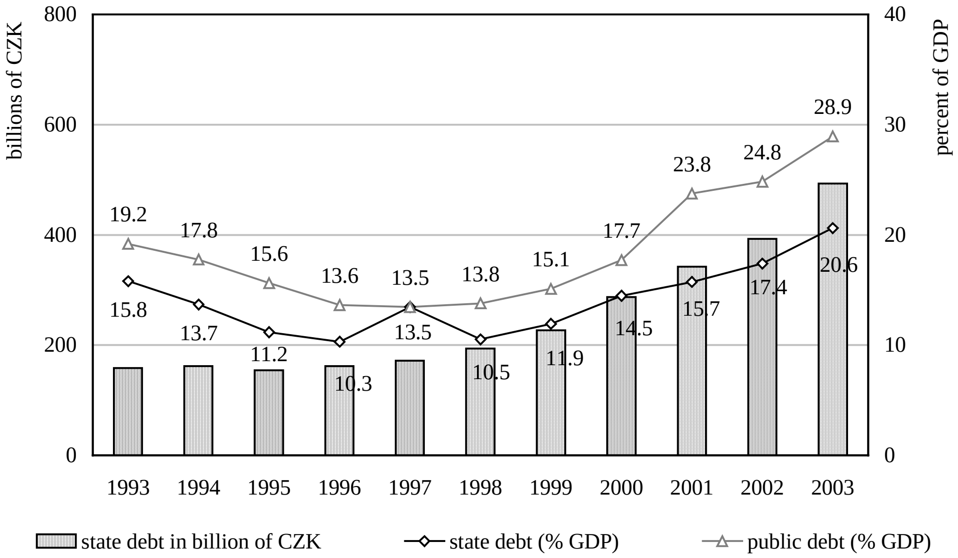
The perception of the state debt management as a part of State Treasury system is primarily important in the economies that undergo fundamental changes. This importance follows from both the direct and the indirect relation between the state debt management and the other functions of the State Treasury. The fundamental changes, or the continuous improvement of the debt management system, should be assessed taking also into account the other functions of the State Treasury and vice versa. Otherwise, it couldn't be guaranteed that the basic functions and objectives of the debt management will be effectively implemented.

3. State debt development in 1993-2003

When we look at the state debt evolution in the economic transformation in the Czech Republic from 1990 to the present, we can identify two basic periods that influenced the overall outstanding state debt, the debt management procedures and the level of the refinancing (roll-over) risk. The declining state debt volume relative to the GDP can be characterized over the first period from 1990 to 1998. This success was reached in a period of economic growth by keeping the nominal amount

Figure 1

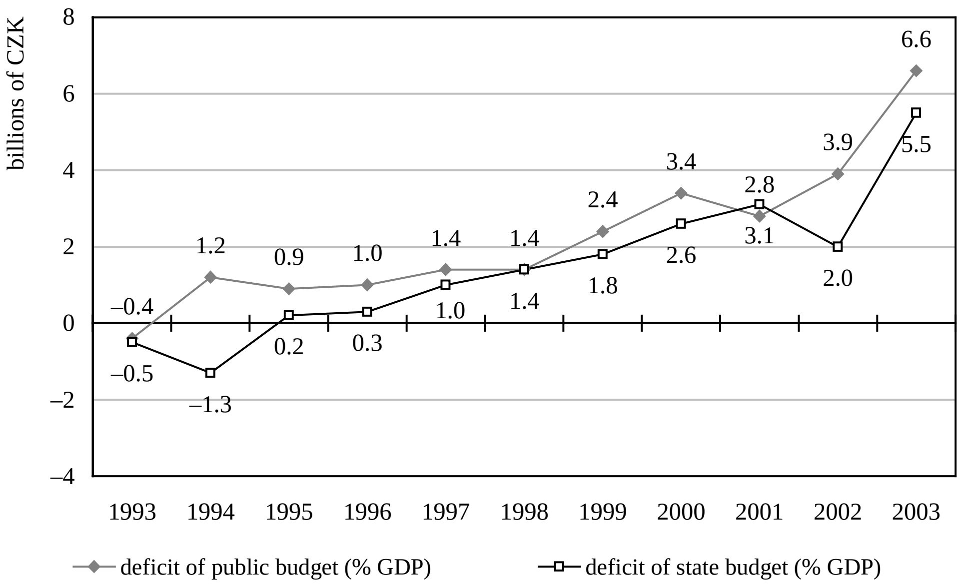
Public and State Debt Developments in the Czech Republic, 1993-2003



Source: CNB, GFS (cash) methodology (IMF).

Figure 2

State Budget Development
GFS adjusted cash data, 1993-2003



Source: CNB, GFS methodology (IMF).

of the outstanding debt almost constant. The Czech governments tried to implement a policy of *balanced state debt* in practice. However, they wasn't able to push it through the Parliament and also make it legally binding for the following governments. After the elections in 1998, the new left-wing oriented government preferred to play a more active role in the economy. The new government also started a policy of revealing the hidden debts that were connected to previous government guarantees as problematic assets in the banking system that were created during the phase of the privatisation. The growing debt dynamics, apparent in Figure 1, demonstrate these facts. In the last couple of years there also has been, as a major force in debt dynamics, the inability of the government to consolidate the budget and significantly reduce the expenditure dynamics that move away from the budget revenue side development. Another point that can be made, based on the following figure, is that the state debt represents the main part of the public debt in the Czech Republic.

Looking at this in closer detail, we can stress the following factors that determine the state debt volume and its structure in the Czech Republic:

a) *the different fiscal policy setting between the first years of the transformation and the present:*

The Czech Republic has a relatively very low level of state debt. Also the foreign debt was very low in contrast to many other transforming countries at the beginning of the Nineties, and created a positive environment for the start of the process of economic reform. The outstanding amount of the Czech debt was influenced by a prudent fiscal policy in the first years of the economic transition. The aim was to reduce the role of government in the economy and expenditure cuts were a necessary tool to achieve this goal. The fiscal policy concentrated, during the period 1993-98, on building a standard market economy framework, on liberalising the economy and on privatising the state property. The year 1998 represents a change in this effort and from that year the government's action was oriented more to the recovery and, later, to the maintenance of the economic growth, letting the public finances deteriorate from their balanced path. A deficit-oriented fiscal policy has been pursued since 1999.

The development of the state budget deficit and the general government deficit is depicted in the following figure. The prevailing methodology of accessing the fiscal policy in the Czech Republic is based on the GFS statistic cash data (according to the IMF methodology) that is adjusted for the privatisation revenues and transfers to transformation institutions.[9] The public budget has displayed a deficit since 1994 and the state budget since 1995.

b) *the increase of the state debt as a result of revealing the hidden government debts and postponing the solution to built-in structural budget problems:*

The financing of the hidden government debt is one of the biggest fiscal issues in the transition economies. The governments used to record the government statistics according to the cash principle. Some operations that did not include a cash transfer at the time of the operation (for example the government guarantees) weren't fully represented in the deficit numbers. A substantial part of the hidden government debt is related to a Czech banking system consolidation that preceded the banks' privatisation in the second half of the Nineties. The government and some public or semi-public bodies (e.g., the Czech Consolidation Agency) cleared the portfolio of commercial banks to a large extent and moved bad loans from their balance sheets into special bodies and consequently covered the costs accruing therefrom. We can estimate the total effect of these losses around roughly 5 per cent of GDP in the period 1997-2003. If there had been no such transformation operations, the state outstanding debt would have reached only 15.6 instead of 20.6 per cent of GDP in 2003. The impact on the public debt is even higher and we can estimate the cumulative effect of these operations around 10 per cent of GDP during the referred period. The overall outstanding public debt would have reached, having had no losses

9 The idea behind this adjustment is an attempt to get a better picture of the fiscal development – how the balance would look like if there were no one-shot operation connected to the transition.

from the transformation institutions, only 18.9 instead of 28.9 per cent of GDP at the end of 2003.

The field of the "hidden debts" is however a broader topic in the Czech Republic. Except for the usual government liabilities, we also have to include the potential liabilities created in off-budget institutions, in the National Property Fund, in the commercial companies where the government is the majority or a substantial shareholder (e.g. the Czech Railways, the aircraft manufacturer Aero Vodochody, etc.). The outstanding amount of the classified government guarantees reached approximately 12 per cent of GDP at the end of 2002. One can increase the official public debt figures by this amount to obtain a clearer picture about the current state of the outstanding debts.

Besides these hidden debts, another future fiscal risk also stems from the postponing of the built-in structural features of public finances that pushed the government balance into deficit even in periods of solid economic growth. In the Czech reality, the main problems on the expenditure side are connected to the so-called mandatory expenditures – with prevailing socially-oriented expenditures. The big issue is the pension-related expenditure and the fact that the PAYG state pension system has been deficient since 1997. A substantial change of the Czech society leads towards lower birth rate that is combined with a rapid rise of the life expectancy (due to sizeable improvement of the health care system). The combination of these factors makes the current pension system imbalance the main medium-term fiscal challenge. The cumulative deficit of the Czech PAYG pension system between 1997 and 2003 reached 5 per cent of the GDP,

c) *the atomisation of the central government finances and its potential risks:*

The side effects of the state decentralisation create some obstacles to the more effective debt management in the Czech Republic. At the beginning of the Nineties, the general government balance was identical to the state budget balance. During that decade, the public finances were atomised to several institutions that are more or less controlled by the government. They consist of the state budget, state financial assets and liabilities, the National Fund as a special body for transfers from and to the EU budget, the State land fund and the Czech Consolidation Agency – naming just the most important at the central government level. Moreover, there are the other seven off-budgetary funds with the dominant position (in terms of expenditure spending volume) of the Transport Infrastructure Fund and Housing Fund. These bodies are linked to the central government and directly or indirectly influence the government debt. The atomisation of the central government complicates the debt management and the regulation of the overall debt dynamics. Some of the off-budgetary institutions are not under the control of the Ministry of Finance and they could therefore carry out expenditure policies that stimulate the debt accumulation. The main risks are connected to the covering of defaulted guarantees of the National Property Fund, losses of the Czech Consolidation Agency and excessively expansionary expenditure policies.

d) *the change in the state debt duration:*

One of the state debt characteristic features had been the increasing ratio of the short-term instruments used in the debt financing until the year 2000. The short-term treasury bills represented almost 60 per cent of the overall outstanding state debt in the year 2002 and it exposed the government to a considerable refinancing risk. This fact can also be illustrated using the debt duration that was far from values observable in other similar countries. At the end of 1999, the state debt duration amounted to only 0.65 years. However, the government was more or less aware of possible difficulties and has been trying – as one of the key debt management objectives – to substantially increase the debt duration since 1999.

The reason justifying the low duration during the Nineties was also a restrictive monetary policy combined with a positively sloped yield curve. The government simply stayed on the shorter side of the yield curve to minimise the debt servicing costs.

e) *the minimal role of the foreign borrowing and the future outlook:*

Interesting conclusions about the Czech debt strategy can be derived from Table 2. The share of the foreign debt has been continuously decreasing since 1994. However, we can observe a break of the trend between 2002 and 2003. In 1993, when the Czech Republic was established, the share was almost half of the state debt was financed by foreign borrowings. This situation was the consequence of foreign loans made by the G24 countries and the EBRD. The justification or purpose of these loans was provided not to serve to the fiscal deficit financing, but to support the balance of payments and to strengthen the internal convertibility of the domestic currency (the economic reform strategy had intended to reach as soon as possible a full external convertibility of the ČZK). At the end of 2003, the foreign debt represented only approximately 9 per cent of the outstanding debt volume. However, we assume that this situation will be changing during the year 2004. The Ministry of Finance has announced that it has plans to enter the foreign markets with Czech government bond issues (more details are given in Chapter 6).

The Czech Republic started a fiscal consolidation process with the aim to push the general government deficits below 4.0 per cent of GDP in 2006. The first phase of the consolidation was implemented in 2003 and started effectively from 1.1.2004. It consists of several revenues and expenditures measures. Now the government discusses the second phase, where some of the basic structural budget problems (e.g. the pension one) should be solved and the aim is to decrease the deficit further to 3.0 per cent of GDP before entering the EMR II. This consolidation effort will affect the debt development, too. As a result of generating government deficits in the following years, the outstanding debt will rise further. However, the debt dynamics should decline. We expect that the public debt will be 36 per cent of GDP and the state debt just 25 per cent of GDP at the end of 2006. The precise denomination is, however, still unclear. Compared to the situation ten years ago, the state debt has already reached a significant outstanding amount. We are moving

Table 1

Time Structure and Duration of the State Debt

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Short-term instruments *(% of total debt)*	10.7	14.7	24.2	42.7	44.1	51.6	57.3	57.5	54.5	41.8	32.4
Debt duration *(years)*	0.83	1.17	1.09	0.97	1.12	0.99	0.65	1.27	2.38	3.11	3.40

Source: ČNB.

Table 2

Foreign Financing of the State Debt

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Absolute volume *(billions of ČZK)*	75.7	81.9	71.3	50.5	50.5	39.3	29.5	29.9	21.3	27.2	45.7
Relative volume *(% of total debt)*	47.7	50.7	46.2	31.3	29.3	20.3	13.0	10.4	6.2	6.9	9.3

Source: ČNB.

closer to the Euro-zone countries in this aspect. The existence of Maastricht's 60 per cent debt criteria even seems to do a disservice since some Czech politicians almost understand it as a "targeted ratio". They tend to postpone necessary fiscal measures pointing out that we are still far enough from this number and can live a couple of years with fiscal deficits.

4. Basic framework and the debt management target in the Czech Republic

The basic state debt management framework is subject to a permanent improvement in the Czech Republic. The main responsibility for the debt management rests on the Ministry of Finance that tries to fulfil its basic objectives and functions. The fundamental objective is defined similarly as in many other countries – it is providing sufficient borrowings for the central government and fulfilment of its payments obligations, trying at the same time to reduce the costs of the debt service in the medium- and long-term at an acceptable level of risk. In addition to the realisation of this fundamental aim, there is also a subsidiary objective – common also to many other transition economies – to develop the domestic financial and capital market infrastructure and its liquidity.

In the process of practical implementation, the Ministry of Finance technically cooperates with the central bank – the Czech National Bank (CNB). The CNB carries out the role of government fiscal agent, which means that it tries to support the primary state bond market development, executes financial operations on the primary and secondary markets according to the needs of and on the Ministry of Finance behalf, provides connected activities in the accounting area, and manages the system of payments and settlements. Important, also, is the regular consulting and advising role of central bank's experts in the formulation of the debt strategy and in the following realisation of this strategy in practice. This role is nowadays shown in the cash management and in the risk management activities.[10] One of the reasons why the CNB carries out the role of the fiscal agent instead of delegating it to a separate debt management office, as is common in many developed economies, is rather practical – the current setting takes advantage of the experience and knowledge of the bank's experts and does not create an additional cost burden that would be connected with establishing and running a new government institution and training its experts.

The institutional framework of the Ministry of Finance and the central bank is set in the legal agreement on the Cupertino in the state debt management that was concluded in the middle of the year 2001 and updated at the end of 2003. The agreement touches the following topics:

- setting the debt strategy and interchange of information,
- specifying ČNB tasks in the fiscal agent role,
- allowing the entry of the Ministry into the short-term bond settlement system,
- primary treasury bills market,
- the liquidity management of the single treasury account,
- administration of the treasury bills issues,
- primary medium- and long-term government bonds market,
- administration of the government bond issues,
- secondary government bond market,
- risk management of the state debt.

[10] This includes management of all potential risks, e.g. the market risk (interest and exchange rate risks), the credit risk, the operational and settlement risk, the liquidity risk and the refinancing (rollover) risk.

According to this agreement, the Ministry of Finance formulates the debt strategy. During the process of the formulation of the debt strategy aim definition, a regular cooperation and information exchange between the Ministry and the central bank proceeds. The responsibilities for the debt management and fiscal policy on one hand and for the monetary policy on the other hand are strictly separated. The final proposal of the debt strategy is submitted to the ČNB prior to the government's approval. The bank then has the possibility to officially express its views and deliver them back to the Ministry of Finance. The contents of this opinion or statement include the bank's view on potential conflicts with the monetary strategy that could emerge in the realisation of the suggested debt strategy and possible macroeconomic impacts. However, the final decision about the debt strategy is fully the competence of the Ministry of Finance, which is obliged to inform the ČNB within 10 days after the decision is taken.

Said agreement also defines the activity and responsibility of a stable coordination working group for debt management issues. The relevant experts from both institutions – the Ministry of Finance and ČNB – participate in the working group activities and meet regularly once a month. During these consultations are solved questions related to:

a) a conceptual framework of the debt management, for example an issue strategy, time-structure of debt, type of debt instruments, treasury bills and government bonds issue calendar, other relevant parameters of the state debt portfolio and ways for these to be achieved,

b) actual market situation and partial technical matters – for example the primary issues organisation, the legal framework, the cultivation of the domestic government bond market.

There is a strong preference to reach conclusions satisfying experts from both institutions. If this is not possible and different opinions are sustained during the discussion, they are explicitly stated and depicted in detail in the working group meeting minutes. The Finance Deputy Minister takes the final decision on these disputes. This joint body represents a very concrete form of the fiscal and monetary policies coordination in practice within the Czech Republic. Its functioning has been very useful during the last three years.

Another area where the Ministry of Finance and ČNB intensively cooperate is the risk management. The Ministry of Finance is the institution primarily responsible for the state debt risk management. The Ministry conducts the activities in setting the risk strategy, building internal regulation and limits for each type of risk, a regular monitoring, assessment and inspection of the existing risks, preparation of underlying legal documents and setting prudent principles for accounting. The role of the ČNB is based on delivering regular monitoring reports to the Ministry, that are focused on the development of the domestic and foreign markets, on elaboration of demand structure analyses and on the survey of the bond market players' preferences.

The framework is continuously refined – the procedures that were sufficient in management of a low outstanding state debt aren't always effective in the light of the substantial debt dynamics the Czech Republic has faced in the last couple of years. There was also a discussion about the separation of the debt management administration from the Ministry of Finance, entrusting it to a more independent institution, as is the Debt Management Office in many countries. This idea seems to have its pros and cons, but from today's perspective the burden of additional costs from the establishment of such an office seems to exceed potential profits. The government needs to consolidate the public finance rapidly and cannot afford an unnecessary increase in expenditures. The government prefers to keep the debt management administration within the Ministry of Finance. However, a new and more independent division has been established there. It seems to be a good compromise that withdraws the debt management from possible political pressures and at the same time does not create an additional expenditure burden to the government budget. Compared to the situation of three or four years ago, the main debt strategy target (at given risk level to minimize debt service costs) is more precisely defined and dominates the secondary aim that tries to support the development of the domestic financial market.

5. Core instruments currently used in the Czech Republic's debt management

A well functioning and liquid financial market is a natural condition for the effective state debt management. The development of the Czech financial market was tightly connected to the debt market instruments in the past and to the overall liberalisation during the economic transformation. We have to bear in mind that there was no real market for debt instruments before 1989 in the Czech Republic/Czechoslovakia – the planned economy simply did not need them. Its creation and further improvement was one of the necessary steps at the beginning of the economic transition. We use two basic types of instruments – the short-term treasury bills and the medium- and long-term government bonds. The beginning of the transition in the early Nineties can be characterised by a very liquid treasury bills market and (as a consequence of the low state debt) a rather limited market with government bonds.

At present, there exists a sufficiently liquid and developed market for both types of instruments. The overall outstanding volume of these state debt instruments amounted to 479 bn. ČZK (of which 160 bn. ČZK (6.7 per cent of GDP) were the treasury bills and 319 bn. ČZK (13 per cent of GDP) the government bonds) at the end of 2003. According to the central bank act, there exists a legal prohibition to finance the government by loans, so the domestic securities market finances the whole central government debt.[11] The government's issue program is in the form of an act – so it has to be approved by the Parliament before it comes into force. The Ministry of Finance publishes an assumed volume of new issues of government bonds and treasury bills in a range of +/–10 per cent for the given fiscal year. The detailed issue timetable is released for each quarter in advance. It includes all necessary information as dates of issues, maturity of the issued instruments and proposed orientation volumes of both – the treasury bills and the government bonds.

Thanks to the fact that the Ministry delegated the role of fiscal agent to the ČNB, the primary issue auctions are technically organised by the central bank. The role of the bank is concentrated on the arrangement of auction rules, on the preparation, announcement and administration of the auctions and on the announcement of the auction results.

There are stable groups of the primary auction participants who can enter the treasury bills and the government bond issue auctions. The other investors can place their orders for the auction only through a group member. Participation in the group is open to every legal entity meeting certain criteria. The biggest commercial banks and investment companies that have a full licence to trade securities in the Czech Republic are among the members. The ČNB prepares a proposal of criteria and their *ex post* evaluation. The existence of certain limits has only practical reasons – there is an effort to include all investors who actively participated in the past auctions and eliminate those of them who did not. The following factors are among the most important ones: the credibility of a candidate, a certain turnover of its operations on the secondary market, and a minimal subscribed amount in a previous decisive period.[12] The Ministry of Finance makes the final decision about the criteria and the involvement of one or both groups. The criteria are flexible enough be modified if one of the groups – the issuer and the investors – suggest improvements.

5.1 Treasury bills

The treasury bills are issued to cover a government deficit in the given fiscal year. They are issued as discounted instruments in the nominal face value of ČZK 1 million within these maturities: 13, 26, 39 and 52 weeks. The volume issued in one auction is usually comprised within the 8-20 bn. ČZK range. The Ministry of Finance sometimes buys a part of the offered amount into its portfolio for better cash management. For the cash management purposes, treasury bills with other (non-standard) maturity can also be issued. The auctions are the "Dutch"-type and they have usually a weekly periodicity. The current auctions are usually

[11] There is also some small fraction of past loans that were provided by the domestic and international financial institutions and that are not matured – therefore have not been repaid, yet. But their outstanding volume is marginal.

[12] The current rules require minimal 1 per cent turnover on the secondary market and to subscribe at least 3 per cent of the offered volume in the previous decisive period. The last rule is applicable only to current group members and is targeted toward passive members.

over-subscribed and the yield is slightly under the corresponding money-market interest rates.

They are issued in the form of dematerialised securities and are registered in the separate electronic registry system (called System of Short-Term Bonds, STD). The registry, which is intended for bills with maturity of less than 1 year, was built and is maintained by the central bank. The participants who can use this registry system are domestic and foreign banking and non-banking institutions. The clients can have a direct terminal connection to the registry, or they can use a terminal connection of special agents. The system works on the Delivery-Versus-Payment basis (DVP).

The secondary market with the treasury bills is a quite advanced segment of the money market. The trading is carried out Over The Counter (OTC) and the settlement is made using the STD system. The Ministry of Finance's operations on the secondary market are carried out by the central bank, but fully on account and on the Ministry's behalf. They usually consist of daily repo-operations, sell-and-buy-back operations and straight bid and sells of the bill for the cash management purposes.

5.2 Government bonds

Compared to the treasury bills market, the government bonds market used to be less developed throughout the Nineties. The reason was a relatively low need to develop this market at the beginning of that decade because the fiscal deficits were very low (actually, the government balance had been in surplus for a couple of years). The first instruments that were issued on this market were the two- and five-year state bonds. The usual issue volume was five bn. ČZK and the auctions proceeded quarterly. Later on, the yield curve was supplemented by other bond maturities as well. The longest existing bond maturity is 15 years. We can also observe substantial shift from issuance of short- and medium-term debt instruments to long-term ones.

The Ministry of Finance announced a new issue strategy in the year 2000. The target was to gradually reduce the short-term debt instruments in the portfolio from 60 to approximately 30 per cent. The first phase included new issues of the government bonds with maturities of 3, 5, 7, 10 and 15 years to create a liquid yield curve of the Czech government bonds with benchmark titles. Recently also a reopening of old issues was set up. Individual issues included bonds in 4-5 bn. ČZK and the issue was later reopened until the total volume reached 20-25 bn. ČZK.[13] After 2002, the newly-issued bonds have all previously stated maturities except for the 7-year ones and the swap yield curve was extended to 20 years. The Ministry of Finance had taken the decision to decrease the total number of outstanding issues

[13] The current upper limit is even higher, reaching 40-60 bn. ČZK.

and at the same time to increase the volume of each issue by reopenings, making the secondary market more liquid.[14]

Also, the government bonds are dematerialised, but they are registered in the Prague Securities Centre,[15] bear a fix coupon interest and their nominal face value is only 10,000 ČZK. The current debt management strategy is to promote benchmark issues with maturities of 5, 10 and 15 years. The primary "American"-type auctions take place on a monthly basis – usually on Wednesday, with a settlement on the following Monday. Also the technical implementation is done by the central bank, using the BBG-Bloomberg system. The coupon rate is announced before the new issue takes place depending on the actual financial market conditions, but the maximally accepted yield is not. After collecting all orders, ČNB delivers to the Ministry a suggestion of possible cut-off yield, but the final decision rests with the Ministry of Finance again.

The trading volume of the state bonds represents around 90 per cent of the total trade turnover of all bonds registered by the Prague Stock Exchange. The vast majority of bond dealing on the secondary market isn't made at the Prague Stock Exchange, but on the OTC market.[16]

Generally speaking, the choice of debt instruments primarily depended on the structure of "debt needs" and on the degree of financial market development. One of the key factors was a stable, continuous and predictable financing of the government's need and, as first-choice, bonds with a fixed coupon come to mind. The inflationary stable environment (or, more precisely, the economy with substantially declining inflation), the sufficient absorption capacity of the domestic market, and the lower costs and risks of domestic financing led to bond issues denominated in the domestic currency on the domestic market. There existed a strong resistance against issues abroad, mainly justified by possible negative impacts on the exchange rate stability. Another and also important reason for home issues was an effort to use a credible benchmark and cultivate the domestic bond market, which can lead in return to the further reduction of the refinancing costs.

Rapid progress was also apparent on the derivatives market. The Czech Republic, as one of the transforming countries in the region, significantly liberalised not only the current, but also the financial account of the balance of payments. A liberal environment allowed the creation of a very liquid forward rate agreement and interest rate swap market. The liquid swap market has an important consequence for the risk management. The yield curve of the interest rate swaps is listed daily and the ČZK swap market is highly correlated to the euroswap market. Thanks to the

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[14] More details about accessible tools to encouraging the market liquidity can be found, e.g., in Bloommestein (2002, pp. 35-36).

[15] The Prague Securities Centre (Středisko cenných papírů) is a state-owned registry for dematerialised securities (for shares and bonds with original maturity greater than 1 year).

[16] The Prague Stock Exchange just registers all transactions: they can be settled there or by a special settlement stock exchange centre (UNIVYC). The information is then passed to the Prague Securities Centre and recorded also there.

liquid swap market, the bond/swap market players can also easily obtain liquid hedging instruments.

The development of the essential segments of the financial and capital market in the Czech Republic during the economic transformation brought the basic precondition for a more effective state debt management. However, the continuous increase of the outstanding volume of the state debt is calling for a permanent fine-tuning of the state debt risk management.

6. Current issues of the Czech debt management

The Ministry of Finance announced its strategy for the year 2004 at the end of 2003. As a part of this strategy, the Ministry declared some medium-term targets – such as decreasing the refinancing and interest rate risks, broadening the investors base, increasing the transparency and credibility of the state debt management policy and a further solicitude for the development of the domestic bond market.

In the area of the refinancing risk, the target, which was set already in the year 2000 for decreasing the ratio of the treasury bills to 1/3 of the overall state debt, was reached at the end of 2003. A new target is to decrease the ratio of outstanding state bonds and treasury bills with the residual maturity lower than 1 year to 25-30 per cent (this ratio was 42 per cent at the end of 2003). The Ministry of Finance is also going to smooth out the distribution each month by raising the funds from the domestic capital market within the year. The Ministry is going to use 13, 26, 39 and 52 weeks treasury bills and 3, 5, 10 and 15 years government bonds with a priority given to the 10 years bonds. It also plans to make the reopenings more frequent and run 1 bond issue and 3 treasury bills issues every month.

The previous interest risk management aim was to attain a debt duration of around 3 years during 2003. The new target wants to increase the duration further to 3.3-4.3 in the year 2004. The long lasting preference of fix coupon bonds hasn't been changed and all bond issues should be fixed. The Ministry is going to use the interest rate swaps more intensively to decline the interest risk.

The Ministry of Finance is considering entering the foreign markets with euro-denominated bond issues and to buy back some of the existing issues before their maturity is due. The Ministry already spoke about issues of non-ČZK-denominated debt abroad in the past, but these plans were always evaluated as more costly than issues on the domestic market. The growing amount of the outstanding debt increases the refinancing risk for the issuer on the domestic market. On the day that some of the existing bonds are due, the Ministry of Finance is liable to pay the face value and the interest of the bond. Due to reopenings, the outstanding amount of an issue increases and the amount of repayment on the due day grows and increases the refinancing risk and the pressures on the cash management. Issuing longer-term bonds cannot solve this problem and the Ministry is, therefore, trying to open other financial sources that could decrease its dependence on the domestic bond market. The profitability of this step is nonetheless rather questionable: possibly lower interest rates abroad could be fully or more than fully offset by the exchange rate movements (in the case of a non-hedged issue). If the Ministry will decide to cover against the exchange rate movements, this hedging will be costly and the total cost of the issue will be higher than in the domestic market. We perceive this strategy (to borrow abroad in foreign currencies) as problematic and possibly conflicting either with macroeconomics stability or with the long-term debt strategy that should try to minimise debt costs.

A completely new feature in the Czech bond market is the so-called reversed issues of government bonds – the Ministry tries to buy-back some of the existing issues with the remaining maturity below 1 year to decrease the refinancing risk. The pressure on the cash management in the times of issues' maturity is therefore reduced, because the remaining outstanding amount of due bonds is smaller. This procedure brings liquidity to the secondary market (the bonds with a very low remaining maturity used to be illiquid). There is not enough experience with this type of operation – the first one was executed on January 21, 2004 and the obtained amount was rather symbolic.[17] We will see in the near future whether the investors change their current attitude towards this innovation or not. Notwithstanding the low success at the first reversed issue, the Ministry is going to carry on over a certain period.

7. Conclusions

Debt management in the Czech Republic is an area of dynamic development that reflects the specific influence of the economic transformation from a centrally planned economy towards a modern market-oriented one. In the first instance, the analysis of this evolution may be useful for the countries that are in economic conditions similar to those of the Czech economy 10-14 years ago. The description of the debt management evolution may provide inspiring ideas for economies where the fundamental segments of the debt market have to be built.

The specific transformation of the Czech economy was influenced by the relatively very low initial level of state debt at the beginning of Nineties. The non-existence of fundamental segments of the financial market at the beginning of the transformation and the absence of basic debt instruments combined with no or low fiscal deficits led to the need to establish the treasury bills and government bond markets and to ensure and promote their liquidity.

It was also very important for the developing economy to define the debt management policy and its relation to fiscal and monetary policies. The institutional separation between fiscal and monetary policies can be implemented only after the basic segments of the market economy are built up. Building a liquid financial market isn't any easy task and requires a certain time and effort. Transition

[17] The Ministry tried to buy back some of the 2 bn. ČZK issue of one government bond (this bond matures within 1 year), but actually obtained just 70 millions.

economies had to build or substantially renovate the State Treasury system. Debt management should be included as one of the parts of the State Treasury management.

There is no debt management agency in the Czech Republic and the responsibility for the debt management issues is delegated to the Ministry of Finance. The central bank acts as fiscal agent – it executes transactions on the financial market on the account and behalf of the Ministry of Finance, keeps the accounting, maintains the payment system, and arranges the settlement of the transactions. The current framework of the debt management is already comparable to similar systems in the developed economies.

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