

DEBT MANAGEMENT IN THE CZECH REPUBLIC (formation in the 1990s and the current state)

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Abstract:

This paper describes the development and the current state of debt management in the Czech Republic. The basic principles on which it was built during the 1990s and the importance of the monetary and fiscal policy co-ordination in effective debt management implementation are discussed. The authors try to explain the main factors that are behind the substantial state debt increases in the course of several recent years and to discuss some of the topical issues connected to the debt management targets and procedures. The paper provides a basic description of the instruments used and the conceptual and institutional framework of the Czech Republic debt management system with a particular emphasis on the role of the central bank.

Keywords: debt management, state treasury management, economic transition, fiscal and monetary policy co-ordination

JEL Classification: E61, G18, H63, H81

1. 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 our debt was in comparison to other countries very small at the beginning of the 1990s, reaching less than 16 % of gross domestic product (GDP) in 1993. Consequently, the attention of the policymakers to the state debt management was rather negligible at that time. The main focus was directed towards the setting of the transformation economic 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 as well as has contributed to the continuous

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modification and improvement of the debt management procedures aimed at bringing 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 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 policy 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. In the second part, we will deal with the state debt development in the years 1993 – 2003 and describe the main features and factors standing behind debt development and give more information 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 transformation economy issues.

2. 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 stabilization of the economy. In some countries the stabilization task is also delegated to the monetary policy authority that can react faster and usually in a less distortive way. Although difficult to precisely define, the main aim of the passive coordination of the monetary and fiscal policies could be broadly expressed as 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 – one 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, it does not create a necessity of direct lending from a central bank to a government and does not generate the excessive foreign debt at the same time. In the short run, it is necessary to focus attention on 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 policy 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 effective realization of the monetary and fiscal

1) For details about this topic, see for example Sundararajan, Dattels, Blommestein, 1997.

policies. On the one hand, this is because it provides sources of financing a fiscal deficit on 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 a maintenance of effective and stable conditions on these markets. For example, the necessity to pay the full market price for a debt servicing may work as an effective limit of the excessive fiscal deficit growth.

The state debt management, therefore, represents one of the key areas of the fiscal and 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 the earlier stage of transformation, a relatively consistent coordination of the monetary and fiscal policy targets with the debt 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 a central bank finances a fiscal deficit or it is fully or partially financed from borrowings abroad. “Broad money programming” system is usually used for setting the balanced mix of monetary and fiscal policies;

- *creation of the short-term government bond markets*, when a financial market is still underdeveloped and the interest rates are regulated administratively by a 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 a central bank to influence the interest rates using market instruments. In setting 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 decisions;

- *fully developed domestic financial market*, where the interest rates are fully flexible, the liquidity of government debt instruments is provided by market forces and a central bank uses indirect market-oriented tools for influencing the overall banking sector liquidity. The institutional independence of a central bank, which is perceived by the market players as a guarantor against non-balanced or inflationary trends of economic development, shall be crucial in this phase. The institutional independence that is given by law has to be backed by the so-called “realization credibility”, that means a practical passive 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 such a monetary policy that is transparent and accepted by the government and the public.

A 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 influences is

the setting and *concrete direction of the monetary policy and the monetary tools and operations used* to reach the monetary policy objectives. The relaxed monetary policy allows the debt financing at low interest rates in the short term, but increases the probability that interest rates will be increased in the future as a reaction to growing inflation pressures. On the other hand, restrictive monetary policy may increase to an excessive degree the debt servicing costs; harm the economic growth perspectives and lead towards higher fiscal deficits.

On the contrary, the state debt management determines also the monetary development. If the market players perceive the debt accumulation as disproportionate, the credibility of the fiscal and monetary policy 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 sterilization operations are costly to the central bank and may negatively affect its profits and hence also directly the government budget if a central bank's profit is a common budget revenue source.

One of the possible solutions of 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 one 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 possibility²⁾ – that has been substantially used by the transition economies – namely selling out of the government assets.³⁾ The privatization 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:

$$D_t = (B_t - B_{t-1}) + (M_t - M_{t-1})$$

where D_t represents the fiscal deficit (fiscal policy), B_t is for the outstanding debt and hence the difference $(B_t - B_{t-1})$ denotes the debt management, and the difference $(M_t - M_{t-1})$ stands for the monetary policy.

This relationship is often stated as a starting point for the discussion about the public debt management and monetary policy. 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 determinants 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 a 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.

2) We ignore the other theoretical “solution” – outright or partial repudiation – as depicted in e.g. Gray (1996) – it is not the case feasible for a stabilised economy. Gray 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) In 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 privatization to cover current or capital expenditures. The existence of privatization receipts that improved the budget revenues is the main reason for not so straight link between actual fiscal deficits and the outstanding debt in these economies.

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 an 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 case of the relatively less autonomous central bank and the government has relatively open possibilities to finance the debt by direct lending. The central bank does not 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 suitably developed financial market where the state debt financing on the financial/capital markets is somehow limited. In both cases the central bank is not fully autonomous and does not have its clear target expressed in the price stability terms. A danger of political pressures and preference for short-term gains or objectives than long-term ones are relatively high. It is necessary to solve a conflict between monetary and fiscal policies by reaching agreements, for example, on limits of direct lending to government and/or about the maximal budget deficit.

The *third case* is currently the most relevant one for the Czech Republic. A 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, can, for example, have significant implications to 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 to prevent emergence of negative situations that can harm the economic stability.⁵⁾

3. 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" (IMF-WB, 2000, p. 4). 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 does not reflect just experience of many developing economies, but also

4) However, in the case of the Czech Republic this 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 detection 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 from the Czech National Bank – can discuss topical problems and topics (more details will be given later in this paper).

the Czech transformation experience from the 1990s. 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.⁶⁾

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 the budget execution, the cash management, the debt management, the 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 by Ministry of Finance (Ministry). However, certain functions can be delegated to different institutions that are not directly influenced by a government (or 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 (a debt management office). The institutional setting is determined by a history of an individual country and differs significantly among countries in the definition, structure and explicit target of a state treasury management.⁷⁾ 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 cooperation with individual government departments provides the implementation of the government budget. The Czech National Bank (CNB) 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 realization 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 a central bank and so it is in the Czech Republic. The daily cooperation 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. The CNB carries out free cash market operations based on the instructions from the Ministry of Finance and on the Ministry's

6) During the transformation process, there was not – opposite to other countries – one-shot substantial reform of the state treasury management system. The original state treasury management was already in the beginning of 1990s in many aspects modern and it was not necessary to build a completely new system.

7) There can be identified several basic state treasury systems – among the most known (at least in Europe) are the British, French, continental (German, Italian, Dutch), American, Latin American, Far Eastern and the system of formerly centrally planned economies.

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 a central bank that helps with the fiscal administration. The accounting function is related to the other state treasury functions; the most obvious is the implementation of the government budget and to the cash management, however, vicariously also to the debt management issues.

The last but not least function of the state treasury is the *debt management*. The main task, as it has been already 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 the 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 co-ordination, etc. The debt management is closely linked also to the management of state guarantees and implicit state liabilities (sometimes labelled as “hidden debts”). This area is very important in the transition economies and the Czech Republic is no exception.

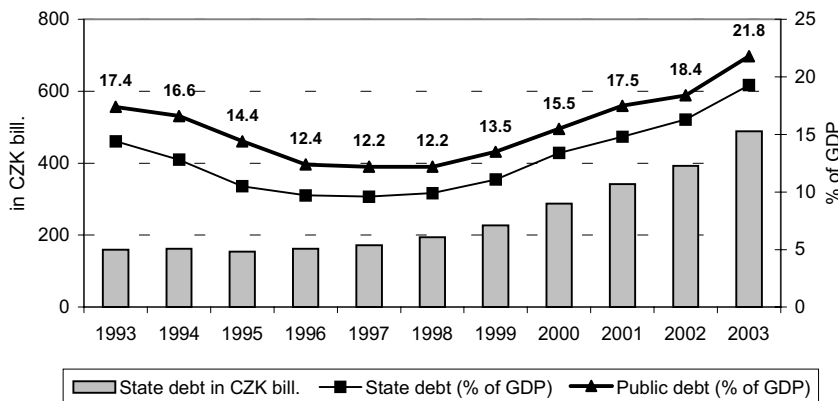
The perception of the state debt management as a part of state treasury system is primarily important in the economies that undergo fundamental changes. This importance follows from both the direct and the indirect relations between the state debt management and the other functions of the state treasury. The fundamental changes, or a continuous improvement of the debt management system, should be assessed taking into account also 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.

4. 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 characterized the first period from 1990 to 1998. This success was reached in the period of economic growth by keeping the nominal amount of the outstanding debt almost constant. The governments tried to implement a policy of *balanced state debt* in practice.

However, it wasn't able to push it through the Parliament and make it legally binding for the following governments. After the elections in 1998, the new left-wing government preferred to play a more active role in influencing the economy. The new government started a policy of revealing the hidden debts – they were connected to previous government guarantees and problematic assets in the banking system created during the privatization. The growing debt dynamics, apparent in Figure 1, demonstrates these facts. In the last couple of years there is also, as a major force of the debt dynamics, the inability of the government to consolidate the budget and significantly reduce the expenditure dynamics that moves away from the budget revenues 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.

Figure 1

Public and State Debt Developments in the Czech Republic

Source: CNB, GFS methodology (IMF).

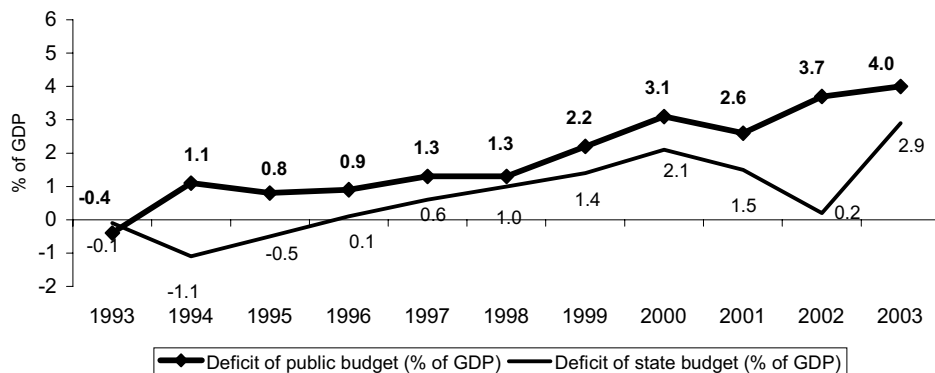
Looking at this in more detail, we can stress the following factors that determine the state debt volume and structure in the Czech Republic.

a) The different fiscal policy setting in the first years of the transformation and now. The Czech Republic had relatively a very low level of state debt. Also the foreign debt was very low in contrast to many other transforming countries in the beginning of the 1990s, and created a positive environment for the start of the 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 for 1993 – 1998 on building a standard market economy framework, economy liberalization and privatization of the state property. A reversal occurred in the year 1998 when the government's effort started to be more oriented to a recovery and later to maintenance of the economic growth, letting the public finances deteriorate from its 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 Figure 2. The prevailing methodology for assessing 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 privatization revenues and transfers to transformation institutions.⁸⁾ The public budget has been in the deficit since 1994 and the state budget since 1995.

b) Increase of the state debt as a result of revealing the hidden government debts and postponing solution to a 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 in 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

8) 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.

Figure 2

State Budget Development (GFS adjusted cash data)

Source: CNB, GFS methodology (IMF).

is related to a Czech banking system consolidation that preceded the banks' privatization in the second half of the 1990s. 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 cover the costs accruing therefrom. We can estimate the total effect of these losses around roughly 5 % GDP between the years 1997 – 2003. If there had been no such transformation operations, the state outstanding debt would have reached only 15.6 % GDP instead of 20.6 % GDP in 2003. The impact on the public debt is even higher and we can estimate the cumulative effect of these operations around 10 % GDP in the referred period. The overall outstanding public debt would have reached, having had no losses from the transformation institutions, only 18.9 % GDP instead of 28.9 % GDP in 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 have also to include the potential liabilities created in off-budget institutions, e.g. in the National Property Fund, in the commercial companies where the government is the major or substantial shareholder (i.e. Czech Railways, aircraft manufacturer Aero Vodochody, etc.). The outstanding amount of the classified government guarantees reached approximately 10 – 12 % of the GDP in 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 existing liabilities, a future fiscal risk stems also from the postponing of the built-in structural features of public finances that push the government balance into deficits also 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 are the pension-related expenditures and the fact that the PAYG state pension system has been deficient since 1997. A substantial change of the Czech society leads towards a 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.

c) Atomisation of the central government finances and its potential risks.

The side effects of the state decentralization create some obstacles to the more effective debt management in the Czech Republic. In the beginning of the 1990s, the general government balance was identical to the state budget balance. During the 1990s, the public finances were atomised to several institutions that were more or less controlled by the government. They consisted 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 7 extra-budgetary funds with the dominant position (in terms of expenditure 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 extra-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 too expansionary expenditure policies.

d) 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 % 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. In 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.

Table 1
Time Structure and Duration of the State Debt

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Short-term instruments (as % of overall 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 (in years)	0.8	1.2	1.1	1.0	1.1	1.0	0.7	1.3	2.4	3.1	3.4

Source: CNB.

The reason justifying the low duration during the 1990s was also a restrictive monetary policy combined with the positively sloped yield curve. The government simply stayed on the shorter side of the yield curve to minimise the debt servicing costs.

e) A minimal role of the foreign borrowing. Interesting conclusions about the Czech debt strategy can be derived from Table 2. The share of the foreign debt has been decreasing since 1995. However, we can observe a break of the trend in 2003. In 1993, it was almost half of the state debt 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 a

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 CZK). At the end of 2003, the foreign debt represented only 12 % of the outstanding debt volume. However, this situation changed during the year 2004, when the Ministry of Finance entered the foreign markets with the first Czech government euro-denominated bond issue.

Table 2
Foreign State Debt Development

	1995	1996	1997	1998	1999	2000	2001	2002	2003
Absolute volume (in CZK bill.)	61.0	57.2	49.6	33.9	28.7	29.8	31.0	36.7	66.5
% of overall state debt	28.9	27.7	22.8	14.1	10.4	12.0	7.7	8.3	12.0

Source: CNB.

5. Basic Framework and the Debt Management Target in the Czech Republic

The Czech Republic started a fiscal consolidation with the aim to push the general government deficits below 4.0 % GDP in 2006. The first phase of the consolidation was implemented in 2003 and started effectively from January 1, 2004. It consists of several revenues and expenditures measures. Later the government discussed the second phase where some of the basic structural budget problems (e.g. the pension reform) should be solved and the aim was to decrease the deficit further to 3.0 % GDP before entering the EMU 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 % GDP and the state debt just 25 % GDP in the end of 2006. The precise denomination is, however, still unclear. Compared to the situation 10 years ago, the state debt is already now reaching a significant outstanding amount. We are moving closer to the eurozone countries in this aspect. The existence of the Maastricht 60 % debt criterion plays a disserviceable role – some of the 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.

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 minimise costs of the debt service in the medium and long-term at an acceptable level of risk. In addition to the realization of this fundamental aim, there is also a subsidiary objective (that is common also in 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. The CNB carries out a

role of a 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 and on the Ministry of Finance behalf, provides connected activities in the accounting area, 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 realization of this strategy in practice. This role is nowadays shown in the cash management and in the risk management activities.⁹⁾ 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 fiscal burden that would be connected with establishing and running of 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 cooperation in the state debt management that was concluded in the middle of the year 2001 and updated in the end of 2003. The agreement touches the following topics:

- setting the debt strategy and interchange of information,
- specifying CNB tasks in the fiscal agent role,
- allowing the entry of the Ministry of Finance in to 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.

According to this agreement, the Ministry of Finance formulates the debt strategy. During the process of the formulation of a debt strategy aim definition, a regular co-operation and information exchange between the Ministry of Finance and the central bank proceeds. The responsibility for the debt management and fiscal policy on the one hand and the monetary policy on the other hand is strictly separated. The final proposal of the debt strategy is submitted to the CNB 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 the statement include the bank's view on potential conflicts with the monetary strategy that could emerge in the realization of the suggested debt strategy and possible macroeconomic impacts. However, the final decision about the debt strategy is fully in the competence of the Ministry of Finance, which is obliged to inform the CNB within 10 days after the decision is taken.

There is also defined an activity and responsibility of a stable co-ordination working group for the debt management issues in the mentioned agreement. The relevant experts from both institutions – the Ministry of Finance and CNB – participate in the working group activities and meet regularly once a month. During these consultations are solved questions related to:

9) 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 (roll-over) risk.

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 organization, the legal framework, a 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 discussion, they are explicitly stated and depicted in detail in the working group meeting minutes. The Deputy Minister the Ministry of Finance takes the final decision on these disputes. This joint body represents a very concrete form of the fiscal and monetary policy co-ordination in practice. Its functioning has been very useful in the last three years.

Another area where the Ministry of Finance and CNB intensively co-operate 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 CNB is based on delivering to the Ministry regular monitoring reports that are focused on the development of the domestic and foreign markets, elaboration of demand structure analyses and surveying of the bond market players' preferences.

The framework is continuously refined – the procedures that were sufficient in management of a low outstanding state debt are not always effective in the light of substantial debt dynamics we have faced in the last years. There was also a discussion about a separation of the debt management administration from the Ministry of Finance to a more independent institution, as a 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 this debt management administration within the Ministry of Finance; however, a new and more independent division was 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 additional expenditure burden to the government budget. Compared to the situation 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.

6. 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 the overall liberalization 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 in the beginning of economic transition. We use two basic types of instruments – the short-term treasury bills and medi-

um and long-term government bonds. The beginning of the transition in the early 1990s can be characterised by a very liquid treasury bills market and (as a consequence of 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 CZK 479 bill., from which CZK 160 bill. (6.7 % of GDP) were the treasury bills and CZK 319 bill. (13 % of GDP) the government bonds, in the end of 2003. According to the central bank act, there exists a legal prohibition to finance the government by loans, so the whole central government debt is financed by the domestic securities market.¹⁰⁾ The government's issue programme 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 % 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 of Finance delegated the role of a fiscal agent to the CNB, the primary issue auctions are technically organised by the central bank. The role of the bank is concentrated on arrangement of auction rules, preparation, announcement and administration of the auctions and 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 CNB 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.¹¹⁾ The Ministry of Finance makes the final decision about criteria they are flexible enough to modify them if one of the groups – the issuer and the investors – suggest improvements.

6. 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 a nominal face value of CZK 1 million with these maturities: 13, 26, 39 and 52 weeks. The volume issued in one auction is usually in the range between CZK 8 and 20 bill. 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

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

11) The current rules require minimal 1 % turnover on the secondary market and to subscribe at least 3 % 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.

can also be issued. The auctions are the “Dutch”-type and they have usually a weekly periodicity. The current auctions are usually 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 the System of short-term bonds). The registry, which is intended for bills with maturity of less than one 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.

The secondary market with the treasury bills is a quite advanced segment of the money market. The trading is carried out over the counter and the settlement is made using the system of short-term bonds. 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 bills for the cash management purposes.

6. 2 *Government Bonds*

Compared to the treasury bills market, the government bonds market used to be less developed throughout the 1990s. The reason was a relatively low need to develop this market in the beginning of the 1990s because the fiscal deficits were very low (actually the government balance had been in surplus for several of years). The first instruments which were issued on this market were the two- and five-year state bonds. The usual issue volume was five billion of the CZK 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 %. 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 re-opening of old issues was set up. Individual issues included bonds in CZK 4 – 5 bill. and the issue was later reopened until the total volume reached CZK 20 – 25 bill.¹²⁾ 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 a decision to decrease the total number of outstanding issues and at the same time to increase a volume of each issue by re-openings making the secondary market more liquid.¹³⁾

Also the government bonds are dematerialised, but they are registered in the Prague Securities Centre,¹⁴⁾ bear a fix coupon interest and their nominal face value is only CZK 10,000. The current debt management strategy is to promote benchmark issues with maturities of 5, 10 and 15 years. The primary “American” – type aucti-

12) The current upper limit is even higher reaching CZK 40 – 60 bill.

13) More details about accessible tools to encouragement of a market liquidity can be found e.g. in Blommestein (2002).

14) Středisko cenných papírů (The Prague Securities Centre) is a registry for dematerialised securities (for the shares and the bonds with original maturity higher than one year).

ons 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, the CNB delivers to the Ministry a suggestion of possible cut-off yield, but the final decision rests on the Ministry of Finance again.

The trading volume of the state bonds represents around 90 % 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 outside over the counter market.¹⁵⁾

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 a first-choice bonds with a fixed coupon come to mind. The inflationary stable environment (or more precisely the economy with substantially declining inflation), sufficient absorption capacity of the domestic market, 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 reasoned 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 re-financing 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 creation of a very liquid forward rate agreement and interest rate swaps 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 CZK swap market is highly correlated to the euroswap market. Thanks to the 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, continuously increasing outstanding volume of the state debt is calling for a permanent fine-tuning of the state debt risk management.

7. Current Issues of the Czech Debt Management

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

15) 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.

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 in 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 one year to 25 – 30 % (this ratio was 42 % in the end of 2003). The Ministry of Finance is also going to smoothen monthly distribution of raising the funds from the domestic capital market within the year. They are 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. They also plan to make the re-openings more frequent and run one bond issue and three treasury bills issues every month.

The previous *interest risk* management aim was to reach the debt duration at around three years during 2003. The new target wanted to increase the duration further to 3.3 – 4.3 during the year 2004. The long lasting preference of fix coupon bonds has not 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 considers to *enter 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-CZK 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 re-financial risk for the issuer on the domestic market. On the day, when 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 re-openings, the outstanding amount of an issue increases and the amount of repayment on the due day grows and increases the re-financing risk and pressures on the cash management. Issuing longer-term bonds cannot solve this problem and the Ministry is, therefore, trying to open other financial source 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 may be costly and the total cost of the issue could be higher than on the domestic market. We perceived 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 the debt costs.

A completely new feature in the Czech bond market was the so-called *reversed issues* of government bonds – the Ministry tried to *buy-back* some of the existing issues with the remaining maturity below one year to decrease the re-financing 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.¹⁶⁾ We will see in the nearest future whether the investors change their current attitude towards this innovation or not. Despite of the low success with the first reversed issues, the Ministry wanted to carry on over a certain period.

16) The Ministry tried to buy back some of the CZK 2 bill. issue of one government bond (this bond matures within one year), but actually obtained just 70 millions.

8. Conclusion

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 similar economic conditions as the Czech economy was in 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 1990s. The non-existence of fundamental segments of the financial market in the beginning of the transformation and the absence of basic debt instruments combined with no or low fiscal deficits led to a need to establish the treasury bills and government bond markets and ensure and promote their liquidity.

It is also very important for a developing economy to define the debt management policy and its relation to fiscal and monetary policies. The institutional separation of fiscal and monetary policy can be implemented only after the basic segments of a market economy are built up. Transition economies often had to build or substantially renovate the state treasury system. The 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 accounting, maintains the payments system, and arranges settlement of the transactions.

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