CZECH UNIVERSITY OF LIFE SCIENCES PRAGUE

Faculty of Economics and Management

Department of Economics

BACHELOR THESIS

State Fiscal analysis
(State budget)
Case study of the Czech Republic

Author: Irena Lhotáková
Supervisor: Ing. Mansoor Maitah PhD.

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Declaration

I declare that I have worked on my bachelor thesis called „ State fiscal analysis (state budget) case study of the Czech Republic "by myself and I have used only the sources mentioned at the end of the thesis.

Prague, the 20th April 2009   ....

                                                              Irena Lhotáková

Acknowledgment

I would like to thank my supervisor Ing. Mansoor Maitah PhD. for his time and for consultations concerning not only the topic of my Bachelor thesis but also other macroeconomic subjects. My thanks belong also to my father who supported me and provided me with advice while I was writing my thesis.

Fiskální analýza státu

(Státní rozpočet)

Případová studie České republiky

State Fiscal analysis

(State budget)

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Souhrn

Tato bakalářská práce je zaměřená, jak již napovídá název „State fiscal analysis (state budget) case study of the Czech Republic", zejména na problematiku fiskální politiky a analýzu státního rozpočtu.

První částí této práce je literární rešerše, která se dělí na tři části. V první části se věnuji konceptu fiskální politiky. Nejprve se zabývám tímto pojmem a jeho vysvětlením. Dále popisuji typy fiskální politiky, její cíle a užití v praxi. Ve druhé části je krátce zmíněna struktura daní a její rozdělení. Třetí část literární rešerše je zaměřena na státní rozpočet, vytyčení základních pojmů, jeho druhy a funkce. Jsou zde zmíněny také mandatorní výdaje státního rozpočtu.

V praktické části této bakalářské práce jsem se věnovala zejména státnímu rozpočtu a dluhu státního rozpočtu. V první části, zaměřené na státní rozpočet, jsem nejprve demonstrovala jeho vývoj od roku 1993 do roku 2008 na příslušných grafech. Na plánovaném rozpočtu na rok 2009 jsem trochu hlouběji analyzovala příjmovou a výdajovou stránku tohoto rozpočtu. Jako druhým jsem v praktické části zabývala státním dluhem a jeho vývojem. Porovnala jsem ho s DPH a zmínila možná rizika stále rostoucích úroků plynoucích z tohoto dluhu. Vše jsem doplnila grafy.

V závěru práce jsem se zamyslela nad současným fenoménem finanční krize a vyjádřila své stanovisko.

Klíčová slova

Fiskální politika, státní rozpočet, státní dluh, úroky státního dluhu, finanční krize.

Summary

This bachelor thesis is focused on phenomenon of fiscal policy and state budget analysis which is apparent from its name "State fiscal analysis (state budget) case study of the Czech Republic".

The first part of this thesis is a literature overview which is further divided into three parts. I dedicated the first part of the literature overview to an explanation of this phenomenon and set basic facts. Then I describe the basic types of fiscal policy, the aim of it and its use in practice. In the second part I briefly mention tax structure and its division. The third part of the literature overview is focused on the state budget. I trace out the basic definitions, its functions and I mention the importance of mandatory expenditures of the state budget.

I devoted the practical part of this thesis to state budget and state budget debt. Firstly I focused on state budget and I demonstrated its development from 1993 to 2008 on a graph. Then I practically analyzed the expenditure and receivables part of the state budget on a planned state budget for 2009. Secondly I was dealing with the state debt and its development in time. I made a comparison with GDP and mentioned possible risks coming from growing debt interest. All is displayed on graphs.

At the end of this thesis I commented current phenomenon of financial crisis and expressed my opinion to the topic.

Key words

Fiscal politics, state budget, state budget debt, budget debt interest, financial crisis

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1. Introduction

The world has noticed a financial crisis occurred. It is a big issue and everybody talks about it. Every time we switch our TV on we can hear economists alerting the economic situation is not good and politicians arguing one over another who comes with the best solution.

There is no doubt the government is a very powerful institution (organ) which can help affect our economic situation by among others a proper implementation of fiscal policy. Fiscal policy affects how much the government spends and saves by changing the level of government expenditures and taxes. But do citizens understand what is going on and why?

I assume everybody should have basic knowledge about economics and politics to understand the situation of our state and how it functions. Conscious and educated citizens then can choose political party which does not offer only impressive promises but reasonable plans to lead our state.

This is the reason why I chose this topic of my bachelor thesis. I wanted to study in depth to understand the fiscal policy model and how it affects our economy.

2. Objectives of thesis and methodology

The objectives of the first part of my thesis which is called literature overview are predominantly to explain terms related to the topic for better understanding of the practical part of this thesis. These are among others fiscal policy, state budget, expenditures and receivables of state budget, mandatory expenditures, state debt and state debt interest. I would also like to describe their functions and practical implementation.

In the second part of the thesis the aim is to introduce the issue of the state budget, state debt, to analyze state budget, describe its development and compare its parts and to show how it is affected by politics.

My hypothesis is the state budget spending has been rising which leads to increase in state debt.

The methodology of my case study covers gathering data from the Czech statistical office, the Ministry of finance and newspaper. The methodology comprises also corrections and minor computations, comparisons, measurements and analysis of collected data, creating tables and graphs. All has been properly commented.

3. Literature overview

3.1 Fiscal Policy

Before I describe the meaning of the term fiscal policy I would like to explain where the word came from. The origin goes as far back as to the Roman times where states started to use money and there was a need to store them. Therefore the Latin word *fiscus* meant cash or cash desk. (Kožešník, 1980) Now I can proceed to the description of fiscal policy.

Fiscal policy is a governmental tool to monitor, stabilize or affect national economy. The government does so by adjusting the amounts of spending and the regulation of taxes. Fiscal Policy is based on theories of a British economist John Maynard Keynes also known as Keynesian economics. This theory tells us that the government can affect macroeconomic productivity level if it increases or decreases tax levels and public spending. The aim of it is to create balanced economy. To make it move when it slows down too much and on the other hand also to slow it down when it gets too productive. It is called **stabilization policy**. Because business cycle tends to move up and down the objective of the stabilization policy is to even it out. The government may purposely choose to take action to make the level of income less changeable. Fiscal policy involves modifications of the level of government spending and collection of receivables either of these changes alters the government budget. **Fiscal policy** is a tool of usage of the state budget in order to stabilize the economy. (Burda, 2005)

3.1.1 Implementation of Fiscal policy

One of the tasks our government undertakes is fighting inflation and dealing with unemployment. It also makes sure the economy grows

and that the level of GDP is sufficiently high. To be more specific I would like to include a formula of GDP. **GDP = C + I + G + NX**.

- **C** = Consumption
- **I** = Income
- **G** = Government spending
- **NX** = Net export (Total export – total import)

The formula of GDP is the same as a formula of aggregate demand.
AD = C + I + G + NX.

To understand how and why implement the Fiscal policy one must understand the relationship among the **GDP**, **AD**, unemployment and inflation as fiscal policy with all of the listed deals in some way. When the economy performs at low level of incomes it results in increasing unemployment. The government can intervene and either increase government spending G or lower taxes T. By increasing the government spending, the aggregate demand rises which causes the equilibrium level of income to go up. Also a decrease in tax levels causes that people have money to spend, corporations can invest and thus aggregate demand rises. It is clear from the formula above that raise of AD means also a rise in GDP. (Maitah, 2009)

The question of unemployment is a bit more difficult. There are two ways how to view unemployment.

- **The full level of employment**
- **The equilibrium level of employment**

The full level of employment presents an ideal situation – how it is supposed to be like.

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The equilibrium level of employment shows the real situation.

In order to create balanced situation in economy, achieve full employment or get as close to it as possible the government uses **income multiplier.**

Although fiscal policy is a power tool it carries also some disadvantages. The first one is that although fiscal policy is a very powerful tool to stabilize economy, on the other hand wrongly implied fiscal policy can hurt economy. Another issue is called a time lag. There are two types of **policy lags**: **Inside lag** and **outside lag**. The inside lag indicates the time that is needed to realize the need of fiscal policy and its implementation. There are 3 types of inside lags. Recognition lag is the time within the government notes the economy needs intervention. It usually takes about 3 to 6 months. Then it takes another time to decide to imply the policy. This time is called Decision lag. And finally Implementation lag takes part as the time needed to imply fiscal policy in practice. This whole process usually takes up to 11 months. The outside lag is a time period it takes for the change in policy to affect macroeconomics. (Maitah, 2009; Burda, 2005)

3.1.2 The Laffer Curve

The Laffer curve is a curve created by an economist Arthur Laffer which represents the relationship between Tax rate and tax revenue. This curve shows that the more the tax rate grows, the less are people motivated to work because the more they have to give to the government. This situation leads to cheating on taxes. On the other hand tax rate decline results in short term fast decline in tax revenue but long term growth as majority of people are willing to give a smaller amount to be collected. (Burda, 2005; Helísek, 2002)
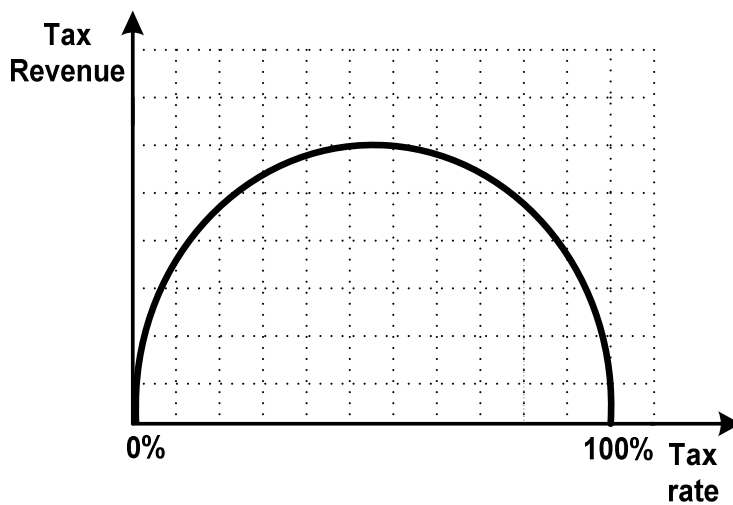
Figure 1: The Laffer curve

Source: Ing. Mansoor Maitah Ph.D.

3.1.3 Types of fiscal policy

Now I would like to mention 2 types of Fiscal policy which differ according to a goal the government has.

- **Expansionary Fiscal policy**
- **Restrictive Fiscal policy**
- **Automatic stabilizers**
- **Discretionary policy**

Expansionary fiscal policy represents an increase in overall spending in the economy, represented by an upward shift of the expenditures graph. In other words an increase in government spending increases aggregate demand and the equilibrium level of income as I have already mentioned in the previous chapter. The alternative offers to cut taxes in order to achieve increase in equilibrium level of income. (Maitah, 2009)
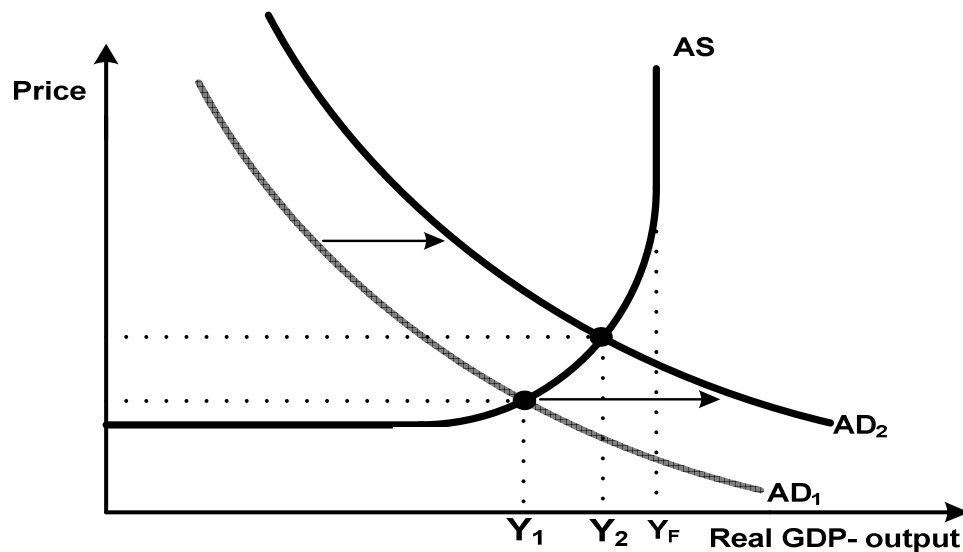
Figure 2: Expansionary fiscal policy

Source: Ing. Mansoor Maitah Ph.D.

Restrictive fiscal policy on the other hand is represented by a downward shift of the consumption graph. It is possible to predict the effects of government fiscal policy using mathematical and graphical analysis. As the graph of expenditures shifts up and down, we can find the point of intersection with the production graph to find the new equilibrium income.

Practically what it means is the government can decrease its spending in order to reduce inflationary pressure. It can also increase taxes which lead to reduction of income and total spending and thus reduction of inflation pressures.
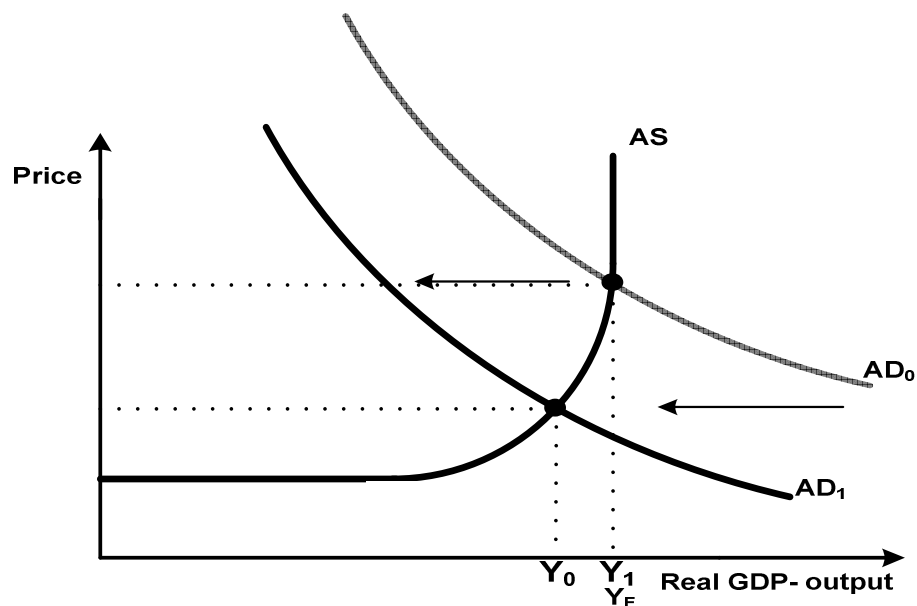
Price

AS

AD₀

AD₁

Y₀ Y₁ Real GDP- output
Y_F

Figure 3: Restrictive Fiscal policy

Source: Ing. Mansoor Maitah Ph.D.

Automatic stabilizers

These tools work automatically and the government does not have to decide whether to apply it or not. The advantage is that there is no time lag within the application. Automatic stabilizers work in response to changing economic conditions.

- o Progressive income taxes in recession– the more people earn the more government collects on taxes
- o Transfer payments such as unemployment benefits, social security benefits. In recession the benefits are higher in order to keep the spending constant

Discretionary fiscal policy is a type of fiscal policy discussed in previous chapters which represents changes in laws regulating government purchases, taxes and transfer payments. It means the government has to decide to implement fiscal policy. It is the exact

opposite of automatic stabilizers which are implied and no decision is needed. The aim of Discretionary fiscal policy is to either increase or decrease the level of aggregate demand. (Burda, 2005; Maitah, 2009)

3.1.4 Goals of fiscal policy

The goals of fiscal policy are rather clear. These are to emend the economy and create balanced state budget. While the economy is flourishing, the demand for goods and services is rising as well as its production. Because the level of unemployment is low the government saves funds on social support. GDP rises influenced by these factors and the state budget is in surplus. In this situation the government implements discretionary fiscal policy in order to keep reserves for the future.

A reverse situation occurs when the economics runs from recession. The unemployment rises, the aggregate demand falls, the GDP lowers and the state budget has to issue more funds for social support. Now we experience a situation when the state budget is in the deficit. Here comes time for expansionary fiscal policy to make the economy move again.

3.2 Income tax structure

Taxes are the main source of the state budget receivables. Collecting of taxes is mandatory according to a law as tax receivables are further distributed. A tax structure and level differs in every state according to economic situation. The tax structure may change if it is needed. There are two basic types of taxes which then divide further:

- **Indirect taxes**

  - **VAT**
  - **Consumption tax –** alcohol, cigarettes, fuels

- **Direct taxes**

  - **Income tax, Corporate tax**
  - **Real estate tax**
  - **Gift tax, Legacy tax**
  - **Road tax**

The term direct tax refers to a fact they are handed in directly the state budget. On the other hand indirect taxes such as VAT are paid to a person collecting money for purchased item. He must then return the tax to the state himself. (Helísek, 2002)

There are also other types of taxes according to the way an income is taxed.

- **Progressive Income Tax:** the tax rate increases as a person's taxable income level rises.

- **Proportionate Income Tax:** the same tax rate is used for all levels. This is sometimes called a flat tax.

- **Regressive Income Tax:** the tax rate decreases as a person's taxable income level rises. (Maitah, 2008)

Nowadays it is used flat income tax in the Czech Republic. The tax level for individual person is set to 15% and it is 21% for corporate body.

3.3 State budget

The state budget is a yearly financial plan of resources the state operates with. It comes in a form of a code and is one of the most important laws of the state. The state budget is formed by the government specifying how much money is to be allocated to every state sector according to priorities. Then it must be approved by the parliament. After being approved it is up to the government and the state ministries to direct funds to individual places (schools, hospitals). Budget expenditures cover the functioning of the state. There are two types of expenditures. There are mandatory expenditures which form approximately 80% of our budget and other. Mandatory expenditures are stated by a code (law) or the constitution. The state budget can also function as a tool for realizing state politics.

3.3.1 Characteristics of the state budget

- **Uniformity** – all state receivables and expenditures must be displayed in one document, which is the state budget
- **Entirety** – all the state receivables and expenditures must be used in the full scale. No compensations are permitted
- **Publicity** – must be accessible to the public
- **Reality** – need for the data to be real, not biased
- **Balance** – all receivables and expenditures must be balanced without state loans

3.3.2 Functions of the state budget

The main function of the state budget is to finance all services and support for citizens our state has to ensure for their everyday life. Every citizen needs to feel secure, must be provided with proper education and also appropriate healthcare when he needs it. Retirees or people who are unable to work have a right to ask for social support. All of these needs must be ensured by the state institutions. Security is provided by the police, healthcare is ensured by hospitals and health care centers, schools provide education and the state administration deals with other problems and need of our citizens and ensure proper functioning of the state. The next lines summarize the basic functions of the state budget.

1. **The allocation function**
2. **Redistribution of income**
3. **Stabilization function – fiscal policy**

1. **The allocation function:**
The purpose of a budget is to assign financial resources to ensure production of public goods and services such as public defence, infrastructure or environmental protection and other services.

2. **Redistribution of income**
The state budget functions as a regulator of inequalities. It collects funds and then it redistributes where it is needed in terms of social payments, pension payments as it is displayed in table 1 in this chapter. The redistribution works through distribution channels, state authorities, and directs funds to final areas such as schools, authorities, retirees or research institutes.

3. Stabilization function – fiscal policy

The state must clearly define how much money from the state budget it can operate with and how it intends to distribute in a way which ensures stability of a state and its economics. (Burda, 2005; Maitah, 2009)

Budget receivables	Budget expenditures
Taxes • Includes also social security payments, sick payments and unemployment support	**Transfer payments** • Pensions • Allowances
Other receivables • Accepted interest • Rental tax • Payments of received loans	**State contracts** • Financing of defence education, health service, State authorities services
Other receivables • Based on lowering of government assets – sale of belongings, loan payments	**Transfer payments** • Subventions for transportation, agriculture, banking, industry, export
Accepted subsidies	**Public debt interest**

Table1: Budget receivables and budget expenditures
Source: Helísek, 2002: own modifications

3.3.3 Types of the state budget

When I come back a little bit and refer to the table 1 displaying state budget receivables and expenditures the ideal situation occurs

when the sum of receivables equals the sum of expenditures. This situation is called **budget balance**. When this ideal situation does not take place and the expenditures exceed the receivables a **budget deficit** arises. On the other hand a **budget surplus** results from the excess of receivables to the expenditures. The following figure provides an overview of the types of state budget. (Burda, 2005)

G = T – budget balance

G > T – budget deficit

G < T – budget surplus

3.4 The state debt

The state debt occurs when the government is not able to balance the budget possibly as a result of an incorrect use of fiscal policy. In other words the government spends more money than it collects on taxes.

3.4.1 The Crowding-out Effect

When the state runs a budget deficit but it still needs money to spend it borrows money. This action leads to an increase pushes real interest rates up. It causes a cut in private spending and corporate investments. The aggregate demand falls. High interest rate makes it attractive for foreigners to buy bonds and other financial assets. To buy bonds they have to buy Czech currency which causes the currency to appreciate. The appreciated Czech currency leads to a decline to export as foreign goods are more expensive. In other words the state itself pushes investments out- crowds–out and the situation becomes even worse. The situation is represented by a figure 4. (Maitah, 2008)
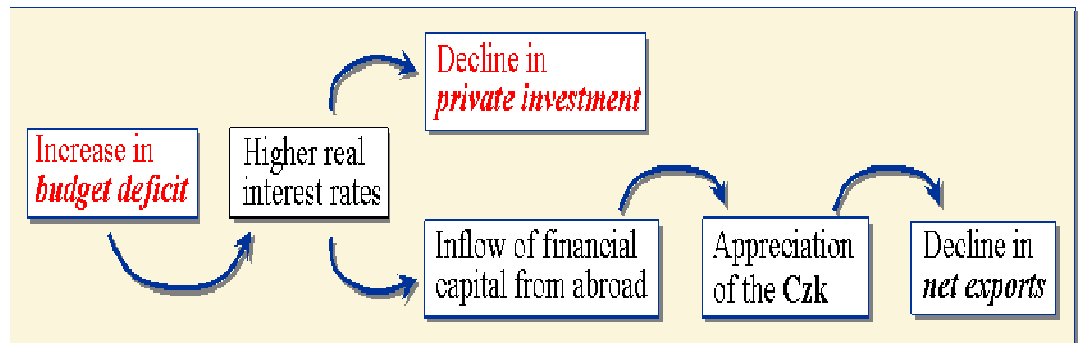
Figure 4: The Laffer curve

Source: Ing. Mansoor Maitah Ph.D.

4. Case study of the state budget of the Czech Republic

This chapter will be focused on demonstration of the state budget in reality. Firstly I will display the state budget expenses and receivables development in real numbers over a time period by means of a table and a graph. Then I will shortly mention the history of the state budget and its development in 4 time periods. I will also briefly mention the mandatory expenses of the state budget and show planned state budget of 2009 in more detail. The next parts of this chapter will be focused on analysis of the state debt, its development in time and a percentage ratio of the GDP. The end of the chapter will be determined to the view on the importance of the state deficit in relation with the world crisis.

4.1 State budget

What a state budget is and what are its mains functions and characteristics is mentioned in the chapter 3.3. In this chapter I would like to distinguish sections a state budget is formed from and especially mention mandatory expenditures. Then I will briefly mention the history of financing of the state budget of the Czech Republic and then it practically exhibit in real numbers. I will describe the development of the state budget throughout the years and focus on the level of state receivables and expenditures by means of table 2 and graph 1.

4.1.1 Parts of the state budget – mandatory expenditures

As I mentioned in the chapter 3.3 about the state budget there are several types of budget expenditures. These are mandatory which are further divided and facultative (other) expenditures. Mandatory expenditures are enacted in a form of a law and the state must cover them in every situation. If the state does not collect enough resources from the receivables part of the state budget and cannot finance them, it must borrow funds in order to do so. Unfortunately mandatory expenses form as much as up to 80% of the total state expenditures which makes their financing even more difficult.

Mandatory expenditures are for example social transfers such as retirement pensions, sickness benefit and state social support. Other mandatory expenditures are health care insurance transfers, debt service, political party allowances, retirement income insurance allowances, export support subsidy.

There are also **other mandatory expenditures** which became a state liability. Firstly these are state mortgage support, which enables people to own a flat or a house. Secondly there are also transfers to international institutions such the International Monetary Fund.

Quasi mandatory expenditures are not enacted but their existence is crucial. Quasi mandatory expenditures form salaries of employees of budget and allowance organizations. Without these employees the state could not function properly.

Only after all mandatory receivables are satisfied, other expenditures such as road construction expenditures, financing of education, research and development or culture can take place. (http://www.czso.cz/csu/2004edicniplan.nsf/t/D000345DF4/$File/1525-04-02.pdf, [cit. 2009-24-3])

4.1.2 The development of the state budget from 1993 - 2008

Now I would like to show how the state budget developed from the
year 1993 to year 2008. All data I used are acquired from the Czech
statistical office and are collected in a table number 2 placed below.

| Year	1993	1994	1995	1996	1997	1998	1999	2000
Receivables	358,00	390,50	439,96	482,81	508,95	537,41	567,27	586,20
Expenditures	356,91	380,05	432,73	484,37	524,66	566,74	596,90	632,26
Balance	1,09	10,45	7,23	-1,56	-15,71	-29,33	-29,63	-46,06
Year	2001	2002	2003	2004	2005	2006	2007	2008
Receivables	626,22	705,04	699,66	769,20	866,46	923,06	1 025,88	1 036,51
Expenditures	693,92	750,75	808,71	862,89	922,79	1 020,64	1 092,27	1 107,31
Balance	-67,70	-45,71	-109,05	-93,69	-56,33	-97,58	-66,39	-70,80

* Commas are used in place of points

Table 2: State budget (In Billions CZK)

Source: http://www.czso.cz/csu/2008edicniplan.nsf/p/1403-08, [cit. 2009-28-2],
own modifications and computations

The table 2 shows dynamics of the growth of the state budget
expenditures and receivables in the given period in real values. The
column called Balance displays an overall value of the state budget. In
other words it shows periods when our state was operating with a state
surplus represented by positive values or whether we were running a
budget deficit. Budget deficit is expressed by negative numbers. As we
can see from the table, the first three years of its existence namely from
1993 until 1995 the Czech Republic was very successful about operating
in the budget surplus. In 1993 the budget surplus was in a rounded
number 1 billion CZK. In 1994 the surplus rose ten times to approximately
10 billion CZK but in the following year 1995 it slightly dropped to 7 billion
CZK.

The situation changed in the following year 1996 when budget deficit of 1 billion CZK occurred. In 1997 there was a rise ten times as in 1993 but this time it was not budget surplus but budget deficit. Since then the state budget has been running deficit. It doubled in 1998 to the amount of 29 billion CZK and since then it has been rising cumulatively. The development of the state budget, specifically how it has been rising is even better visible from the graph number 1.
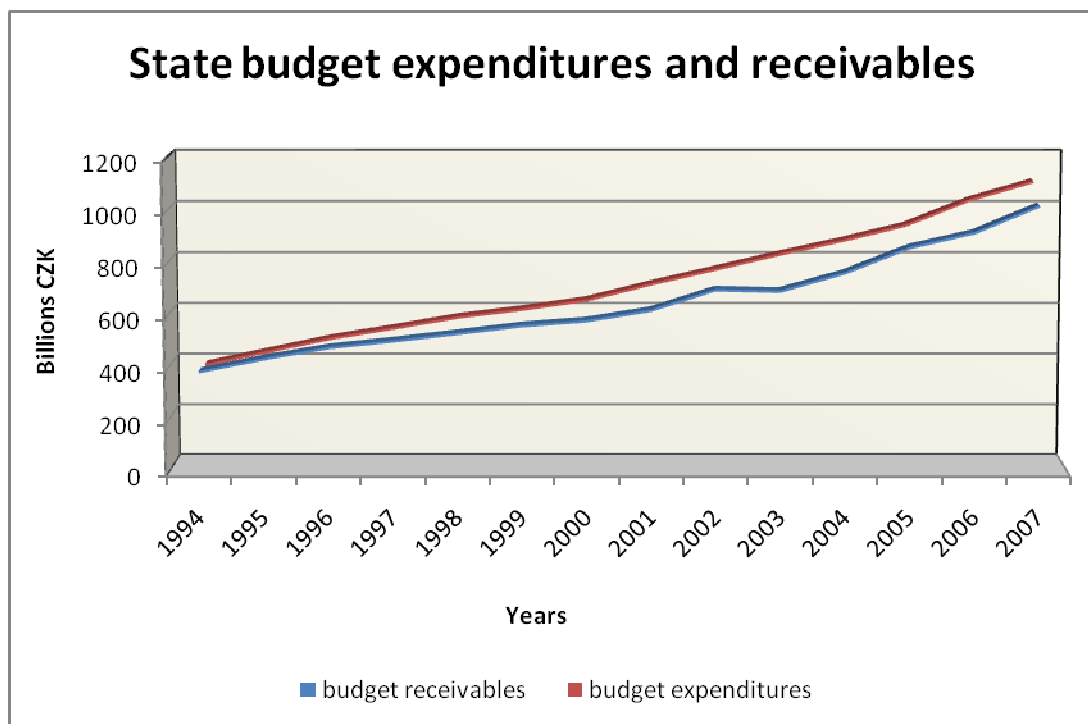
Graph 1: State budget expenditures and receivables
Source: http://www.czso.cz/csu/2008edicniplan.nsf/p/1403-08, [cit. 2009-28-2]

4.1.3 History of financing of the state

The history of the state budget divides into 4 time periods explained below.

1. **Period - stagnation and consolidation of emission (1993-1999)**

2. **Period – imposition of new emission strategy (2000-2001)**

3. **Period - active management of the state deficit (2002-2005)**

4. **Period – expected development**

1. **Period** – After the Czech Republic was settled it was inevitable to settle the legal competencies and undertake liabilities of the former Czechoslovakia. There was a debt undertaken by a former state and there was an effort to pay off direct credit of the Czech national Bank as well as trading banks. In this period there was a minimal issuance of state bonds and only on the capital market due to deficit stagnation.

2. **Period** – A changed market situation and growing demand for credit created a field for new emission strategy – to support market liquidity. Bond issued in this period are of a longer period then 10 years and of higher amount than ever before (up to 30 billion CZK). In 2001 a state committee for managing of state deficit was established. It comprised experts from the Ministry of finance and the National bank.

3. **Period** – This period is significant by changes that were made in the management of the state budget and these are the active management of the portfolio of the state bonds and significant support of the state deficit unit by the Ministry. The year 2003 was noteworthy by simplifying and fastening of the debt service. The state debt deepens and a need of reverse purchase of state bonds occurs. In 2004 there is a decision to enter a capital market as an eminent.

4. **Period** – Although the state debt keeps growing as I have mentioned in the 3. Period due to among others high deficits of public budges and the process of privatization, the Czech Republic belongs to a set

of countries with a low level of the public debt. There are tendencies to lower expenditures and sharpen receivables in order to stabilize the state debt. A pension system reform seems an important factor too. (http://www.mfcr.cz/cps/rde/xchg/mfcr/xsl/vf_historie_financovani.html)

4.1.4 Structure of the state budget 2009

While in the previous chapters I was concerned with the development of the state budget and the history of financing of the state, this chapter will be focused on a closer analysis of the state budget. I chose to study the planned state budget for the year 2009. According to the government it is "A good base for functioning of the state". As a representation of the state budget for the year 2009 I chose a scheme you can find below. (Hospodářské noviny, page 2, [cit. 2008-11-12])

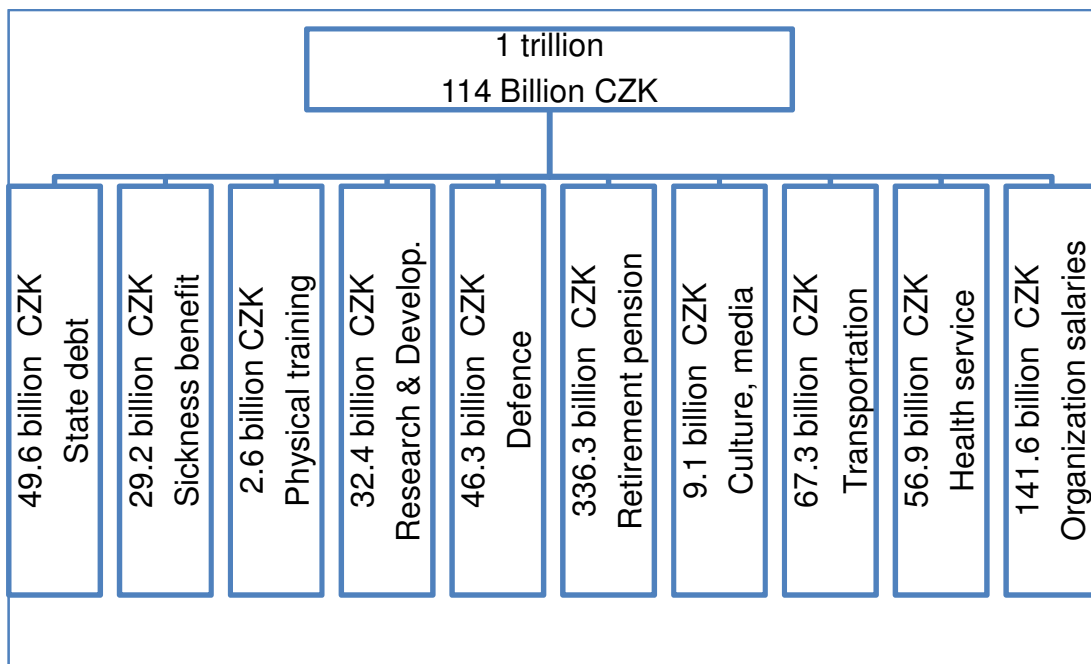| 1 trillion 114 Billion CZK									
49.6 billion CZK State debt	29.2 billion CZK Sickness benefit	2.6 billion CZK Physical training	32.4 billion CZK Research & Develop.	46.3 billion CZK Defence	336.3 billion CZK Retirement pension	9.1 billion CZK Culture, media	67.3 billion CZK Transportation	56.9 billion CZK Health service	141.6 billion CZK Organization salaries

Figure 5: Structure of the state budget 2009

Source: , Hospodářské noviny, page 2, [cit. 2008-11-12], own modifications

If we look at the schema we can see the state budget receivables are formed mainly from taxes, which can be divided into direct and indirect, and then the social security payment. More specifically, the goods and services taxes are as high as 338 billion CZK. The corporate taxes bring to the state budget an amount of 130.3 billion CZK. The amount collected on the income taxes is 107.3 billion CZK. To sum up, the amount collected from all the taxes is 576.3 billion CZK. Together with the social security payment of 396.7 billion CZK, the total planned state budget receivables are 1 trillion and 114 billion CZK.

The second part of the state budget is formed of the budget expenditures. In other words, the amount of 1 trillion and 114 billion CZK the state plans to collect on taxes and social security payment will be distributed according to the following key. As I already stated the major part of the budget expenditures goes to the **mandatory expenditures** which are in total 556.7 billion CZK. From which transfer pensions cost is worth 336.3 billion CZK. The second biggest expenditure of 141.6 billion CZK goes to public organization salaries 49.6 billion CZK is a cost of the state debt and sickness benefit of 29.2 billion CZK. Other expenditures in amount of 214.6 billion CZK in total are planned to be spent in a following manner. The amount of 67.3 billion CZK will be invested in the infrastructure, 56.9 billion CZK in healthcare, 46.3 billion CZK will be spent on state defense, 32.4 billion CZK will support the research and development and 2.6% the physical education. In summation, the state budget plans to receive 1 trillion 114 billion CZK and spend 1 trillion 152 billion CZK which makes it to be in a deficit of 38.1 billion CZK.

The total planned state deficit of 38.1 billion CZK seems to be from the contemporary stage of our economics rather unrealistic. At the same time there are rumors that the state deficit could reach even 200 billion CZK if we consider economic recession which has been threatening the global

economics. Not even the brightest experts are able to predict future situation of our economics. However the planned state deficit of 38.1 billion CZK is likely to be overrun.

4.2 State debt and its development

State debt and debt service has become a burden of the state budget. State debt occurs when the government collects less money on receivables then what it has to spend on mandatory expenditures according to a law. The missing amount of money must be borrowed either from private sector or foreign investors. The state issues state bonds with 5 % interest. State bonds are secure and convenient for its investors. State bonds are purchased by commercial banks, corporations or even regular persons or by foreigner investors. The state debt costs a significant amount of money in a form of state deficit interest.

The Czech Republic has been trying to run a balanced budget since it was formed in 1993. In the years from 1993 until 1995 the state budget was in surplus as we could see from the table 2. This tendency changed in 1996 when the state was operating with a budget deficit. The debt was rising and in 2001 it approached to the level of 345 billion CZK. In the period from 2001 to 2005 it even doubled to the amount of 700 billion CZK. In 2008 it was close to 1 billion CZK. The following debt service is getting close to 50 billion CZK (49.6 in reality). The relevancy of the state deficit and its development in economics of a state becomes more significant when economics notice a substantial decrease of productivity or a crisis in a financial sector occurs.

Financial crisis has got into the real economics with all its consequences such as economic activity decrease and a recession of a business cycle. In this time period when a state budget is threatened by

decrease in receivables and state authorities are neither willing nor able to cut expenditures and so the state debt rises and the importance of state indebtedness deepens.
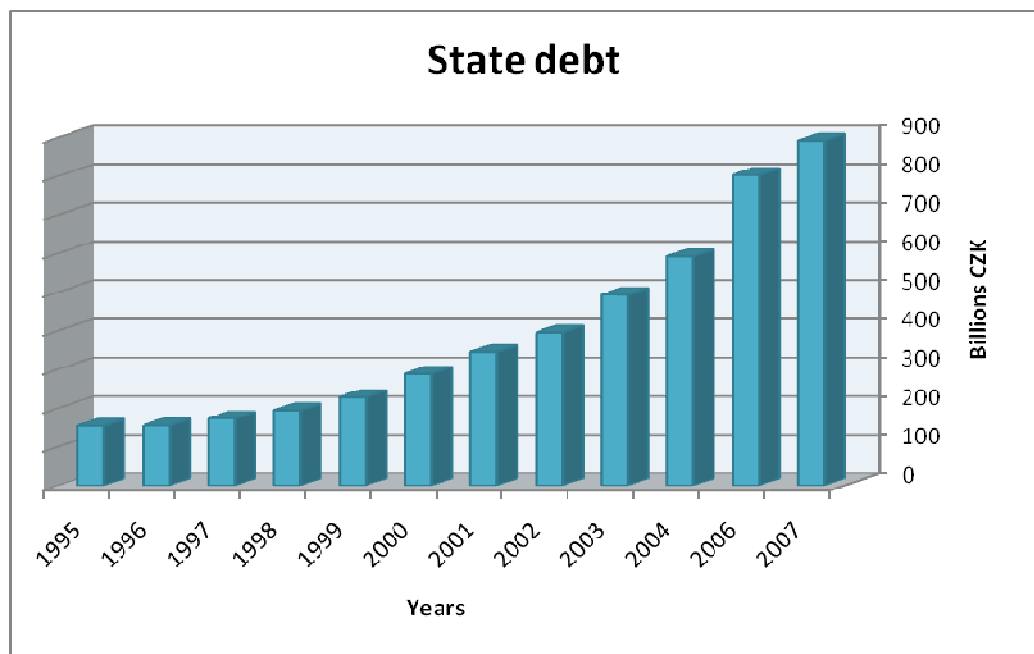

Graph 2: State debt

Source:http://www.czso.cz/redakce.nsf/i/cr:_makroekonomicke_udaje/$File/HLMAKKRO.xls, [cit. 2009-30-2]

As we can see from graph 2 the state debt has been increasing cumulatively. If I review the state budget 2009 scheme we can see the amount spent on state debt service which is 49.6 billion CZK is only slightly lower than the one spent on health care (56.9 billion CZK). It is even higher than expenses on defense which is 46.3 billion CZK.

It is very important to realize that our situation is warning on one hand but on the other hand the position of the Czech Republic as from the point of view of indebtedness is not catastrophic. The position of the Czech Republic can be seen from the graph 2.
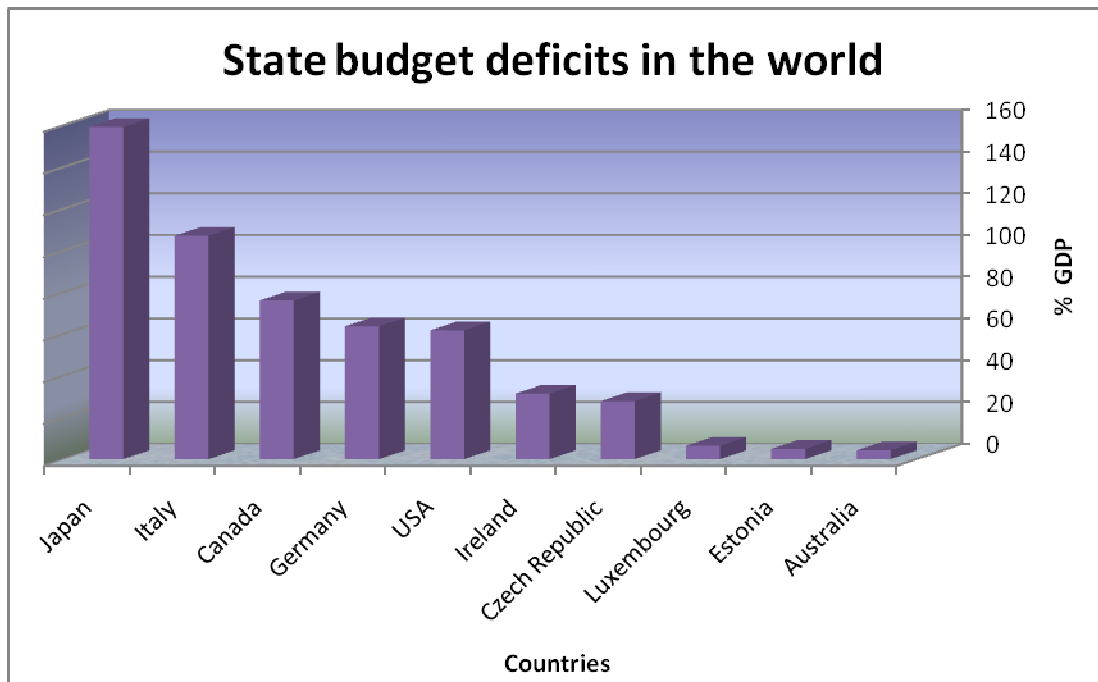
Graph 3: State budget deficits in the world

Source:http://www.euroekonom.com/bottom-government-debt-2.php?year=2000-2006&lang=cz, [cit. 2009-13-2]

As we can see from graph 3, the Czech Republic is in the middle from point of view of the height of debt situation. The situation in other countries for example Japan or Italy is incomparably worse. The state debt burdens the state budget and it can lead to a debt spiral. It can further grow and in an extreme it can lead to **state bankruptcy**. State bankruptcy is a very delicate situation when a state is not able to finance common functioning of the state due to excessive indebtedness. It that situation it loses its face of a confidential state. It has then several choices. It must cut on spending to the prejudice of mandatory expenditures, then it devaluates the currency. These steps affect the inhabitants as is lowers their standard of living. It must also negotiate a new installment strategy with his creditors in order to postpone it.

The danger emerging from debt does not seem to be significant in times of economic prosperity. However the more painful and more difficult to solve the impact is in time of economic downturn. It depends on length of the crisis or recession. The future situation of the state debt depends on future governments and management of the Czech Republic.

Although the Czech crown is a strong currency I incline to the **acceptance of Euro** as it would be a liability of the government to respect the **Maastricht treaty**. Maastricht treaty is a limit for excessive government spending as the liability of a state within the treaty is to keep the total state debt under 60% of state GDP and yearly debt increase under 3%.

There is a need to add another issue that does not allow many politicians to sleep. World economic specialists admit that the Maastricht criteria are no longer sufficient. They call for new ones in order to achieve sustainable economic development of Euro zone with respect to other possible recessions that might threaten us in the future.

Nowadays the state debt is a serious topic to deal with while compiling the state budget. Still increasing budget debt is becoming still a bigger and bigger item of the state budget.

4.2.1 State debt in relation with GDP

The state debt situation has become a problem in many countries around the world. According to the Maastricht treaty the state debt should not exceed 60% of the state GDP level and should not raise more than 3% every year. If we look at graph 4 I created for better visibility we can see the state debt has been raising tremendously. In 1996 it ran not even to 10% whereas in 2007 it was as high as 25%. In the 2 following years it

reaches 30%. It is true the state debt has been rising steeply. On the other hand the Maastricht criteria have been met.
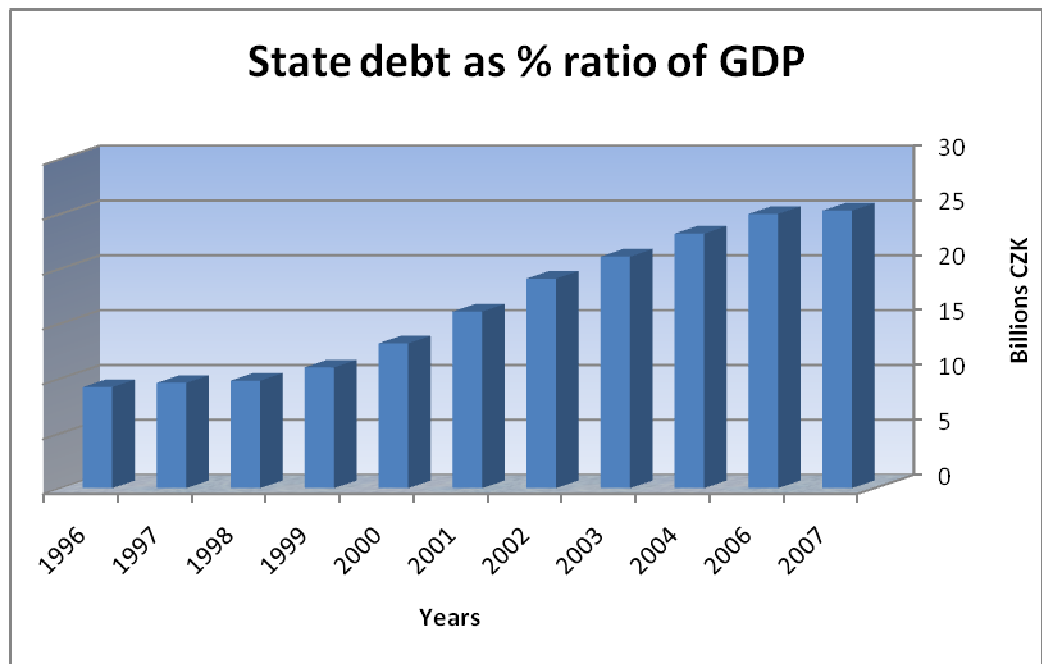

Graph 4: State debt as percentage ratio of GDP

Source:http://www.czso.cz/redakce.nsf/i/cr:_makroekonomicke_udaje/$File/HLMAKKR O.xls, [cit. 2009-30-2], own modifications

4.2.2 Results of the state debt increasing – debt interest

The debt interest represents the amount of money the state has to pay to its creditors who hold state bonds with 5 % interest. The creditors can be foreign or domestic. Domestic creditors are for example commercial banks, private corporations or whoever purchases state bonds. Every time the government has got a difficulty financing all mandatory and other expenditures, it must borrow money by issuing bonds. The debt interest symbolizes a fee for borrowing this money. The

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indebtedness is so high, our state as well as most of other states does not pay the whole debt back but pays a part of it in payments. The more money the state borrows, the more it has to pay on debt interest. The amounts became so high it must be considered in the state budgets for every year.

As we can see from the graph 5 the debt interest has been rising cumulatively since 1993 and in 2007 it more than doubled in comparison with year 1993.
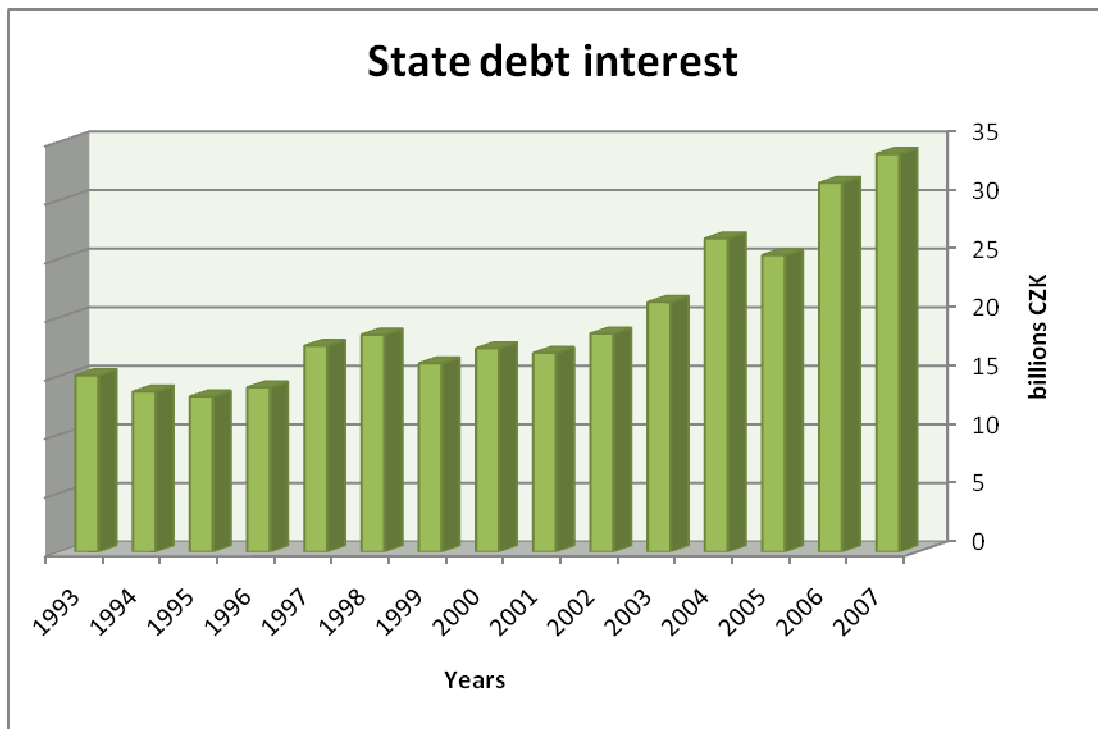
Graph 5: State debt interest

4.3 A view on a world crisis

"The world has been dealing with a big economic crisis." "Are you prepared for the crisis?" We have been hearing these lines for some time now. The crisis is a big issue nowadays and everybody talks about it. Media, advertising and consulting agencies utilize the situation and offer all kinds of workshops, courses and advices for the wide public to help them either sustain their current job or find a new one. The competition is tough. My aim is not to describe how this crisis occurred but debate whether the whole phenomenon really exists and is worth attention. If we look at world economics or economics of individual states we can see there have always been recessions – crisis. Recession is a part of an economic cycle. The whole concept of economics stems from trust. When people believe the economics prospers, they unintentionally further support it. On the other hand when people obtain information a crisis has occurred, they cut their spending, possibly withdraw money from banks which causes the crisis to deepen. Media have a great power to evoke distrust and so negatively affect economic situation. Now I am debating: "Is current economic recession – crisis really so serious?" or even "Do we have to fear it or is it just a bubble blown-out by media?"

5. Conclusion

As I have convinced myself during gathering information for this bachelor thesis Fiscal policy truly is a very powerful tool for managing the state economics as well as it is a good tool for politicians to achieve their own goals.

The state budget is in hands of our politicians and they decide how much money will be spent in each state sector. Here is space for them to play their games in order to gather necessary votes from their voters – us, citizens of the Czech Republic. By managing the tax levels and the state budget our government affects all citizens and their standard of living.

In this bachelor thesis I studied the development of the state budget, state debt and debt interest and how the management of the Czech Republic affects our economy. I added a view on a situation what can happen in case of state bankruptcy.

During my case study I found out that after our republic was formed the state budget receivables and expenditures were approximately at the same level and the budget was more or less balanced. The situation changed over the years. Both the budget expenditures and receivables kept rising but the budget operated deficits which means the expenditures exceeded receivables. The state debt as well as budget debt has been rising which proves my hypothesis.

However even if there is space for improvement the situation is not far that serious due to a fact the Czech Republic fulfils Maastricht criteria. It is a task of our government to manage the situation towards improvements.

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2009-1-3].

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7. Supplements

Supplement 1: Receivables and expenditures of the state budget
(millions CZK)

Pokladní plnění státního rozpočtu						
Pramen: Ministerstvo financí České republiky					stav ke konci období	
v mil. Kč						
Období	Příjmy celkem		Výdaje celkem		Přebytek / schodek	
	roční rozpočet	skutečnost	roční rozpočet	skutečnost	roční rozpočet	skutečnost
1990	163 139	162 513	163 139	163 557	x	-1 044
1991	241 020	225 342	239 920	240 089	1 100	-14 747
1992	249 865	251 379	255 865	253 076	-6 000	-1 697
1993	342 200	358 000	342 200	356 919	x	1 081
1994	385 327	390 508	385 327	380 059	x	10 449
1995	446 267	439 968	436 967	432 738	9 300	7 230
1996	497 641	482 817	497 641	484 379	x	-1 562
1997	519 586	508 950	519 586	524 668	x	-15 718
1998	547 186	537 411	547 186	566 741	x	-29 330
1999	581 339	567 275	612 354	596 909	-31 015	-29 634
2000	592 156	586 208	627 336	632 268	-35 180	-46 060
2001	636 197	626 223	685 177	693 921	-48 980	-67 698
2002	690 400	705 043	736 623	750 758	-46 223	-45 715
2003	684 062	699 665	795 362	808 718	-111 300	-109 053
2004	754 081	769 207	869 051	862 892	-114 970	-93 685
2005	824 831	866 460	908 416	922 798	-83 585	-56 338
2006	889 392	923 060	963 792	1 020 640	-74 400	-97 580
2007	949 477	1 025 883	1 040 777	1 092 275	-91 300	-66 392
2008	1 036 511	1 063 941	1 107 311	1 083 944	-70 800	-20 003
2004 - 1. čtvrtletí	754 081	186 801	869 051	194 620	-114 970	-7 819
2. čtvrtletí	754 081	179 834	869 051	221 717	-114 970	-41 883
3. čtvrtletí	754 081	192 674	869 051	183 488	-114 970	9 186
4. čtvrtletí	754 081	209 898	869 051	263 067	-114 970	-53 169
1. - 2. čtvrtletí	754 081	366 635	869 051	416 337	-114 970	-49 702
1. - 3. čtvrtletí	754 081	559 309	869 051	599 825	-114 970	-40 516
2005 - 1. čtvrtletí	824 831	206 823	908 416	198 574	-83 585	8 249
2. čtvrtletí	824 831	219 430	908 416	223 916	-83 585	-4 486
3. čtvrtletí	824 831	207 817	908 416	185 832	-83 585	21 985
4. čtvrtletí	824 831	232 390	908 416	314 476	-83 585	-82 086
1. - 2. čtvrtletí	824 831	426 253	908 416	422 490	-83 585	3 763
1. - 3. čtvrtletí	824 831	634 070	908 416	608 322	-83 585	25 748
2006 - 1. čtvrtletí	884 392	235 935	958 792	220 181	-74 400	15 754

2. čtvrtletí	884 392	232 883	958 792	240 995	-74 400	-8 112
3. čtvrtletí	889 392	204 683	963 792	210 836	-74 400	-6 153
4. čtvrtletí	889 392	249 559	963 792	348 628	-74 400	-99 069
1. - 2. čtvrtletí	884 392	468 818	958 792	461 176	-74 400	7 642
1. - 3. čtvrtletí	889 392	673 501	963 792	672 012	-74 400	1 489
2007 - 1. čtvrtletí	949 477	241 984	1 040 777	230 720	-91 300	11 264
2. čtvrtletí	949 477	241 335	1 040 777	251 324	-91 300	-9 989
3. čtvrtletí	949 477	265 205	1 040 777	230 164	-91 300	35 041
4. čtvrtletí	949 477	277 359	1 040 777	380 067	-91 300	-102 708
1. - 2. čtvrtletí	949 477	483 319	1 040 777	482 044	-91 300	1 275
1. - 3. čtvrtletí	949 477	748 524	1 040 777	712 208	-91 300	36 316
2008 - 1. čtvrtletí	1 036 511	270 143	1 107 311	283 490	-70 800	-13 347
2. čtvrtletí	1 036 511	266 428	1 107 311	258 733	-70 800	7 695
3. čtvrtletí	1 036 511	257 886	1 107 311	241 761	-70 800	16 125
4. čtvrtletí	1 036 511	269 484	1 107 311	299 960	-70 800	-30 476
1. - 2. čtvrtletí	1 036 511	536 571	1 107 311	542 223	-70 800	-5 652
1. - 3. čtvrtletí	1 036 511	794 457	1 107 311	783 984	-70 800	10 473

Source:http://www.czso.cz/csu/2008edicniplan.nsf/p/1403-08

Supplement 2: Macroeconomic data

Ukazatel	1995	1996	1997	1998	1999	2000	2002	2003	2004	2005	2006	2007
Ukazatele reálné ekonomiky												
HDP	1 466,5	1 683,3	1 811,1	1 996,5	2 080,8	2 189,2	2 464,4	2 577,1	2 814,8	2 983,9	3 215,6	3 530,2
HDP na 1 obyvatele	141 957	163 183	175 772	193 929	202 357	213 110	241 593	252 617	275 770	291 561	313 213	341 989
HDP na 1 obyvatele v PPS	10 774	11 586	11 828	11 961	12 385	13 036	14 419	15 215	16 257	17 058	18 299	19 966
HDP	.	4,0	-0,7	-0,8	1,3	3,6	1,9	3,6	4,5	6,3	6,8	6,0
Výdaje na konečnou spotřebu	.	5,7	2,4	-1,0	3,0	1,1	3,5	6,3	0,9	2,6	3,5	3,8
z toho: spotřeba domácností	.	8,4	2,2	-0,8	2,8	1,3	2,2	6,0	2,9	2,5	5,4	5,2
Výdaje na tvorbu hrubého kapitálu	.	11,6	-8,4	-2,1	-3,5	10,6	4,6	-1,4	9,1	-0,8	10,5	8,4
z toho: fixního	.	9,9	-5,7	-0,9	-3,3	5,1	5,1	0,4	3,9	1,8	6,5	6,7
Vývoz zboží a služeb	.	5,5	8,4	10,4	5,4	16,5	2,1	7,2	20,7	11,6	15,8	14,9
Dovoz zboží a služeb	.	12,1	6,9	8,3	4,9	16,3	5,0	8,0	17,9	5,0	14,2	14,2
Domácí realizovaná poptávka	.	7,0	-0,1	-1,0	1,2	2,2	4,0	4,8	1,6	2,4	4,3	4,6
Deflátor HDP	.	10,3	8,4	11,1	2,8	1,5	2,8	0,9	4,5	-0,3	0,9	3,6
Hrubý disponibilní důchod	1 477,1	1 669,5	1 794,1	1 976,8	2 053,4	2 152,6	2 365,1	2 467,8	2 658,5	2 837,1	3 033,2	3 299,1
Hrubé národní úspory	424,8	454,9	441,0	525,5	512,1	542,4	553,3	532,2	620,0	714,2	780,8	883,0
Míra hrubých národních úspor	28,8	27,2	24,6	26,6	24,9	25,2	23,4	21,6	23,3	25,2	25,7	26,8
Míra hrubých úspor domácností	15,2	11,5	11,3	9,3	8,5	8,4	8,3	7,4	5,4	8,2	9,3	9,0
Souhrnná produktivita práce	.	3,3	-0,9	0,9	3,9	4,1	1,6	4,7	4,3	5,2	5,0	3,3
Jednotkové pracovní náklady	.	9,1	8,7	6,6	2,7	1,8	3,7	3,1	1,5	-1,2	0,7	2,3
Energetická náročnost	-1,9	0,2	-3,6	-4,2	-3,6	-1,4	-1,3	2,9	-2,5	-6,1	-4,8	
Emise CO2	4,0	5,5	-4,5	-6,2	-3,0	4,8	-3,1	2,6	0,8	-0,6	4,0	
Průmysl - tržby	.	.	6,1	0,6	-0,7	7,7	2,7	5,8	9,9	8,1	11,6	10,8

Stavebnictví - tržby	.	.	-0,3	-11,5	-8,5	0,6	-3,5	11,2	4,5	3,7	13,9	5,9
Služby - tržby	.	.	-1,7	-5,7	2,3	5,7	0,9	4,7	3,2	3,0	5,0	7,0
Zemědělství - tržby	.	.	0,7	-1,8	1,9	-3,0	2,5	-5,5	0,0	8,0	-3,7	-6,6
Počet zaměstnaných s jediným nebo hl.zam.	0,7	0,2	-0,7	-1,4	-2,1	-0,7	0,8	-0,7	-0,6	1,2	1,3	1,9
Míra registrované nezaměstnanosti	2,99	3,08	4,28	6,04	8,54	9,02	9,15	9,90	10,24	.	.	.
Míra reg.nezam. podle stávající metodiky	.	.	.	.	.	.	.	.	9,19	8,97	8,13	6,62
Obecná míra nezaměstnanosti	4,0	3,9	4,8	6,5	8,7	8,8	7,3	7,8	8,3	7,9	7,1	5,3
Míra dlouhodobé nezaměstnanosti	1,1	1,1	1,3	1,9	3,1	4,1	3,7	3,8	4,2	4,2	3,9	2,8
Průměrné hrubé nominální mzdy	18,6	18,3	9,9	9,2	8,4	6,4	7,3	6,6	6,6	5,3	6,5	7,3
Průměrné reálné mzdy	8,7	8,7	1,3	-1,4	6,2	2,4	5,4	6,5	3,7	3,3	3,9	4,4
Průměrný starob.důchod/průměrná mzda	43,8	43,5	45,3	45,9	45,2	44,2	43,5	42,2	40,6	41,1	40,8	40,6
Míra inflace	9,1	8,8	8,5	10,7	2,1	3,9	1,8	0,1	2,8	1,9	2,5	2,8
Míra inflace	7,9	8,6	10,0	6,8	2,5	4,0	0,6	1,0	2,8	2,2	1,7	5,4
Ceny průmyslových výrobců	7,6	4,8	4,9	4,9	1,0	4,9	-0,5	-0,3	5,7	3,0	1,6	4,1
Ceny stavebních prací	10,6	11,3	11,3	9,3	4,8	4,1	2,7	2,2	3,7	3,0	2,9	4,1
Ceny tržních služeb	17,6	12,7	10,9	8,8	4,1	3,4	3,2	1,6	2,3	-0,3	3,3	1,6
Ceny zemědělských výrobců	7,6	8,3	2,9	2,3	-11,7	9,2	-9,5	-2,9	8,1	-9,4	1,1	16,5
Ceny vývozu zboží	7,3	1,0	5,2	4,3	-0,9	6,3	-6,7	0,9	3,7	-1,5	-1,2	1,3
Ceny dovozu zboží	5,7	1,4	5,1	-2,7	1,8	12,0	-8,5	-0,3	1,6	-0,5	0,3	-1,0
Směnné relace	1,5	-0,4	0,1	7,2	-2,7	-5,1	2,0	1,2	2,1	-1,0	-1,5	2,3
Měnové ukazatele												
CZK/EUR	.	.	.	.	36,882	35,610	30,812	31,844	31,904	29,784	28,343	27,762
CZK/USD	26,545	27,138	31,711	32,274	34,600	38,590	32,736	28,227	25,701	23,947	22,609	20,308
Nominální efektivní kurz	2,8	1,7	-5,5	0,8	-0,2	1,2	11,3	-0,5	0,4	6,2	5,0	1,9
Reálný efektivní kurz	.	.	.	.	-1,7	1,4	9,6	-2,2	3,2	4,8	2,4	2,6
M2 *	23,7	7,6	9,2	5,4	7,7	5,6	3,5	6,9	4,4	8,0	9,9	13,2
Běžný účet (BÚ) platební bilance	-36,3	-111,9	-113,0	-40,5	-50,6	-104,9	-136,4	-160,6	-147,5	-39,8	-82,2	-62,6
Finanční účet (FÚ) platební bilance	218,3	113,6	34,3	94,3	106,6	148,0	347,8	157,1	177,3	154,8	92,4	94,4
Změna devizových rezerv	-197,9	22,5	56,0	-62,6	-57,1	-31,6	-216,9	-12,9	-6,8	-92,9	-2,1	-15,7
BÚ/HDP	-2,5	-6,6	-6,2	-2,0	-2,4	-4,8	-5,5	-6,2	-5,2	-1,3	-2,6	-1,8
FÚ/HDP	14,9	6,7	1,9	4,7	5,1	6,8	14,1	6,1	6,3	5,2	2,9	2,7

Stav devizových rezerv* (DR) ČNB	373,0	339,9	338,5	376,7	461,4	496,8	714,6	691,5	636,2	726,7	656,6	631,0
Stav DR* ČNB/HDP	25,4	20,2	18,7	18,9	22,2	22,7	29,0	26,8	22,6	24,4	20,4	17,9
Krytí dovozu zboží a služeb DR ČNB	5,5	4,4	3,9	4,1	4,7	4,1	5,6	5,0	3,9	4,2	3,4	2,9
Fiskální ukazatele												
Vládní deficit (přebytek)	-197,0	-55,8	-68,8	-100,1	-77,3	-81,5	-166,8	-170,6	-83,3	-106,7	-85,9	-34,9
Vládní deficit (přebytek)/HDP	-13,4	-3,3	-3,8	-5,0	-3,7	-3,7	-6,8	-6,6	-3,0	-3,6	-2,7	-1,0
Saldo státního rozpočtu (SR)	7,2	-1,6	-15,7	-29,3	-29,6	-46,1	-45,7	-109,1	-93,7	-56,3	-97,6	-66,4
Saldo SR/HDP	0,5	-0,1	-0,9	-1,5	-1,4	-2,1	-1,9	-4,2	-3,3	-1,9	-3,0	-1,9
Vládní dluh	214,4	209,9	236,7	299,8	340,5	405,4	702,3	775,0	855,1	888,6	951,5	1 020,7
Dluh sektoru vlády v procentech HDP	14,6	12,5	13,1	15,0	16,4	18,5	28,5	30,1	30,4	29,8	29,6	28,9
Státní dluh	154,4	155,2	173,1	194,7	228,4	289,3	395,9	493,2	592,9	691,2	802,5	892,3
Státní dluh/HDP	10,5	9,2	9,6	9,8	11,0	13,2	16,1	19,1	21,1	23,2	25,0	25,3