### Department of Political Science Central European University Budapest

### István Benczes

# Institutional Conditions of Expansionary Fiscal Consolidations

**Supervisor:** 

Professor László Csaba

Doctoral dissertation submitted to the Central European University in partial fulfilment of the requirements for the degree of Doctor of Philosophy

### **Abstract**

Recently, the short-term effects of fiscal consolidation have attracted increasing attention from both the academia and policy-makers. Authors in the literature on non-Keynesian effects usually put the emphasis on the need for the devaluation of the national currency, the accommodating reaction of the monetary authority and favourable international economic conditions as the necessary accompanying tools of fiscal consolidation, in order to realise short-term expansionary effects in times of fiscal consolidations. Some also add the necessity of large-scale adjustment; while others support the view that a high and increasing debt ratio or increasing government spending, by triggering an unavoidable adjustment, is the key to experiencing short-term expansionary effects. The increased competitiveness of the economy via reduced real wage also became a crucial explanation for non-Keynesian effects. However, as our critical assessment of the concept of expansionary fiscal consolidations will reveal, institutional conditions, such as (i) the deepness of financial intermediation; (ii) the composition of adjustment; and (iii) the structure of the labour market and wage bargaining system, can prove to be crucial in the occurrence of the desired expansionary short-term effects. Without having an eye on these indispensable institutional factors, the desired short-term growth effects may prove to be illusionary, thereby preventing the success of fiscal consolidation.

### **Acknowledgements**

Completing a long-term project such as this one offers the pleasure of acknowledging the generous help and support of all those who have participated in the process of its preparation. First and foremost I wish to thank László Csaba, my supervisor, who has guided me patiently through the dissertation process, providing me with an incredible amount of expertise, advice and encouragement throughout the years. He has always managed to find the time to listen to my great many dilemmas and he was also ready to provide further impetus whenever I needed it (which happened quite often indeed). He always had confidence in me when I doubted myself. To be honest, the greatest benefit of my doctoral research is not the product – the thesis – itself, but the process rather that led to it: working together with László Csaba and learning from him.

I would also like to thank László Bruszt and Julius Horvath, members of my doctoral committee at CEU for their careful reading of the drafts and the insightful comments and suggestions they have made throughout the years. They both contributed significantly to the successful completion of the research.

The dissertation would not have been possible without the highly motivating academic environment of the Political Science Department. I am immensely thankful to the faculty and fellow students, especially Lóránt Ambrus-Lakatos, Dorothee Bohle, Attila Fölsz, Iván Csaba, Tamás Meszerics, Gábor Tóka and Balázs Váradi. The dissertation seminars at the department helped me substantially in the formulation of my ideas.

I have also received invaluable suggestions and support from a number of people along the years, who read the previous drafts of the dissertation and the chapters of the final version, providing invaluable feedback. I am especially grateful to László Antal, Wendy Carlin, György Csáki, Pál Gáspár, Júlia Király, Mihály Laki, Miklós Losoncz, Judit Neményi, Gábor Oblath, András Vigvári and Anikó Szombati, on whose impartial opinion I hope to count on in the future as well.

I am also grateful to my colleagues at the Department of World Economy, Budapest Corvinus University, especially András Blahó, Péter Gál, Ákos Kengyel, István Magas, Tibor Palánkai, Mihály Simai and Tamás Szentes. I greatly appreciate their help and the opportunity for having interesting and inspiring discussions relating to my research.

I would like to thank my wife, Réka Benczes, for her understanding, patience, care and love during the past few years. Réka provided me with invaluable help in proofreading and editing the dissertation.

This project would never have been either undertaken, or completed, without the support of my parents. I wish to thank them for all the inspiration they have given me, right from the very beginning. I know that my father would have been really proud of me. He strongly believed in my professional work being both warranted and worthwhile. I dedicate this dissertation to his memory.

### Contents

Li	st of Figures	V
Li	ist of Tables	vii
1	Introduction	1
	1.1 Motivation	2
	1.2 Scope of this study	3
	1.3 Sources and data	7
	1.4 Structure of the thesis	7
2	Stylised Facts of EU Countries' Major Fiscal Episodes	9
	2.1 Descriptive data analysis: evidence from the EU – a puzzle	9
	2.2 Identifying exceptional fiscal episodes	12
	2.3 Macroeconomic consequences I: protracted consolidations	17
	2.4 Macroeconomic consequences II: economic growth	20
	2.5 Summary	24
3	An Expectational View of Fiscal Policy: A Non-Linear Approach to Rationalise Expansionary Fiscal Consolidations	26
	3.1 The traditional Keynesian view	27
	3.2 Explaining non-Keynesian effects	28
	3.2.1 Four explanations of non-Keynesian effects	33
	3.2.1.1 Blanchard and his deterministic model	34
	3.2.1.2 Sutherland's stochastic model	35
	3.2.1.3 A neoclassical formulation of non-Keynesian effects in the model of Bertola and Drazen	36
	3.2.2 Testing for non-linearity in demand	39
	3.2.3 Descriptive analysis of the EU-14	40
	3.3 Intertemporal decisions – the modern theory of consumption	46
	3.4 Non-Keynesian effects and the criticism of Hall's stochastic model – the importance of liquidity constraints	50
	3.4.1 Measuring liquidity constraint in developed economies	53
	3.5 Summary	59

4	The Composition of Adjustment and the Structure of Labour Markets: A L Approach to the Rationalisation of Expansionary Fiscal Consolidations	
	4.1 Linear effects on the supply side	62
	4.2 The first step: composition matters – restoring fiscal balance	69
	4.2.1 Composition matters – in general	71
	4.2.2 The composition of fiscal adjustment – some evidence from the EU-14	74
	4.2.3 Country experiences	80
	4.2.3.1 Ireland (1987-1989)	82
	4.2.3.2 Denmark (1982-1984)	84
	4.2.3.3 Sweden (1994-97)	85
	4.2.3.4 The Netherlands (1993-1997)	87
	4.2.3.5 The UK	88
	4.2.3.6 And the others	90
	4.2.4 Summary	91
	4.3 The supply-side channel: the labour market	91
	4.3.1 Non-competitive labour market structures	92
	4.3.2 The changing characteristics of the European labour market and wage bargaining system in the Maastricht process – the revival of social pacts	96
	4.3.3 Country studies	101
	4.3.3.1 Ireland	102
	4.3.3.2 The Netherlands	103
	4.3.3.3 The UK	104
	4.4 Summary	105
5	From Goulash Communism To Neo Kadarism: An Overview (1968-89-2005)	109
	5.1 The continuity hypothesis and its apparent dissolution	
	5.2 Fidesz in power (1998-2002)	
	5.3 Hesitance and inaction (2002-2005)	
	5.4 Summary	
		202
6	Testing the Institutional Conditions of Non-Keynesian Effects in Hungary	133
	6.1 Financial intermediation in Hungary – a comparative perspective	135
	6.1.1 Transformation and the legacy of the past	136
	6.1.2 Stylised facts of the CEE financial markets	138

	6.1.3 Banking activity in a comparative perspective	140
	6.1.4 Hungary: the deepening of the financial sector	146
	6.1.5 Housing market in Hungary	149
	6.1.6 Vulnerability of the private sector	152
	6.1.7 Summary	155
	6.2 The structure of the Hungarian general government – a decompositional analysis	157
	6.2.1 The stabilization process: the years of the Bokros package (1995-1997/8)	158
	6.2.2 After stabilisation – before deterioration (1997 and 2000)	166
	6.2.3 Bringing back the past – the revival of fiscal indiscipline (2001-2004/2005)	172
	6.2.3.1 Wage policy and public sector employment	179
	6.2.3.2 Welfare spending	185
	6.2.3.3 Health care system	190
	6.2.4 Struggle without hope (restrictions in 2003, 2004 and 2005)	193
	6.2.5 Summary	195
	6.3 Labour market and wage bargaining in Hungary – the (ir)relevance of a social pact	199
	6.3.1 The evolution of industrial relations in Hungary: a historical overview	200
	6.3.2 Labour market implications of the enlargement: the three levels of social (non)dialogue	204
	6.3.2.1 The pivotal role of the state	204
	6.3.2.2 Sectoral-level collective bargaining: the weakest chain	206
	6.3.2.3 At the lower end of the spectrum: company-level negotiations	207
	6.3.3 About the irrelevance of a Hungarian social pact	210
	6.3.4 Summary	214
7	Conclusion	216
	7.1 Non-Keynesian effects at work	
	7.2 The Hungarian relevance of non-Keynesian effects	
	- · · · · · · · · · · · · · · · · · · ·	

References	235
Appendix 1	245
Appendix 2	248
Appendix 3	250

## List of Figures

3.1	The schematic representation of the effects of fiscal spending in the model of Bertola and Drazen (1993)	38
3.2a	An inverse relationship between private and government consumption in Ireland – the eighties	43
3.2b	A positive correlation between private and government consumption in Ireland – the nineties and after 2000	43
3.3a	The evolution of debt-to-GDP ratios: some successful attempts	45
3.3b	The evolution of debt-to-GDP ratios: some unsuccessful attempts	45
4.1	Traditional mechanisms of the effects of fiscal policy on investment and economic growth	67
4.2	The supply-side rationalisation of non-Keynesian effects	68
4.3a	Primary government balance, cyclically adjusted	81
4.3b	Current receipts of the general government, cyclically adjusted	81
4.3c	Current disbursements of the general government, cyclically adjusted	81
4.4	Trade off between the degree of centralization of collective bargaining and the equilibrium rate of unemployment	94
5.1	Changes in party preferences	127
6.1	Banking assets (2004)	141
6.2	Domestic credit (2004)	142
6.3	Total credit granted by domestic credit institutions (1995-2004)	142
6.4a	Development versus the degree of financial intermediation I: banking asset penetration and GDP (2004)	144
6.4b	Development versus the degree of financial intermediation II: domestic credit and GDP (2004)	144
6.5	Deposits in 2003.	145
6.6	Annual real growth rate of outstanding loans to the private sector	149
6.7	Mortgage credit (2004)	151
6.8	Share of foreign currency lending by domestic banks to the private sector	153
6.9	Decomposition of public expenditures (1994-1997)	160
6.10	The evolution of the debt-to-GDP ratio and interest balance (1991-2000)	164
6.11	Decomposition of public expenditure (1997-1999)	169

6.12	Fiscal performance of the general government, EDP notification (2001-2004)	173
6.13	Comparison of general government spending in 2004 by economic decomposition	176
6.14	Functional decomposition of public expenditure	.178
6.15	Compensation of public sector employees	.179
6.16	Expenditure on state operation functions	.180
6.17	Personnel outlays in state administration	.181
6.18	The REER and inflation	.182
6.19	Public employment in numbers	.184
6.20	Functional decomposition of welfare spending	.185
6.21	Welfare spending in relative and absolute numbers	.186
6.22	Spending on social protection (without pension)	.187
6.23	The number of recipients of disability benefits	188
6.24	Personnel and capital expenditure in the health care sector	.137
7.1	Conditions for Keynesian and non-Keynesian effects	.227

### **List of Tables**

2.1	Various definitions of "exceptional" in the literature	13
2.2	Number of exceptional fiscal events by feature	16
2.3	Number of exceptional fiscal events in the year they occurred	17
2.4	Sample characteristics of fiscal adjustments I.	18
2.5	Expansionary and permanent fiscal consolidations in the EU-14	22
2.6	Sample characteristics of fiscal adjustments II.	23
3.1	Changes in private and government consumption and direct taxes during non-Keynesian episodes	41
3.2	Reasons for credit constraints	55
4.1	The effects of 1 per cent increase (in GDP) of public expenditures and revenues on the marginal propensity to investment	66
4.2	The evolution of expenditure and taxation in OECD countries	70
4.3	The characteristics of successful and unsuccessful stabilization attempts	73
4.4	Categorisation of fiscal consolidations	76
4.5	Systematic characterisation of adjustments I: the relationship between the type of adjustment and persistence of consolidation	77
4.6	Systematic characterisation of adjustments II: the relationship between the type of adjustment and its output effects	78
4.7	The composition of fiscal adjustment, Ireland (1987-89)	83
4.8	The composition of fiscal adjustment, Denmark (1983-84)	85
4.9	The composition of fiscal adjustment, Sweden (1994-97)	86
4.10	The composition of fiscal adjustment, Netherlands (1993 and 1997)	88
4.11	The composition of fiscal adjustment, UK (1997-98)	89
4.12	Fiscal strategies in the EU in the nineties	90
4.13	Wage coordination in euro-zone countries on the road to EMU	95
4.14	The level and time horizon of economic policy in EMU	96
4.15	Multi-tier collective bargaining in the EU	100
5.1	Main economic indicators of Hungary, 1990-1995	114
5.2	Comparison of the two periods before and after the launching of the austerity package	115

5.3	Real GDP growth rates	118
5.4	Results of the 2002 general elections	123
5.5	Deficit in PEP and CPs	130
5.6	Debt in PEP and CPs	130
6.1	Sectoral distribution of assets	147
6.2	Housing loans-to-GDP (2003).	150
6.3	Lending structure in some CEE countries	152
6.4	Main aggregates of the general government (1991-1996)	159
6.5	Changes in social security and welfare spending	161
6.6	Share of working-age population in sick pay and sick leave	163
6.7	Interest payments in different accounting standards (1995-1997)	165
6.8	General government accounts, OECD basis (1997-2000)	166
6.9	Change in social security funds	171
6.10	State aid	171
6.11	General government's position (2000-2005)	172
6.12	Fiscal measures in a comparative perspective (2004)	175
6.13	Wage increase in the public sector	184
6.14	Number of recipients of some selected social protection schemes	188
6.15	The measure of strictness of employment protection legislation in selected countries	204
6.16	Trade union density and collective bargaining coverage in selected countries	207
6.17	The level of centralisation and coordination of wage-setting in selected countries	213
7.1	Conditions of Keynesian and non-Keynesian effects	217

### Chapter 1

### Introduction

The launch of the single currency in Europe, along with the preparation, ratification and implementation of the Maastricht Treaty, put fiscal policy in the forefront of theory and policy research. In fact, after the delegation of monetary policy and exchange rate policy to a supranational level in eleven (and later twelve) countries in the EU, only fiscal policy has remained in the hands of politicians as an ultimate tool in influencing aggregate demand. Nevertheless, while in the past fiscal policy was considered as an exclusively national authority, the EMU-project changed this approach dramatically, emphasising the possibly controversial effects of autonomous fiscal policies with regard to the stability of a monetary zone.

The steadily increasing interest in the *efficiency* of discretionary fiscal policy, however, could not provide clear-cut statements concerning its long-term and short-term effects – in fact, it propagated the doubts. On the one hand, the traditional Keynesian view claims a positive correlation between government spending and private demand. With the assumption of excess capacity and price/wage stickiness, the multiplier effect – through the channel of aggregate demand – helps the economy to cushion the severe social consequences of economic downturns. On the other hand, the neoclassical view postulates just the opposite relationship between government consumption and private consumption; and in fact, in its radical form (the Barro-Ricardian equivalence), it claims unequivocally that fiscal policy is irrelevant in influencing aggregate demand, since any increase in government expenditure – financed by either debt or tax increase – will be fully offset by increased private savings.

Nevertheless, it might be claimed that a consensus has been formed in policy analysis, namely that the strict form of the Ricardian view – albeit theoretically appealing – does not correspond with reality. While the long-term ineffectiveness of discretionary fiscal measures may hold true, Keynesian effects can determine economic output in the short term. The government, therefore, is able to use fiscal policy as a tool in short-term stabilisation

### 1.1 Motivation

The consensus proved to be short-lived, however. It was undermined by the experience of some countries in the last two decades, giving rise to another stream of arguments, the concept of non-Keynesian effects of fiscal policy, the topic of the dissertation itself. In the eighties, a large number of industrialised countries embarked on wide-scale reform programmes in their general budget – targeting a reduction in the debt-to-GDP ratio and reducing the level of deficit financing. It came as a surprise that fiscal adjustment was not accompanied with the much-echoed side-effect of economic slowdown, but instead (some) countries experienced a relatively quick recovery in economic activity, an immediate acceleration in economic growth. In their seminal paper, Giavazzi and Pagano (1990) were the very first to point out such unexpected outcomes, sometimes referring to the phenomenon as the "perverse effects" of fiscal policy. Later on, several papers have been published, arguing that major fiscal consolidations proved to be expansionary in relatively large numbers in the last two decades. Afonso (2001) and Giudice et al. (2003) for instance claimed that non-Keynesian effects are not that peculiar and rare within the EU. The preparation for EMU membership induced the bulk majority of countries in the EC/EU to commence on the consolidation of their general government budget. Besides the two general references of Ireland and Denmark, the Netherlands, the UK and to a lesser extent Finland, Portugal, Sweden, Greece and Austria also provided the earlier unexpected results, that is, fiscal consolidation culminated in accelerated economic growth in the short term

Why did the non-Keynesian effects of fiscal policy receive such a differentiated attention from both the academia and economic policy making, especially in international organisations such as the International Monetary Fund, the European Central Bank or the European Commission? Rodrigo de Rato (2004), the managing director of the IMF gives a simple but clear answer:

It may be, then, that the oft-cited conflict between the long term benefits of adjustment and its short-term costs does not always arise. In other words, it is possible to have what we call *expansionary fiscal contractions*. <sup>1</sup>

Speech delivered by Rodrigo de Rato, to the Real Academia de Doctores Barcelona, Spain, 25 November 2004. Emphasis as in the original.

If it holds true that the longer-term benefits of fiscal adjustment are not in a trade off with the short-term decline of output, life is indeed much easier than as it has been previously believed. From a purely *economic* point of view, the warm welcome of the perverse effects of fiscal policy can be explained by the apparent fact that in some instances fiscal retrenchment can end up in an expansion of economic activity even in the short run – a statement which sharply contradicts traditional Keynesian theory. However, one could go further in the argument and claim that based on the occurrence of non-Keynesian effects, fiscal adjustment can be made effectively costless for the politicians. With positive net gains at an aggregate level even in the short term, it would be easy to sell fiscal adjustment to voters without the government being threatened to be voted out from power at the following election – a *political economy* viewpoint.

### 1.2 Scope of this study

Accordingly, the dissertation tries to provide some clues as to how a government can embark on fiscal consolidation without being threatened too seriously by voters. Certainly, any stabilisation measure entails costs. However, the popularity of non-Keynesian effects can be derived from the fact that they mean by definition an increased economic growth even in the *short term*. That is, non-Keynesian effects refer to a surprising situation where the fiscal multiplier turns out to be negative: the indirect effect of fiscal impetus on private consumption offsets the direct effects of government action, thereby reducing the risk of a government's fall and consequently facilitating fiscal reform.

However, certain questions arise in the light of both the economic and the political economy perspective.

- (i) If non-Keynesian effects are so attractive, why are governments still reluctant to embark on reducing the general government deficit, especially cutting the expenditures?
- (ii) If we can talk about the expansionary effects of fiscal contraction, then why do only a few countries and only at certain times experience these effects, while others not at all?

Finding the proper answers to these questions means basically the identification of those circumstances and/or conditions under which a fiscal consolidation can boost economic

activity even in the short term – making it appealing for politicians to undertake otherwise surely unpopular fiscal measures. Consequently, the aim of the dissertation is basically i) to show that non-Keynesian effects are not that rare, which might be a real puzzle in itself; and moreover ii) to map out the determining factors of a successful fiscal consolidation in the terms of positive and accelerating economic growth, that is, to identify those conditions and factors which can be responsible for delivering the non-Keynesian effects of a fiscal adjustment.

Authors in the literature on non-Keynesian effects usually (and mostly unanimously) put the emphasis on the need for the devaluation of the national currency, the accommodating reaction of the monetary authority and favourable international economic conditions as the necessary accompanying tools of fiscal consolidations in order to realise the perverse effects (see especially Giavazzi and Pagano 1990, Hagen et al. 2001). Some also add the necessity of large-scale adjustment, that is, size does matter (Giavazzi, Jappelli and Pagano 2000); while others support the view that a high and increasing debt ratio (Blanchard 1990, Sutherland 1997 and Perotti 1999) or increasing government spending (Bertola and Drazen 1993), triggering an unavoidable adjustment, is the key to experiencing the expansionary effects of fiscal stabilisation in the short term. Alesina and Ardagna (1998) and Alesina et al. (2002), on the other hand, place the emphasis on supply-side factors, such as the competitiveness and profitability of firms. A cut in government wages (or the level of public employment), they argue, makes it easier to lower the costs of labour in private companies, thereby gaining a more competitive position in the international markets. For them, it is the composition of adjustment that matters in providing non-Keynesian effects.

However, as our critical assessment of the literature on non-Keynesian effects will reveal, certain institutional conditions are not included (or not as clearly) yet in the recommended "package" of conditions and factors which can facilitate the occurrence of the desired short-term effects. The ultimate aim is therefore to identify those necessary (albeit surely not sufficient) institutional conditions which can increase the likeliness of experiencing expansionary effects in the case of fiscal adjustment.

As the dissertation will show, research on non-Keynesian effects can be divided basically into two streams: demand-side and supply-side explanations. By critically evaluating demand-side theories, it will be demonstrated that the importance of the lack of liquidity

constraint and consequently the depth of financial intermediation has been generally neglected. By scrutinising the supply-side rationalisations of non-Keynesian effects, it will be argued that a flexible labour market and a coordinated wage bargaining mechanism can strongly support the occurrence of expansionary effects in times of expenditure-side fiscal consolidations. In short, the related explanations are severely conditioned on several implicit institutional assumptions which may or may not be met in reality, seriously questioning the relevance of policy recommendations based on simplified theories.

Summarising these points in a hypothesis, the following statement can be formulated:

It is more likely to experience the occurrence of non-Keynesian effects if certain institutional conditions are met. Especially (i) the deepness of financial intermediation; (ii) the composition of adjustment and (iii) the structure of the labour market and wage bargaining system can prove to be crucial in the short-term realisation of expansionary effects of fiscal consolidation.

A further, similarly important objective of the dissertation is to test the relevance of the identified institutional conditions. Hungary has been selected for this specific purpose for two main reasons. This is the country in the EU (i) with the largest deficit at present which makes the early adoption of the singly currency highly unlikely; and (ii) the most in need to embark on a major fiscal consolidation without which there is no hope for the country to perform on its potential rate of economic growth. Nevertheless, the elaborated framework of the analysis is suitable for the scrutiny of any other country as well.<sup>2</sup>

Importantly, Hungary cannot opt out from introducing the single currency, the euro. Practically, what this means is that the country – along with the other new nine member states – has to reduce its deficit and debt level to the Maastricht reference values of 3 and 60 per cent, respectively, in order to qualify for euro-zone membership and to abide by the rule of "close to balance or in surplus" fiscal position following the accession. The more the country waits with the introduction of the euro, the less benefits it can expect from having the single currency, since neighbouring economies such as Slovenia, Slovakia or the Baltic states are now close enough to adopt the euro, making these countries more

The international literature on non-Keynesian effects has analysed industrialised countries almost exclusively. Exceptions included Purfield (2003), Afonso et al. (2005) and Rzonca and Cizkowicz (2005), authors who, however, neglected the study of institutional conditions.

<sup>&</sup>lt;sup>3</sup> See especially the Council Regulation no. 1467/97.

appealing for investment. Furthermore, independently from the changeover to the euro and the Maastricht numerology, the deteriorated fiscal performance seriously undermines the long-term sustainability of the Hungarian economy, devaluating substantially the potential growth rate of the country.<sup>4</sup>

As a corollary, Hungary has two options at the moment: either politicians realise the need for initiating fiscal adjustment or they take the position of wait-and-see. In the latter case, an exogenous shock will enforce the fiscal consolidation sooner or later, without providing any room for reducing the costs of adjustment. In the former case, however, there is still a chance to minimise the costs of the stabilisation attempts or possibly to implement a consolidation with positive short-term growth effects. Since one of the main objectives of the dissertation is to identify those institutional conditions which are inevitable in experiencing non-Keynesian effects, our findings may hopefully contribute to the exploration of whether Hungary is ready at the moment to experience short-term expansionary effects. Certainly, if the conditions facilitate the emergence of non-Keynesian effects, it can give an incentive to politicians to continue with the consolidation of the general budget without being threatened by losing their popularity substantially and consequently being voted out from power at the next general elections.

Nevertheless, the second part of the dissertation does not aim at providing an answer to the question whether Hungary will indeed experience short-term growth effects in the case of fiscal consolidation because it is almost impossible to predict precisely the ultimate effects of an adjustment effort. Yet the framework of analysis presented in the first part of the thesis can hopefully provide a good starting point in the assessment since it will be possible for us to investigate those institutional conditions which can prove to be crucial in the emergence of non-Keynesian effects.

It is worth underlining once again at the very beginning of the dissertation that it is the short-term stabilisation and its macroeconomic consequences, especially economic growth, that are investigated here. Fiscal tightening means a significant reduction in the deficit of the general government and a curtailment of a debt-increase. Accordingly, no medium or longer-term perspective of fiscal reform will be considered in the dissertation as relevant.

<sup>&</sup>lt;sup>4</sup> See especially Erdős (2004).

The focus is therefore not on the restructuring of the subsystems of the general government – which indeed cannot be simply equated with a reduction of deficit. In fact, reform can trigger even an increased imbalance of the general government budget in the short term. <sup>5</sup>

#### 1.3 Sources and data

The concept of non-Keynesian effects is a rather new phenomenon, yet the literature on the issue has proliferated substantially in recent years. Articles were published generally in the form of working papers, written mostly by the staff of the IMF, the OECD or the ECB. In addition, the most respected journals, such as the *American Economic Review* or the *Quarterly Journal of Economics*, were ready to publish articles on the topic, which clearly indicates that the short-term perverse effects of fiscal consolidation has become part of the mainstream fields of interest of theoreticians and policy-makers.

The dissertation embarks heavily on quantitative statistical analysis. The main sources of data have been the following: the *European Economy* (especially its statistical annex) published by the European Commission and the OECD's most recent *Economic Outlook*. Data and information on Hungary were collected from the OECD's country reports, the IMF's country reports, the European Commission's country assessments and the *Country Profile* and *Country Report*, both issued by the Economist Intelligence Unit.

The collection of the relevant materials was completed in December 2005, therefore articles published after that date were not taken into consideration while working on the dissertation. More importantly, the latest data sets which were used in the dissertation were published in 2005. Therefore, data on 2005 are only estimates.

#### 1.4 Structure of the thesis

Following the introduction, Chapter 2 will show that non-Keynesian effects are indeed not rare phenomena in the EU. This puzzle requires an explanation. In the following two chapters, therefore, the relevant theoretical explanations are systematically and critically assessed and some empirical research will also be carried out in order to test the relevance of the theoretical rationalisations of non-Keynesian effects. Since explanations can be

Furthermore, the dissertation does not deal with the reaction of the monetary authority (inclusive of the exchange rate policy) or the role of the international economic environment while discussing the short-term effects of fiscal retrenchment. These issues are not part of the research project either.

divided basically into two, first Chapter 3 looks at the various ways scholars – focusing on the demand side of non-Keynesian effects – have treated this problem with more or less success, and also delineates the possible way forward in the analysis of the unexpected short-term effects of consolidation. Emphasis will be on the so-called expectational view of fiscal policy, which attributes the emergence of expansionary effects of fiscal tightening to the concerns of private actors regarding the solvency of the state. Factors such as the size of the adjustment, the initial conditions, the prevalence of liquidity constraint and the depth of financial intermediation will be analysed in length accordingly. Chapter 4 turns to a different method of explaining the expansionary effects of fiscal consolidation, focusing on the supply side of adjustment. The relevance of the fall of business cost, providing a positive supply shock in times of adjustment will be reflected upon in the chapter. Here, the importance of the composition of adjustment, the structure of the labour market and the system of wage bargaining will be elaborated on in detail.

After the thorough critical study of both the demand- and the supply-side explanations of non-Keynesian effects, the dissertation turns to the investigation of Hungary and asks whether the previously identified necessary (albeit not sufficient) conditions are present in the country in order to experience non-Keynesian effects in the case of fiscal tightening. Chapter 5 gives a short overview first of the development of Hungarian economic policy in the last few decades, arguing that the hesitance is nothing new in Hungarian policy-making, while Chapter 6 provides a detailed and painstaking analysis of the country's financial intermediation system, its labour market structure and wage bargaining mechanism and the composition of the general budget. Chapter 7 summarises the main findings of the thesis.