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## Expenditure reform in industrialised countries: a case study approach

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Industrialised Countries:  
A Case Study Approach**

Sebastian Hauptmeier, Martin Heipertz  
and Ludger Schuknecht

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## Non-Technical Summary

In many industrialised countries, about half of GDP goes through the hands of government. Against this backdrop, the expenditure side of public budgets is gaining greater attention, particularly with respect to the quality of public finances. Contributing to the debate how the expenditure side can support economic performance, this paper adopts a case study approach and takes a close look at real policy examples and concrete experiences with expenditure reforms in industrialised countries.

‘Ambitious reformers’ among OECD countries are identified on the basis of reductions in the GDP ratio of primary spending that amount to or exceed 5% of GDP over seven years, starting with the year of maximum total expenditure in relation to GDP. The resulting sample of ambitious reformers comprises eight countries in two ‘reform waves’: Ireland, Belgium, the United Kingdom and the Netherlands reduced their expenditure ratios as of the early 1980s and, with the exception of Belgium, marshalled a second ambitious reform effort in the early 1990s. This second wave was joined by Finland, Sweden, Canada and Spain. Countries that reduced their primary spending ratio by less than 5% of GDP are defined as ‘timid reformers’. This ‘control group’ consists of Austria (borderline to ambitious), Denmark, New Zealand, the United States, Italy, Japan, Belgium in the 1990s, Germany, France and Switzerland.

The study examines each ambitious reform case individually and collects its main contextual facts with respect to the macroeconomic environment, the scope and composition of the expenditure reduction, important institutional components of the reform effort as well as complementary measures. The latter illustrate the comprehensiveness of reforms, including liberalisation and privatisation in the labour, product and services markets as well as far-reaching tax reforms.

From a horizontal perspective and on the basis of comparing unweighted averages of early (reforms in 1980s) and late (reforms in 1990s) ambitious vs. timid reformers, the study discerns a number of important features of expenditure reforms. Within seven years, ambitious reform countries reduced total expenditures by around 10% of GDP. While both ambitious and timid reformers benefit from falling interest payments, these reductions amount to 50% of the overall expenditure decline in timid countries but to only 10% of the savings achieved by ambitious ones. Ambitious reformers focus their efforts on the reduction of public consumption (wages and employment), transfers and subsidies. On average, over 80% of the decline in their primary expenditure ratios occurs in these categories. Public investment was cut strongly by the group of early ambitious

reformers but only moderately by the other two groups. Education spending was touched little in the reform process for all groups.

In all cases, ambitious expenditure reform was part of a comprehensive agenda that changed countries' economic policy regime significantly. Reforms included in most cases improved fiscal institutional, labour market incentives, taxation, privatisation and other measures to enhance macroeconomic stability.

The study also compares the performance of both the early and late 'ambitious' vs. the 'timid' reformers in terms of medium-term economic developments. Ambitious expenditure reform episodes coincided with more profound improvements in the soundness of public finances than timid ones and yielded significant scope for tax cuts. Furthermore, countries that undertook ambitious expenditure reforms experienced more favourable trend output developments. The study provides some evidence that positive confidence effects of ambitious expenditure reforms were potentially strong and coincided with a quick rebound in growth.

While the experiences of the two country groups are significantly different (as suggested by relevant statistical tests), the study does not establish causality between reform ambition and performance in an econometric sense, for which much further analysis would be warranted.

# Expenditure reform in industrialised countries: a case study approach<sup>1</sup>

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**Abstract:** This study examines reforms of public expenditure in industrialised countries over the past two decades. We distinguish ambitious and timid reformers and analyse in detail reform experiences in eight case studies of ambitious reform episodes. We find that ambitious reform countries reduce spending on transfers, subsidies and public consumption while largely sparing education spending. Such expenditure retrenchment is also typically part of a comprehensive reform package that includes improvements in fiscal institutions as well as structural and other macroeconomic reforms. The study finds that ambitious expenditure retrenchment and reform coincides with large improvements in fiscal and economic growth indicators.

**Keywords:** public expenditure, expenditure reform, economic growth, deficit, debt, employment, case studies, fiscal institutions

JEL classification: H5, H6, O57

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# 1 Introduction

Public expenditure in industrialised countries stands at very high levels. In Europe, in particular, almost half of GDP is going through the hands of government. At the same time, the data exhibit enormous cross-country divergence in terms of both expenditure levels and trends in recent decades. Many countries reported public spending well above 50% of GDP at some point over the past 25 years, with maxima above 60% in the Nordic countries and Belgium. By contrast, a number of countries have never reported spending ratios in excess of 40% of GDP, notably the US, Japan, Australia or Switzerland. Moreover, in recent years, a number of countries have reversed very high spending ratios through ambitious expenditure reforms while others also retreated from earlier peaks, albeit in a much more timid fashion.

This paper takes a close look at experiences with expenditure reform in industrialised countries and places special emphasis on ambitious reform episodes. It conducts a comparative in-depth analysis of such episodes by examining the concrete reform measures undertaken and their effect on total spending and expenditure composition. It also looks at the institutional context in which these reforms were undertaken, the comprehensiveness of reform programs and the economic and fiscal performance of these countries in the wake of such reforms.

The study has its conceptual underpinning in the literature on fiscal policies, growth and sustainability. Very high spending in many industrialised countries has, according to many observers, significant adverse consequences on employment, investment and innovation. Large bureaucracies and benefit systems that discourage labour supply as well as high effective and marginal tax rates tend to discourage work and capital formation and stifle entrepreneurial and technological dynamism. High spending is also correlated with persistent deficits and debt increases as well as significant future liabilities related to population ageing. This threatens to put at risk the sustainability of public finances. If expenditure reforms enhance the efficiency of spending and reduce unproductive spending commitments, disincentives are reduced, taxes can be lowered and fiscal imbalances lastingly eliminated. The beneficial effects of expenditure reforms can be reinforced if they are conducted as part of a comprehensive reform program where macroeconomic or structural bottle-necks elsewhere in the economy are eliminated at the same time.<sup>2</sup>

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<sup>2</sup> For surveys, see Tanzi and Schuknecht, 2000 and 2003; Hemming, Kell and Mahfouz., 2002; Afonso, Ebert, Schuknecht and Thoene, 2005; European Commission, 2003 and 2004; EPC Ageing Report, 2006; Wierds, 2006; ECOFIN 2006. The literature has also found that expenditure-based consolidations tend to be more successful in improving debt dynamics than revenue increases (Alesina and Perotti, 1995).

The literature points to the possibility of strongly positive effects of expenditure reform in the medium to long run. These effects can be magnified if fiscal reforms are complemented by macroeconomic stabilisation and structural reforms in factor and product markets. The literature has also been putting increasing emphasis on the “institutional infrastructure” or “the rules of the game” of economic policy making that set the right incentives for policy makers, including in the fiscal sphere. If expenditure and other macroeconomic, institutional and structural reforms result in a deep change of the policy regime and break expectations of rent-seeking opportunities and repeated policy errors, then these reforms should result in improved economic performance at least in the medium term. Additionally, it is by now well known that expenditure reform and retrenchment may even have positive short term effects on demand if changes in expectations take hold quickly and generate strong confidence effects from anticipated higher wealth and lower taxes. This is another way of phrasing in more technical terms what would happen if a fundamental reform programme causes a profound change in the economic policy regime of a country.<sup>3</sup>

This study focuses mainly on medium to long term aspects of expenditure reforms. It builds on and extends a recent study by Schuknecht and Tanzi (2005), which takes a bird’s eye view on the different experiences that OECD countries have made since the early 1980s with reducing public expenditure. The authors find in particular that ambitious expenditure reforms have coincided with strengthened economic growth as well as socio-economic and institutional indicators. A forthcoming case study conducted by the IMF (Annett 2006) pursues an approach similar to ours while focussing on labour market issues. Its findings are consistent with the results of this paper and, in a complementary way, also point to the need for comprehensive reforms that encompass structural measures as well as expenditure-based fiscal consolidation.

Ambitious reform programs as defined in this paper display a number of common features: the reduction in total spending is indeed ambitious and averages about 10% of GDP within seven years. It is achieved by focusing mainly on government consumption, transfers and subsidies, while mostly protecting education spending and, often, public investment. Ambitious expenditure reform comes as part and parcel of a comprehensive reform package, mostly including labour market reform, tax reform and privatisation as well as, in about half of the episodes, the establishment of monetary and external stability. Virtually all

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<sup>3</sup> For a discussion of the importance of changes in the rules of the game or the policy regime change, see Brennan and Buchanan (1985) from a conceptual perspective and Tanzi and Schuknecht (2000) for applications in the expenditure domain to Chile and New Zealand. Fiscal rules are discussed in von Hagen, Hallerberg and Strauch (2004); or Deroose and Wierts (2006). For surveys of the Non-Keynesian effects literature, see McDermott and Wescott (1997); or Briotti (2005).



episodes of ambitious reform feature a significant strengthening of national and sub-national budgetary procedures and institutions. For many of the episodes discussed, it appears that one could indeed talk about a major change in the policy regime.

Ambitious reform episodes appear to coincide with more lasting fiscal consolidation than “timid” expenditure reforms while also yielding an important “tax cut dividend”. Ambitious reformers also experience a considerably more favourable growth performance than “timid” countries and small ambitious countries experience a stronger and faster increase in output growth. Ambitious reformers have also typically not experienced significant short term economic costs of retrenchment, despite an average adjustment effort of around 3% of GDP in the first two years of reform, as consumer and investor confidence picked up rather quickly.

Before entering into the discussion, it is worth stressing that this study looks at the changes in spending ratios since their peak, their correlation with other reforms and the fiscal and economic performance of countries from a case study perspective. While the ambitious and timid groups’ experiences are significantly different (as suggested by relevant tests), we do not establish statistical causality between reforms and performance for which much further analysis would be warranted. While focusing on changes in expenditure ratios, the study does not comment on “optimal” levels of public spending ratios (on this issue, see the quoted work by Tanzi and Schuknecht).

The remainder of this paper is structured as follows: The second section provides a historic overview of expenditure trends followed by a methodological discussion of how to distinguish ambitious and timid reformers. Section three presents eight country case studies comprising 11 episodes of ambitious expenditure reform. The fourth section draws horizontal conclusions from the case studies and compares these with the economic and fiscal performance of timid reformers. The final section concludes.

## **2 Expenditure trends and reform episodes in OECD countries**

### **2.1 A historical perspective on expenditure trends**

From a historic perspective, it is striking that, one century ago, public expenditure absorbed only about 10% of GDP, with most spending going to the military and public investment. With World War I, the expenditure ratio rose to over 20% of GDP and further to somewhat less than 30% by the early 1960s. This was the period when (apart from military spending during World War II), health,

education and other goods and services began to be financed publicly. After this, public spending growth accelerated when the modern welfare state was created and expanded. This increase affected all advanced economies, though to varying degrees. By the early 1980s, average public spending reached about 45% of GDP—four times as much as a century earlier. (For more details, see Tanzi and Schuknecht 2000 and Peacock and Wiseman 1961.)

Since then, however, expenditure developments were rather diverse across industrialised countries as more and more countries started reforming their public finances and reducing public expenditure levels relative to GDP. The first countries where public expenditure peaked and subsequently started to decline were Luxembourg and the United Kingdom in 1981, followed by Ireland (1982), Belgium and the Netherlands (1983) and Australia and New Zealand (1985). In a further large group of countries, public spending continued to increase until the early to mid-1990s and then started coming down. Only Greece and Portugal experienced their expenditure peaks in the past five years.

This picture is reflected in Table 1. Comparing maximum expenditure ratios with most recently available data confirms a marked decline in public expenditure ratios in many industrialised countries since its peak. The first two columns report the year when expenditure ratios peaked and the ratio for that year. The next two columns report the expenditure ratio in 2004 (or the latest available year) and the change since the peak. On average, total expenditures have fallen by 8% of GDP, the change being slightly higher in the euro area. The Table also clearly shows the two reform waves starting in the early 1980s and early 1990s, respectively.

There are not only great differences in the starting year of expenditure reduction and reform but also in the intensity of the respective reform efforts. In some countries, including Belgium, Canada, Finland, Ireland, the Netherlands, New Zealand and Sweden, expenditure fell by over 10 or even 20 percentage points of GDP.

**Table 1: Total expenditure, maximum spending ratio, 2004**

Percent of GDP

	Maximum public expenditure			Change Maximum-2004 (% of GDP)
	Year	ratio	2004 or nearest	
<b>Australia</b>	1985	40.2	36.3	-3.9
<b>Austria</b>	1993	57.4	50.4	-7.1
<b>Belgium</b>	1983	63.8	50.2	-13.6
<b>Canada</b>	1992	52.6	39.7	-13.0
<b>Denmark</b>	1993	61.3	55.1	-6.2
<b>Finland</b>	1993	64.8	51.5	-13.2
<b>France</b>	1996	55.4	54.0	-1.3
<b>Germany</b>	1996	50.2	47.5	-2.7
<b>Greece</b>	2000	52.0	49.9	-2.1
<b>Ireland</b>	1982	56.2	34.0	-22.2
<b>Italy</b>	1993	57.7	48.6	-9.1
<b>Japan</b>	1998	41.0	38.6	-2.5
<b>Luxembourg</b>	1981	51.9	45.6	-6.3
<b>Netherlands</b>	1983	58.3	47.1	-11.2
<b>New Zealand</b>	1985	56.5	38.6	-17.9
<b>Portugal</b>	2004	46.5	46.5	0.0
<b>Spain</b>	1993	47.6	39.0	-8.6
<b>Sweden</b>	1993	73.0	57.1	-16.0
<b>Switzerland</b>	1998	34.8	34.3	-0.5
<b>United Kingdom</b>	1981	50.7	44.1	-6.5
<b>United States</b>	1992	37.2	34.3	-2.9
<b>Average</b>		52.6	44.8	-7.8
<b>Euro zone</b>		55.1	47.0	-8.1
<b>Non-euro OECD</b>		49.7	42.0	-7.7

Source: Ameco

In a number of others, public expenditure fell very little and even that fall was due to savings from lower inflation and interest on public debt rather than due to a structural consolidation effort. In some countries, public expenditure was relatively low at the outset and hence the room for cuts much smaller (Australia, Switzerland, Japan, US).

The average ratio of public spending to GDP is now more or less back to where it was in the early 1980s. However, the countries with the highest expenditure ratio today are mostly not the same as 20 years ago. In some countries, expenditure reductions brought ratios back close to the average. In some others, public spending fell to levels that are close to what might be broadly considered “optimal”: Ireland’s, Spain’s, New Zealand’s and Canada’s public spending is now below 40% of GDP and even near the ratio of 30-35% that Tanzi and Schuk-

necht (2000) speculated to be the maximum necessary for financing essential and high quality public services.<sup>4</sup>

## 2.2 Categorisation of countries by reform effort and timing

In order to conduct an in-depth analysis of expenditure reform experiences, it is useful as a first step to propose some definitions and categorisation. This may then also facilitate discussing reform patterns, their context and their impact, e.g. with respect to the timing and intensity of reform. We define changes in the primary expenditure ratio (which is total expenditure excluding interest spending on public debt) as the measure of a country's reform effort. This is a well-accepted approach in the literature as it measures deviations between non-interest expenditure developments and their main drivers (public wages, and social benefits) relative to nominal GDP.<sup>5</sup> Nevertheless, we also use real expenditure growth as a robustness check. Ideally one should look at cyclically adjusted expenditure ratios but due to limited data availability and concerns about data quality we use this data as another means to check robustness rather than as the primary assessment indicator. Finally, we did not only look at changes in the public expenditure ratio but also at relative changes, i.e. at the decline of public primary expenditure relative to total expenditure.

Furthermore, we define the total expenditure peak of each country as the starting date of the expenditure reform period. We take stock of the change in the expenditure ratio after 7 years, which is broadly the duration of observed reform "waves" (and adjustment fades out around this date) and which also roughly corresponds to the length of many business cycles (so that cyclical adjustment of expenditure developments becomes less important). This approach will later allow comparing and discussing the medium term experiences in the context of expenditure reforms. Again, we checked whether results were robust to different observation periods. For the countries that started reforming in the 1980s, we also checked whether they participated additionally in the second reform wave of the early 1990s. Some countries may hence feature two reform episodes.

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<sup>4</sup> See Tanzi and Schuknecht (2000) for arguing for industrialised countries that public spending increases have not brought much additional benefit when growing beyond 30% of GDP. Afonso, Schuknecht and Tanzi (2005) show, for a large number of emerging economies, that expenditure efficiency appears to be declining strongly when the expenditure ratio exceeds 30% or 35% of GDP.

<sup>5</sup> See, for example, the Non-Keynesian effects literature.

Note that wages and benefits are normally correlated with nominal GDP growth. A country with 4% nominal wage, benefit and GDP growth will need to make an effort to keep expenditure growth below GDP growth just as a country with 5% or 6% growth in these elements. However, with high GDP growth it is easier to shrink the expenditure ratio without resorting to nominal spending cuts.

**Table 2: Primary expenditure, changes**

Percent of GDP						
	Primary expenditure		Change maxT7 (or nearest)  (% of GDP)	Relative (% of max)	Ranking	
	year	ratio			(% of GDP)	(% of GDP)
<i>"ambitious" reformers</i>						
<b>Finland</b>	1993	60.3	-14.0	-23.2	1	2
<b>Sweden</b>	1993	67.2	-14.0	-20.8	2	5
<b>Ireland (Phase 1)</b>	1982	47.5	-12.4	-26.0	3	1
<b>Belgium (Phase 1)</b>	1983	53.9	-12.3	-22.7	4	3
<b>Canada</b>	1992	44.9	-9.5	-21.2	5	4
<b>United Kingdom (Phase 1)</b>	1981	45.4	-8.2	-18.1	6	6
<b>Netherlands (Phase 2) United Kingdom (Phase 2)</b>	1993	48.5	-7.5	-15.4	7	9
	1992	44.3	-7.2	-16.2	8	7
<b>Spain</b>	1993	42.6	-6.4	-15.0	9	10
<b>Ireland (Phase 2)</b>	1992	38.2	-6.2	-16.1	10	8
<b>Luxembourg</b>	1981	50.5	-5.7	-11.2	11	11
<b>Netherlands (Phase 1)</b>	1983	52.8	-5.1	-9.7	12	13
<i>"timid" reformers</i>						
<b>Austria</b>	1993	53.1	-4.3	-8.1	13	15
<b>Denmark</b>	1993	54.1	-3.9	-7.2	14	17
<b>New Zealand</b>	1985	46.9	-3.8	-8.2	15	14
<b>United States</b>	1992	32.2	-3.4	-10.4	16	12
<b>Italy</b>	1993	44.6	-3.0	-6.6	17	18
<b>Japan</b>	1998	37.6	-2.7	-7.3	18	16
<b>Belgium (Phase 2)</b>	1993	45.2	-2.1	-4.6	19	19
<b>Germany</b>	1996	46.7	-0.6	-1.3	20	20
<b>France</b>	1996	51.5	-0.5	-0.9	21	22
<b>Switzerland</b>	1998	34.0	-0.3	-1.0	22	21
<i>other countries</i>						
<b>Portugal</b>	2004	43.8	0.0	0.0	23	23
<b>Greece</b>	2000	43.9	0.4	0.8	25	24
<b>Australia</b>	1985	34.9	0.4	1.1	26	25

Source: Ameco

The results of these considerations are reflected in Table 2 and in Annex Tables 1 and 2. Of the 21 countries that we considered, six countries started reducing public spending in the 1980s, and four of them report two “waves” (Belgium, Ireland, the Netherlands and the United Kingdom). This yields a total of 25 episodes or “cases”. Of these 25 cases, ten reported primary expenditure reductions of more than 6 percent of GDP and a relative decline of public spending of more than 15% of GDP within seven years. Moreover, there are two cases where primary expenditure declined by more than 5% of GDP, reflecting a relative decline of about 10%. To put this in perspective, a 5% primary expenditure decline reflects about half of the public sector wage bill or more than half of public pension spending for the average of industrialised countries. To us, these cases

therefore reflect ambitious reform programs. Four of these are cases of “early” ambitious adjustment took place in the 1980s. The others are “late” ambitious programs, as they took place in the 1990s.<sup>6</sup> When looking at real expenditure growth, all episodes feature contained positive or even negative growth in this variable with the notably exception of Ireland. However, the country was able to limit spending growth well below real GDP trend and still reported a remarkable decline in the cyclically adjusted expenditure ratio. Spain and the first Dutch reform episode show somewhat less expenditure consolidation when looking at cyclically adjusted figures. All in all, and despite these caveats, we would find our identification criterion as broadly reasonable and classify 12 (or almost half of the total) episodes as incidents of ambitious reforms.

There are 10 cases of “timid” reforms whose public primary expenditure declined but by less than 5% of GDP within seven years. This group also includes the large euro area countries. There are two countries where the choice of a longer adjustment period (than 7 years) would have made a difference and would have qualified them as “ambitious reformers” under the above definition. Austria is the least timid and comes close to the 5% threshold after 7 years. New Zealand is the country with the greatest overall adjustment effort between the start of reforms and today in this group.<sup>7</sup> The US reports the highest relative expenditure decline of about 10% of total primary spending in this group, coming close to that of Luxembourg or Netherlands (phase 1). However, most of the reduction occurred in the area of military spending. It also noteworthy that Germany and Italy reported relatively moderate real expenditure growth but in an environment of low trend growth this did not translate into much reduced spending ratios. To be consequential, we included all these cases with some ‘borderline characteristics’ in the group of timid reformers.

Three countries did not experience any decline in primary spending ratios since the peak of total expenditure (Portugal, Greece, Australia). Nevertheless, this does not mean that these countries did not undertake economic policy reforms. Especially Australia undertook major structural reforms in the past two decades. The categorisation of countries is reflected in Table 3, with numbers in brackets indicating the respective reform phase.

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<sup>6</sup> Ireland, for example, reduced primary spending by over 12% of GDP in the first phase and again by 6% in the second phase. The UK shows even more peculiarities as it experienced two phases of expenditure reform which each time were followed by very strong expenditure increases, so that the current ratio of public spending is not much different from 20 years ago.

<sup>7</sup> For a more detailed discussion of New Zealand’s experience see Massey, 1995; Scott, 1996 or Tanzi and Schuknecht, 2000.

**Table 3: Reform categories**

Categories	Countries
Ambitious and early reformers	Ireland (1), Luxembourg, the Netherlands (1), United Kingdom (1)
Ambitious and late reformers	Belgium (2), Canada, Finland, Ireland (2), the Netherlands (2), Spain, Sweden, United Kingdom (2)
Timid reformers	Austria, Belgium (2), Denmark, France, Germany, Italy, Japan, New Zealand, Switzerland, United States
Other countries	Australia, Greece, Portugal

The following section will discuss individually the experiences of countries that undertook ambitious reforms, according to our categorisation. While there are 12 cases affecting 9 countries, we will not discuss Luxembourg due to limited data availability. We will look at the expenditure reforms undertaken, the accompanying institutional reforms and at complementary structural reforms that may have affected the fiscal or economic performance of the country in question. In the subsequent section, we propose a number of horizontal conclusions from the case studies in both quantitative and qualitative terms.

### **3 Country case studies of expenditure reform experiences**

The different experiences with expenditure reforms that OECD countries have made over the last decades are highly instructive from a case by case perspective. Discussing and comparing individual experiences is insightful in several respects: On the one hand, each expenditure reform is unique. The economic and political conditions from which it arises as well as its effects differ from country to country and over time. Hence, we naturally observe a range of idiosyncratic features associated with each single expenditure reform. On the other hand, some common characteristics stand out, too. Therefore, the following country studies should be of relevance beyond the specific cases at hand. With the exception of Luxembourg, we discuss all countries that qualify as ‘ambitious reformers’. All country analyses benefited from the respective OECD country surveys; further sources are quoted where appropriate. The case studies are presented in the order of ambition, i.e. listed by the degree of the primary expenditure adjustment, starting with one of the most impressive expenditure reform success stories in economic history: Ireland.

## 3.1 Ireland

Ireland: The macro picture (% of GDP)

	Phase 1			Phase 2		
	T0	T0-T2	T0-T7	T0_2	T0-T2	T0-T7
	1982	1982-1984	1982-1989	1992	1992-1994	1992-1999
Total revenue	41.9	2.5	-1.6	42.4	0.0	-5.4
Total expenditure	56.2	-1.6	-13.3	45.3	-1.0	-10.9
Primary expenditure	47.5	-2.1	-12.4	38.2	0.1	-6.2
Fiscal balance	-15.2	4.4	12.5	-3.0	1.0	5.5
Cyclically adj. balance	-15.2	5.7	11.9	-2.0	3.2	2.6
Cyclically adjusted primary balance	-5.3	6.1	9.8	5.1	2.2	-2.1
Public debt	84.6	14.1	15.7	92.5	-2.9	-43.8
Real GDP growth (%)	2.3	2.1	3.9	3.3	2.4	7.4
Trend GDP growth (%)	3.3	-0.3	0.6	5.6	0.8	2.7
Inflation (CPI growth in %)	17.2	-8.6	-13.2	3.1	-0.8	-1.5
Employment ratio	57.8	-3.4	-5.0	53.0	1.0	11.8

Source: Ameco, OECD

Ireland: The disaggregated picture (% of GDP)

	Phase 1			Phase 2		
	T0	T0-T2	T0-T7	T0_2	T0-T2	T0-T7
	1982	1982-1984	1982-1989	1992	1992-1994	1992-1999
Total expenditure	56.2	-1.6	-13.3	45.3	-1.0	-10.9
Interest	8.8	0.4	-1.0	7.1	-1.0	-4.8
Primary expenditure	47.5	-2.1	-12.4	38.2	0.1	-6.2
Government consumption	20.4	-1.1	-5.2	17.9	-0.4	-3.9
Thereof: compensation of employees	12.1	-0.4	-2.3	11.2	-0.3	-3.0
Transfers and subsidies	15.7	1.1	-2.2	14.1	-0.4	-4.7
Transfers	14.4	0.5	-2.1	12.9	-0.4	-4.4
Subsidies	1.3	0.7	-0.1	1.2	-0.1	-0.3
Investment	5.0	-1.2	-3.2	2.1	0.2	1.0
<i>Functional:</i>						
Education	5.8	-0.3	-0.9	5.22	0.2	-0.9
Health	6.3	-0.4	-1.7	5.04	0.0	-0.5
Pensions	4.9	-0.1	-0.7	4.32	-0.2	-1.6
<i>Memorandum item:</i>						
Government employment (change in %)	5.2	-3.8	-13.6	2.6	-0.3	8.7

Source: Ameco, OECD, Worldbank

Ireland undertook major expenditure reforms over two periods (Phase 1 and 2, see, for example, Barry 1999). The first reform phase was initiated in the early 1980's after Ireland had been suffering from persistently low GDP growth, accompanied by rising unemployment rates and widening fiscal deficits. This situation had been aggravated by high inflation and large increases in the public debt ratio. In 1982, CPI Inflation had accelerated to 17%, public spending reached 56% of GDP, the deficit exceeded 15% of GDP and the public debt-to-GDP ratio had increased to nearly 85%, rising above 100% in the mid-1980s. The second reform phase started in a less dramatic environment in 1994, but nevertheless some fiscal imbalances had reappeared and a relatively high debt ratio had remained at a time when Ireland was preparing for Monetary Union.

The **correction of Ireland's fiscal situation** started in 1982-84 with a mixed strategy that consisted of both expenditure-based and revenue-based adjustment. While this policy contributed to a significant improvement in the cyclically adjusted primary balance (by 6% of GDP within two years), the deficit still stood near 10% of GDP and the debt level continued rising up to 113% of GDP in 1986. A genuine turnaround was undertaken when the adjustment effort was reinforced as of 1987. The so-called 'Programme for National Recovery' rested essentially on a deep-rooted expenditure reform. Almost the entire fiscal ad-



justment during Phase 1 was placed on the spending side, with primary expenditure falling by 12% of GDP over the seven-year period after 1982. In the second phase, public spending fell again by over 10% of GDP. For the total period since 1982, spending even came down by over 20% of GDP to around 35% of GDP in recent years. Together with the recovery of economic growth, this unprecedented consolidation program yielded fiscal surpluses and allowed for a rapid decline of public debt and significant tax cuts.

The substantial **retrenchment of the first reform phase** in the 1980s was mainly based on cuts in public consumption and investment. The public wage bill was brought down by continued restraint on wages and, more importantly, a significant reduction of civil service personnel. Public employment declined by almost 14% between 1982 and 1989, partially thanks to a hiring freeze. In addition, the expenditure reform involved legislative changes that lastingly embedded significant cuts in the areas of transfers and subsidies. Subsidies were cut by almost two thirds in 1988 from a level of 3% of GDP in the preceding year. Furthermore, social spending and specifically health and pension expenditure was reduced to a considerable extent. Eligibility for social security benefits was tightened and targeting was improved, while the real value of benefits was frozen. User fees for universities and hospitals were established. Finally, the amount of borrowing by public enterprises was largely trimmed, including by abrogating major projects in the energy and telecommunications sector. Expenditure reform hence played a major role in improving macroeconomic conditions in the late 1980s.

The **second reform phase**, starting in 1994, saw a resumption of expenditure-based public finance consolidation (to counter renewed expenditure pressures) and concurred with steady and even stronger growth (Boyle and O'Leary 1997). The deficit disappeared in 1996 after the non-recurrence of special spending requirements in 1995, and the continuously declining debt level was brought below 40% of GDP in the year 2000, which resulted in significant interest savings. Tight controls on discretionary spending and declining interest rates helped to lower the headline deficit further. The primary expenditure-to-GDP ratio declined by 6%. As in the previous reform phase, the bulk of the reduction in primary spending was achieved by lower spending on public employment and significant declines in the area of transfers. Continued savings resulted from a low intake of public recruitment as well as from falling real levels of social transfers as the number of recipients was coming down in the wake of strong output and private employment growth. However, towards the end of phase 2, expenditure growth started to accelerate again, so that the expenditure ratio stopped falling despite strong growth.

From an **institutional perspective**, a radical strengthening of the position of the Minister of Finance can be seen as the essential political precondition for the implementation of the first phase of the Irish expenditure reform. Political ownership over Phase 1 of the reform was almost completely entrusted to the Finance Minister, who, from 1987 to 1989, possessed virtually unconditional Parliamentary support and the full backing of the Prime Minister to impose austerity measures (Hallerberg, 2004). For the second adjustment phase, during the mid-1990s, the institutional underpinning of the expenditure reform is shaped by the conclusion of fiscal contracts among the governing coalitions, and the introduction of multi-year budgeting.

**Complementary measures** to the expenditure reform included public sector wage moderation in agreement with the trade unions as well as the transformation of centralised wage bargaining, leading to wage moderation also in the private sector. Furthermore, the government reformed the tax system. The introduction of the by far lowest corporate tax scheme in the EU at the time raised Ireland's attractiveness for foreign direct investment. The normal VAT rate was reduced. Since 1987, the government pursued its tax policy specifically with a view to improving labour market incentives. Corresponding measures included successive reductions in the standard income tax rate from 35% to 26% and a cut in the top rate from 58% to 48% until the mid-1990s. Additionally, the standard tax bracket was doubled and the tax wedge narrowed from an average of 43% of total employer labour cost in 1987 to 35% ten years later. Further sizeable tax reductions were implemented in 1996 and 1997. A three-year central wage agreement was announced in December 1996 which, in combination with the effects of the tax reform, contributed to continued wage moderation and increased labour market flexibility. In addition, the government focussed on improving work incentives. To this end, it reformed the benefit system and realigned public employment programmes and services as well as vocational training and education. Moreover, privatisation of public companies as well as increased public-private cooperation were continued, particularly in the areas of telecommunications and public banking.

In terms of macroeconomic measures, the external sector was supported by a devaluation of the Irish pound in 1987, which also helped to reduce the costs for foreign investors and improved Irish competitiveness (Bartolini 1993). In the early 1990s, Ireland's devaluation again supported the external sector. But the broader economic reforms that helped break the expectation of repeated cycles of devaluation, wage and fiscal pressures and inflation caused the impact to be more lasting in an environment of continued price stability.

**In summary**, Ireland seems to be a case of a major change in the economic policy regime where expectations and behaviour of economic agents changed fun-

damentally and for which expenditure reform constituted a key element. Subsequently, Ireland experienced swift employment creation, rising income, low spending ratios and public debt and, ultimately, convergence of living standards with those of the most advanced Western economies (Fitz Gerald 1999). In particular, the first phase of the Irish expenditure reform delivers a prime example of how expenditure retrenchment as part of a broad and deep structural and macroeconomic reform agenda can coincide with a swift and sustained economic recovery.<sup>8</sup> Unsurprisingly, the Irish experience sparked the scientific debate on possible expansionary effects of fiscal contractions (starting with Giavazzi and Pagano, 1990).

### 3.2 Sweden

Sweden: The macro picture (% of GDP)

	T0	T0-T2	T0-T7
	1993	1993-1995	1993-2000
Total revenue	61.6	-0.9	0.8
Total expenditure	73.0	-5.2	-15.7
Primary expenditure	67.2	-6.1	-14.0
Fiscal balance	-11.4	4.4	16.5
Cyclically adj. balance	-7.3	1.6	11.0
Cyclically adjusted primary balance	-1.4	2.5	9.2
Public debt	71.3	2.4	-18.4
Real GDP growth (%)	-2.0	6.0	6.3
Trend GDP growth (%)	0.8	1.4	2.0
Inflation (CPI growth in %)	4.7	-2.3	-3.8
Employment ratio	73.2	-0.3	1.4

Source: Ameco, OECD

Sweden: The disaggregated picture (% of GDP)

	T0	T0-T2	T0-T7
	1993	1993-1995	1993-2000
Total expenditure	73.0	-5.2	-15.7
Interest	5.8	0.9	-1.8
Primary expenditure	67.2	-6.1	-14.0
Government consumption	29.4	-2.2	-2.8
Thereof: Compensation of employees	18.6	-1.8	-2.8
Transfers and subsidies	27.1	-2.8	-8.0
Transfers	22.6	-2.0	-5.1
Subsidies	4.5	-0.8	-2.9
Investment	3.8	0.2	-0.9
<i>Functional:</i>			
Education	7.6	-0.1	0.2
Health	7.5	-0.4	-0.4
Pensions	10.9	-1.0	-1.7
<i>Memorandum item:</i>			
Government employment (change in %)	1.9	-3.5	-7.7

Source: Ameco, OECD, Worldbank

Sweden's experience with expenditure reform arose from a severe recession coupled with a financial crisis following the bubble-economy of the late 1980s (for an overview of Swedish reforms, see Henriksson 2003). This led to a significant decline in the employment ratio, fiscal imbalances and strong inflationary pressures. The public expenditure ratio had increased to a staggering 73% of GDP in 1993 while deficits exceeded 10% of GDP and public debt had risen rapidly to over 70% of GDP.

**Fiscal reforms** started in earnest after 1993 when the government passed three successive 'consolidation packages'. The strategy proved successful due to discretionary measures that combined revenue-enhancing tax increases with substantial reductions of public expenditure by almost 16 percentage points in the course of seven years. As fiscal balances improved and turned into surpluses, public debt also started coming down rapidly.

<sup>8</sup> On the basis of modelling causal factors behind Irish growth, it has been argued that the 'fiscal adjustment was directly responsible for a sizeable increase in the growth rate after the mid-1980s' (see also Barry, 1991, de la Fuente and Vives 1997, Honohan, 1999).

The main expenditure categories being reduced were transfers and subsidies (down from 27% of GDP in 1993 to 19% in 2000; particularly in the areas of pensions and social security), government consumption (particularly in the area of public employment) and pensions. The fiscal consolidation course improved the structural primary balance by 2.5% of GDP within two years and by around 9% of GDP within 7 years. State transfers to municipalities were frozen at the nominal 1994 level until 2000 in conjunction with banning local government borrowing. Considerable cuts, often on the basis of permanent legal changes, were imposed on transfers in the social security domain, including reductions in child allowances and compensations in family insurance, as well as in the area of pensions and sick payments. A subsequent 'package' contained further reductions in unemployment, sickness and parental benefits. Eligibility for benefits was tightened and replacement rates significantly reduced.

**Institutionally**, the Swedish government improved legislative control over the budget process in the course of constitutional changes advocated by a special commission on the reform of the country's fiscal institutions (for an overview of the institutional reforms in Sweden, see Frank 2004). The changes lengthened the Parliamentary period and imposed binding three-year expenditure ceilings on particular spending categories within an overall envelope on total expenditure. Additionally, both the standing of the Minister of Finance in the cabinet and the position of the minority government vis-à-vis Parliament were strengthened, allowing to discontinue the spending-prone tradition of budgetary agreements with the opposition. Following the institutional reform, budgetary control was shared by the government and the budgetary committee in Parliament and enhanced sufficiently. The reform, which is considered as considerably improving the political economy features of the Swedish system (Perotti 1998), also introduced a number of innovative features, such as provisions to 'carry over' a certain proportion of the budget earmarked for mandatory spending categories, thereby reducing the incentive to exhaust the annual expenditure frame. This also allows to finance higher-than-expected mandatory spending, e.g. on social benefits, from the 'own' funds of the respective spending category, rather than driving up the overall level of public expenditure. The Swedish government placed the budgetary retrenchment on a solid legal foundation and additionally used the EU's surveillance process as a secondary basis for further strengthening its commitment to fiscal discipline. For example, the 1995 Convergence Programme entailed a commitment to eliminate the budget deficit by 1998. Once this objective was achieved, expenditure rules supplemented by a 2%-of-GDP surplus rule helped to maintain fiscal discipline.

**Complementary measures** flanking the expenditure reform include a floating exchange rate regime and a significant depreciation of the krona followed by monetary stabilisation by the (newly independent) central bank. Since mid-1995,

the government gradually implemented a pension reform and introduced a funded pillar. Besides these measures, the government pursued a privatization programme and higher degree of labour market liberalisation. The Swedish government did not resort to substantial tax cuts but tax restructuring reduced marginal income tax rates from up to 90% to at most 60-70%. This together with benefit reforms reduced tax evasion and benefit fraud, distortions and moral hazard (Lindbeck, 1997).

**All in all**, Sweden is another example of a successful expenditure-based fiscal consolidation. This and institutional, macroeconomic and structural policy reforms as part of a rapid and comprehensive program were also accompanied by a strong and remarkably fast rebound in real and trend economic growth.<sup>9</sup>

### 3.3 Canada

	T0 1992	T0-T2 1992-1994	T0-T7 1992-1999
Total revenue	45.1	-1.2	-0.3
Total expenditure	52.6	-3.5	-11.4
Primary expenditure	44.9	-3.4	-9.5
Fiscal balance	-9.3	2.5	10.9
Cyclically adj. balance	n.a.	n.a.	n.a.
Cyclically adjusted primary balance	n.a.	n.a.	n.a.
Public debt	110.5	8.6	0.3
Real GDP growth (%)	0.9	3.9	4.7
Trend GDP growth (%)	1.8	0.6	1.8
Inflation (CPI growth in %)	1.5	-1.3	0.2
Employment ratio	68.1	0.6	3.6

Source: Ameco, OECD

Canada: The disaggregated picture (% of GDP)

	T0 1992	T0-T2 1992-1994	T0-T7 1992-1999
Total expenditure	52.6	-3.5	-11.4
Interest	9.5	-0.3	-1.7
Primary expenditure	44.9	-3.4	-9.5
Government consumption	24.4	-1.9	-5.3
Thereof: Compensation of employees	15.4	-1.2	-3.9
Transfers and subsidies	15.3	-1.0	-3.3
Transfers	13.5	-0.5	-2.5
Subsidies	1.8	-0.5	-0.8
Investment	2.9	0.0	-0.5
<i>Functional:</i>			
Education	7.3	-0.7	-1.9
Health	7.3	-0.6	-1.1
Pensions	4.9	0.0	-0.2
<i>Memorandum item:</i>			
Government employment (change in %)	1.0	-0.1	0.2

Source: Ameco, OECD, Worldbank

The Canadian economy entered a severe downturn in 1990. The recession was followed by a historically slow recovery and, consequently, unemployment rates increased significantly, peaking at 11.5 per cent in 1992. In the same year, public spending rose well above 50% of GDP, fiscal deficits reached 9% of GDP and, as a result, the public debt-to-GDP ratio grew sharply to well above 100% of GDP. The worsening of the overall general government deficit was, to a large extent, caused by an increasingly difficult provincial budget situation. Moreover, Canada was facing substantial competitive disadvantages due to high labour costs, low productivity growth rates and a pronounced exchange-rate appreciation since the mid-1980's.

In this situation, the federal government started an **ambitious program of fiscal tightening** as of 1993, which, unlike previous attempts at fiscal adjustment, was

<sup>9</sup> Sweden has also been identified as among the prime examples of possible non-Keynesian effects of fiscal adjustments (Giavazzi and Pagano 1995).

to be chiefly expenditure-based (Kneebone and McKenzie 1999). Within two years, total and primary expenditure declined by around 3.5% of GDP. The consolidation course was continued in the following years such that total spending fell by more than 11% of GDP over seven years in comparison to the peak level in 1992. The budget was balanced in 1997, and in 1999 the fiscal deficit had been improved by more than 10% of GDP compared to 1992. Successful fiscal consolidation went hand in hand with a strong increase in trend growth and also started to bring down the public debt ratio.

**As regards reform measures**, structural cuts in government consumption (especially compensation of public employees) accounted for almost half of the overall retrenchment, while about one third was achieved by reducing transfers to households and subsidies. Amendments to and ultimately the discontinuation of the unemployment insurance systems led to reduced spending on income support by adjusting eligibility requirements and cutting the replacement rate. Reforms also took place in the system of transfers to the provinces. These transfers were reduced in order to improve provincial cost efficiency and control federal spending. Moreover, in 1996/1997 several provincial social assistance programmes were merged into one comprehensive scheme and moved from a cost-sharing approach to a system of block grants, further limiting social expenditure. Important improvements were also achieved in the field of privatisation and public sector reform. A so called ‘Programme Review’ was introduced in 1994 in order to enhance public sector efficiency and to reduce the overall cost of government. This led to the (partly) privatisation of a number of major state-owned enterprises.

Expenditure-based fiscal consolidation in Canada was enabled by important **institutional changes** under the specificities of a federal system (Boadway and Hobson 1993). The ‘Expenditure Control Act’ of 1990 had already imposed limitations on spending growth for most expenditure categories. Subsequently, the so-called ‘Spending Control Act’ was implemented in 1992 in order to keep primary spending on public programme below 1991 levels for the subsequent five years. Once surpluses were achieved as of 1997, the government successfully resisted them being spent. Both at the federal as well as at the provincial levels, “contingency reserves” aimed to use budgetary surpluses for public debt reduction (Kennedy, Robbins and Delorme, 2001).

The success of Canada’s fiscal consolidation in the 1990’s was also based on a wide range of **complementary reforms**. The reform of transfer systems and more extensive use of privatizations not only benefited the budget but also improved conditions and incentives on the supply side. The reform of the unemployment insurance system was coupled with active labour market policies. Additionally, a number of measures were introduced to increase labour market

flexibility and the skill level of the work force. Moreover, the government undertook a major restructuring of financial legislation, increasing competition, innovation and efficiency in the financial sector. In the area of taxation, reforms lowered the tax burden while improving the fairness of the tax system, broadening the tax base and, at the provincial level, reducing personal income taxes.

**All in all**, Canada's fiscal consolidation period in the 1990's can be described as a success story, built on a three-pillar strategy: low and stable inflation, structural reforms and substantial expenditure reductions. Within a seven year period following the spending peak in 1992, Canada was able to substantially improve the soundness of its public finances. Trend growth as well as employment picked up significantly and notably early-on in the course of the process. Strong institutional underpinnings also helped to sustain fiscal soundness once deficits had disappeared.

### 3.4 Finland

Finland: The macro picture (% of GDP)

	T0 1993	T0-T2 1993-1995	T0-T7 1993-2000
Total revenue	57.4	-1.7	-1.3
Total expenditure	64.8	-5.1	-15.7
Primary expenditure	60.3	-4.6	-14.0
Fiscal balance	-7.3	3.4	14.4
Cyclically adj. balance	-1.8	0.4	6.7
Cyclically adjusted primary balance	2.7	-0.1	5.0
Public debt	56.4	0.7	-11.8
Real GDP growth (%)	-1.2	4.7	6.2
Trend GDP growth (%)	0.2	1.6	3.4
Inflation (CPI growth in %)	2.2	-1.4	0.9
Employment ratio	60.2	0.1	6.2

Source: Ameco, OECD

Finland: The disaggregated picture (% of GDP)

	T0 1993	T0-T2 1993-1995	T0-T7 1993-2000
Total expenditure	64.8	-5.1	-15.7
Interest	4.5	-0.5	-1.6
Primary expenditure	60.3	-4.6	-14.0
Government consumption	24.5	-1.5	-3.8
Thereof: Compensation of employees	16.8	-1.6	-3.6
Transfers and subsidies	27.4	-2.5	-9.4
Transfers	24.1	-2.0	-7.7
Subsidies	3.3	-0.5	-1.8
Investment	2.9	-0.2	-0.3
<i>Functional:</i>			
Education	7.8	-0.7	-1.8
Health	6.3	-0.7	-1.3
Pensions	9.1	-0.5	-1.5
<i>Memorandum item:</i>			
Government employment (change in %)	-4.9	0.6	5.7

Source: Ameco, OECD, Worldbank

Finland started its reforms in a very difficult economic and fiscal environment. Following the end of the late 1980s bubble-economy and the disruption of trade with the Soviet Union, the country experienced a severe economic slump, which lasted from 1990 to mid-1993. GDP fell by almost 15% and unemployment rose to 19%. On the back of rising welfare spending and falling revenue, the spending ratio had reached nearly 65% of GDP and the deficit exceeded 7% while bailout costs for the banking sector further accelerated the increase in the public debt ratio.

In these circumstances, Finland undertook an **ambitious expenditure reform program** (for an overview, see Hetemäki 2003). Primary spending growth of the central government was brought under control and was reduced successively. This resulted in a restrictive fiscal stance after 1994 when the measures started to bite fully. Total expenditure was reduced by 5% of GDP in the course of 2 years and by 15% of GDP to 49% of GDP over seven years. In the same

time span, the fiscal balance improved by 14% of GDP to a surplus of 7% (including extraordinary revenue of 2% of GDP in that year). With fiscal consolidation and reviving growth, public debt also started declining rapidly towards the end of the 1990s.

Individual **measures** of the Finnish expenditure retrenchment were mainly based on lasting cuts of subsidies and transfers to households as well as government consumption. These declined by 3% and 1½% of GDP respectively in the first two years and continued declining strongly thereafter. The cuts were mainly orchestrated through a sustained compression of central government expenditure, which declined even in absolute terms from 1995 onwards. Around one third of these expenditure cuts took the form of reductions in central government transfers to municipalities, including on education, health care and public pensions. Major savings were achieved through moderate wage agreements in the public sector and reductions in public employment (by almost 5% alone in 1993). Interest payments levelled off in the context of declining interest rates and falling public debt.

Changes in **fiscal institutions** were crucial to the attainment of expenditure cuts (Corsetti and Roubini 1996). A legal change in 1992 reduced the parliamentary requirement for spending reductions to simple majority rule instead of the previously required two thirds majority. By consequence, it became immediately and substantially more difficult to form blocking minorities against measures of expenditure restraint. Hitherto, the previous arrangement had rendered expenditure cuts near to impossible (Meklin et al 2004). In 1993, Finland additionally reformed the funding of municipalities, replacing retrospective reimbursements with prospective block grants. In 1995, two further institutional elements strengthened the consolidation course: Firstly, a coalition agreement after the 1995 elections contained strong commitments to continue expenditure restraint, and secondly, Finland's entry into the EU and the process of Maastricht convergence added an external framework to the restitution of fiscal soundness. Finally, the success of consolidation was facilitated with the introduction of effective expenditure ceilings, implementing reductions of central government spending levels in the areas of subsidies, transfers and public employment over a three-year horizon.

There were also significant **complementary reform measures**. An initial exchange rate devaluation benefited the tradable sector. Tripartite biannual 'incomes policy agreements' in the national tradition of centralised wage bargaining ensured wage moderation and contributed to low levels of inflation (and a break with past trends of inflation eroding the gains of devaluations rapidly). Monetary policy encouraged moderate wage and price behaviour through the announcement of a 2% target for underlying inflation. Furthermore, the govern-



ment implemented a series of changes to the taxation system. Their overall impact was subservient to the overarching goal of regaining fiscal soundness and improved the revenue base, for example allowing for surpluses at the municipal level and in the social security funds. The measures included lower taxation of income, a VAT reform and an increase in social security contributions. Finally, the Finnish authorities also restructured the banking industry, followed by labour market and pension reforms in conjunction with major privatisations and deregulations of formerly public enterprises (e.g. telecommunication).

**In summary**, in the wake of expenditure cuts that were part of a comprehensive institutional, macroeconomic and structural reform program, growth and employment picked up strongly and already within two years after the reforms were started. Consolidation and reform concurred with strengthening confidence and higher growth which, in turn, facilitated further consolidation.

### 3.5 Belgium

Belgium: The macro picture (% of GDP)

	T0 1983	T0-T2 1983-1985	T0-T7 1983-1990
Total revenue	49.0	0.7	-2.2
Total expenditure	63.8	-3.9	-10.2
Primary expenditure	53.9	-4.7	-12.3
Fiscal balance	-14.8	4.5	8.0
Cyclically adj. balance	-12.3	4.0	4.4
Cyclically adjusted primary balance	-2.5	4.8	6.4
Public debt	109.4	9.0	19.8
Real GDP growth (%)	0.3	1.3	2.8
Trend GDP growth (%)	1.8	-0.2	0.7
Inflation (CPI growth in %)	7.7	-2.8	-4.2
Employment ratio	55.4	-0.3	2.9

Source: Ameco, OECD

Belgium: The disaggregated picture (% of GDP)

	T0 1983	T0-T2 1983-1985	T0-T7 1983-1990
Total expenditure	63.8	-3.9	-10.2
Interest	9.9	0.8	2.1
Primary expenditure	53.9	-4.7	-12.3
Government consumption	23.5	-0.1	-3.0
Thereof: compensation of employees	13.2	-0.5	-2.0
Transfers and subsidies	22.2	-1.4	-4.2
Transfers	19.4	-1.1	-3.2
Subsidies	2.8	-0.3	-1.1
Investment	3.9	-0.9	-2.2
<i>Functional:</i>			
Education	6.0	-0.2	-1.1
Health	6.0	-0.1	0.6
Pensions	6.7	-0.1	0.9
<i>Memorandum item:</i>			
Government employment (change in %)	-1.4	0.8	2.4

Source: Ameco, OECD, Worldbank

Following the second oil crisis of the late 1970s, the Belgian economy deteriorated markedly. By 1983, public spending stood at 63.8% of GDP, the deficit was approaching 15% of GDP while the debt level exceeded 100% of GDP. The unemployment rate was one of the highest across the OECD at 14.5% in 1983 while growth had come to a standstill. Belgium seemed trapped in a 'vicious circle' with low competitiveness, rising unemployment and widening public sector deficits mutually reinforcing each other.

In 1982, the government entered a first period of **fiscal consolidation** (Phase 1) and announced a 'recovery plan'. This was followed in 1984 by two successive biannual 'Corrective Public Finance Plans', lasting until 1988. Whereas the first Corrective Public Finance Plan also included measures to increase government revenue (through higher labour taxes and social security contributions), the sec-

ond programme exclusively focused on expenditure-based consolidation.<sup>10</sup> A second (though more timid) wave of consolidation subsequently occurred until 1997 in the context of Maastricht convergence (Phase 2, not included in the above table).

During the first of two these **reform phases**, the fiscal stance was tightened significantly as of 1983. Total public expenditure came down by 10% of GDP by 1990 and this decline was entirely due to primary expenditure reductions. While the first consolidation phase eliminated the risk of imminent macroeconomic destabilisation, significant deficits remained and public debt was still on the rise. In the second, more timid, reform phase, fiscal balances were, therefore, eliminated so that public debt was also brought on a clear downward path. Further primary expenditure reductions were more moderate and much of the consolidation was brought about by the fall in interest payments due to declining interest rates (and to a lesser extent as a premium from bringing down the debt ratio). The two reform phases together brought down total spending by almost 14 percentage points to 50% of GDP.

Most of the **adjustment** in primary spending came from cuts in transfers and subsidies as well as in government consumption. During the first, ambitious, consolidation phase, transfers were reduced through annual cuts from a peak at 19.4% of GDP in 1983 to 16.2% in 1990. They rose back to over 17% in the recession of the early 1990s and were reduced anew below 16% in 1999 during the second retrenchment period. A considerable redrafting of benefit systems enabled sustained spending reductions and improved the incentive effects of these schemes. Subsidies were reduced throughout and more than halved by constant annual reductions from the 1983 level of 2.8% of GDP down to below 1.2% in 1997. Nearly constant public employment supported the adjustment of public wage expenditure. In the first consolidation period, the government reduced investment spending drastically, down from 3.9% of GDP in 1983 to 1.7% in 1990 before keeping it broadly constant thereafter. In the second phase, expenditure control at the federal level and for social security further contributed to primary expenditure reduction, albeit at a more “timid” scale (Reynders 2002, de Callatay 2002).

**Institutional change** occurred mainly during the second consolidation phase in the 1990s. The government as well as regional and local authorities concluded a ‘fiscal contract’ in which they agreed to respect the budgetary targets set by the so-called *Conseil supérieur des finances*.

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<sup>10</sup> For a detailed discussion of Belgian public finance developments in the 1980s, see De Ryck (1993) and Frank (1993).

**Complementary measures** to the expenditure reforms were taken on the supply side, such as partially suspending the national wage indexation scheme in 1982, which delivered a freeze on real wage developments. Labour market policy was restructured, including a more active labour market policy to complement the reform of benefit systems. Public debt was rescheduled in the 1980s in order to spread the burden of interest payments more evenly across time. In the second phase, the structural reform progress was very limited (de Callatay, 2002).

**All in all**, Belgium undertook an impressive fiscal consolidation and reform programme over two phases in the 1980s and 1990s. This brought deficits under control and debt on a declining path while bringing the public spending ratio down significantly. Over time, this also coincided with a significant increase in trend growth and employment, although both the reforms and the country's economic recovery were perhaps somewhat less spectacular than in some of the other cases.

### 3.6 Netherlands

Netherlands: The macro picture (% of GDP)

	Phase 1			Phase 2		
	T0	T0-T2	T0-T7	T0_2	T0-T2	T0-T7
	1983	1983-1985	1983-1990	1993	1993-1995	1993-2000
Total revenue	52.9	-0.2	-4.8	51.8	-5.7	-5.5
Total expenditure	58.3	-2.1	-5.0	54.6	-4.5	-9.8
Primary expenditure	52.8	-2.7	-5.1	48.5	-4.1	-7.5
Fiscal balance	-5.4	1.9	0.2	-2.8	-1.3	4.3
Cyclically adj. balance	-1.9	0.2	-4.7	-1.0	-1.9	-0.2
Cyclically adjusted primary balance	3.6	0.8	-4.6	5.0	-2.2	-2.5
Public debt	59.8	8.8	15.1	77.2	-2.0	-22.8
Real GDP growth (%)	1.8	0.9	2.3	0.7	2.4	2.8
Trend GDP growth (%)	1.9	0.4	1.0	2.6	0.1	0.0
Inflation (CPI growth in %)	2.7	-0.5	-0.3	2.6	-0.7	-0.2
Employment ratio	54.6	2.1	10.3	66.0	1.4	9.0

Source: Ameco, OECD

Netherlands: The disaggregated picture (% of GDP)

	Phase 1			Phase 2		
	T0	T0-T2	T0-T7	T0_2	T0-T2	T0-T7
	1983	1983-1985	1983-1985	1993	1993-1995	1993-2000
Total expenditure	58.3	-2.1	-5.0	54.6	-4.5	-9.8
Interest	5.5	0.6	0.2	6.1	-0.3	-2.3
Primary expenditure	52.8	-2.7	-5.1	48.5	-4.1	-7.5
Government consumption	24.8	-1.1	-2.0	24.0	-0.6	-1.9
Thereof: Compensation of employees	13.2	-1.1	-2.5	10.9	-0.4	-1.2
Transfers and subsidies	22.2	-1.7	-2.2	19.4	-3.4	-6.5
Transfers	20.1	-1.9	-2.3	17.4	-2.4	-5.9
Subsidies	2.1	0.3	0.1	2.1	-1.0	-0.6
Investment	3.2	-0.1	-0.2	2.9	0.0	0.1
<i>Functional:</i>						
Education	6.9	-0.6	-1.1	5.17	-0.2	-0.4
Health	5.5	-0.3	-0.1	6.30	-0.3	-0.8
Pensions	7.4	-0.3	0.4	7.69	-0.7	-1.2
<i>Memorandum item:</i>						
Government employment (change in %)	0.2	1.7	7.2	0.4	-2.6	1.8

Source: Ameco, OECD, Worldbank

The Dutch economy deteriorated markedly since the late 1970s in the wake of the second oil shock and plunged into the most severe recession of post-war times. By the early 1980s, the employment ratio had significantly fallen to below 55%. Labour market slack was absorbed to some degree by social security schemes and public employment programmes, which, together with growing interest payments and subsidies, contributed to public expenditure rising above 58% of GDP. In 1982, the fiscal deficit had reached more than 6% of GDP and interest payments already amounted to over 10% of tax revenues.

**Expenditure retrenchment** was imposed as of 1983.<sup>11</sup> In Phase 1, primary expenditure came down by almost 3% of GDP within the first two years and by over 5% within 7 years (by 1990). However, initially this did not result in sufficient deficit improvement as revenue was also falling strongly. During Phase 2 in the 1990s, the retrenchment course was continued and deficits disappeared in the late 1990s. Public debt, which had continued to rise in the 1980s, started falling significantly during the second retrenchment phase. Total expenditure declined from over 58% of GDP in 1983 to about 53% in 1990. In the second phase, it was reduced considerably further to less than 45% of GDP by 2000.

As regards **reform measures** during Phase 1, the ratios of government consumption, transfers and subsidy spending declined by roughly equal amounts. In the second phase, transfers came down very strongly. Investment was mostly spared over the entire time frame. Concrete measures included restraint on civil service salaries and new recruitment and lending and capital transfers to enterprises.

The first consolidation package of 1982/83 encompassed nominal freezes on government pay, social benefits and volume ceilings on social security expenditure as well as further cuts in non-wage expenditure of the government. Subsequently, income support schemes and benefits in the areas of unemployment, disability, sick leave and health services were reformed, for example, by reducing replacement rates and eligibility, especially for disability benefits (de Mooij, 2003).

In the second reform phase, lower social security outlays were the main contribution to spending cuts (especially once the indexation of benefits was suspended in 1992), while infrastructure investment was allowed to grow. Additionally, subsidies for housing and public transport were reduced. Sickness insurance was privatized and a major tightening combined with the introduction of competition occurred in the disability scheme (de Mooij, 2003). Defence expen-

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<sup>11</sup> For a review of Dutch expenditure developments from a historic perspective, see Bos and Timmerhuis (2006).

diture was also reduced markedly. Health care spending was even reduced over the combined 20-year period by improving demand, supply and insurance incentives.

From an **institutional perspective**, the budget process of the Netherlands has benefited from the introduction and periodic adaptation of fiscal rules and contracts between governing coalition parties (van Dijkhuizen 2003, Hallerberg and von Hagen, 1999; Berndsen, 2001; Heeringa and Lindh, 2001). These included deficit reduction paths and expenditure ceilings in the first reform phase as well as rules for the distribution of expenditure savings and growth dividends between tax and deficit cuts for the second phase. The institutional improvements underpinned the permanent character of the reduction of public spending.<sup>12</sup> Additionally, Maastricht convergence also provided an external source of fiscal discipline to the government during the second reform phase.

With regard to **complementary measures**, in 1982, the Wassenaar Agreement initiated a series of labour market reforms, which substantially improved the employment situation in the Netherlands. In the course of this agreement, social partners gave up wage indexation and repeatedly agreed on moderate wage claims. A new unemployment benefit system was introduced in 1987. Complementary measures also included a strategic reorientation of industry subsidies. Tax policy included tax cuts with a shift from direct to indirect taxation. Structural reforms in the transfer system and minimum wage setting helped increase employment, especially of women (Bos and Timmerhuis, 2006). A Deutsche-mark target for the exchange rate and the convergence process towards EMU membership helped to contain inflationary expectations and reinforced the rationale behind the fiscal reform efforts.

During the second reform phase, the government implemented further tax cuts and reduced employers' social contributions, especially for low wage groups, giving considerable support to job creation. The budgetary efforts to curb social security spending went hand in hand with the decentralisation, tightening and the injection of market forces into the social security and employment systems, thereby not only reducing costs but also increasing efficiency and incentive effects. For example, the sick-leave payment insurance was privatized and employees can 'opt-out' of the disability insurance.

**In sum**, the Netherlands represents yet another case of remarkable fiscal retrenchment as part of an ambitious and comprehensive reform package. When

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<sup>12</sup> At the same time, electoral competition and the corresponding incentives to call for spending increases were eased by the party-political constellation and the fact that the likelihood for any one party to be part of the governing coalition was not directly related to its voting share but rather to good relations with the other parties (Seils 2004).

the first reform phase proved insufficient, a second round in the early 1990s achieved further improvements. In the wake of these reforms, the employment ratio and trend growth increased rapidly, which, in turn, facilitated continued expenditure restraint.

### 3.7 Spain

Spain: The macro picture (% of GDP)

	T0 1993	T0-T2 1993-1995	T0-T7 1993-2000
Total revenue	40.9	-2.5	-2.4
Total expenditure	47.6	-2.6	-8.2
Primary expenditure	42.6	-2.8	-6.4
Fiscal balance	-6.7	0.1	5.8
Cyclically adj. balance	-5.7	0.5	3.4
Cyclically adjusted primary balance		0.0	1.0
Public debt	58.4	5.5	1.5
Real GDP growth (%)	-1.0	3.8	6.1
Trend GDP growth (%)	2.4	0.3	1.1
Inflation (CPI growth in %)	4.6	0.1	-1.1
Employment ratio	50.4	0.4	9.3

Source: Ameco, OECD

Spain: The disaggregated picture (% of GDP)

	T0 1993	T0-T2 1993-1995	T0-T7 1993-2000
Total expenditure	47.6	-2.6	-8.2
Interest	5.0	0.2	-1.8
Primary expenditure	42.6	-2.8	-6.4
Government consumption	18.8	-0.8	-1.5
Thereof: Compensation of employees	11.8	-0.5	-1.4
Transfers	16.2	-2.3	-4.1
Investment	4.2	-0.5	-1.0
<i>Functional:</i>			
Education	4.5	0.2	0.0
Health	5.8	-0.3	-0.4
Pensions	8.3	0.1	0.2
<i>Memorandum item:</i>			
Government employment (change in %)	-0.3	1.7	20.0

Source: Ameco, OECD, Worldbank

The Spanish economy entered a slowdown in 1992 and went into recession the year after. The unemployment rate came close to 24% in 1993. Cyclical effects in conjunction with large overruns in all main spending categories led to the public expenditure ratio increasing to a peak of 47.6% of GDP. The significant fiscal slippages saw the deficit increasing to 6.7% of GDP and public debt rising to near 60% of GDP.

Using the Maastricht convergence process as an external anchor, the government embarked on a **determined and expenditure-based consolidation course** between 1994 and 1997 (for an overview of Spanish fiscal reforms, see also González-Páramo and Hernández de Cos, 2005). Total and primary expenditure declined by almost 3% of GDP in the first two years of adjustment and fell by over 8% and 6% respectively in seven years until the year 2000. While some of the expenditure savings were used for tax cuts, most went into the elimination of fiscal imbalances. With growth rebounding and the deficit disappearing towards the end of the 1990s, public debt also started coming down rapidly.

**Public expenditure measures** followed very much the trend for ambitious adjusters. Almost half of the expenditure consolidation fell on cuts in transfers (4% of GDP) while government consumption and investment accounted for about one quarter and interest savings for the remaining expenditure decline. Individual expenditure measures of the highly restrictive 1994 and 1995 budget included restraint on public sector wages, some reductions in public employment, cuts in spending on security and defence, a decline in capital transfers to public enterprises as well as in payments to regions and the abolishment of certain em-

ployment and training schemes. Of significant importance were structural reductions in social transfers (especially in the areas of unemployment, pensions and disability benefits) in the context of a wider reform of benefit systems, which also aimed at reducing fraud and abuse. The coverage of the unemployment scheme was reduced from 83% of the registered unemployed to 69% thanks to tightened eligibility. Furthermore, the government attempted to limit health expenditure, a traditional cause for budgetary overruns, and curbed the trend rise in pensions. In 1996 and 1997, discretionary expenditure was compressed further, particularly in the fields of government consumption, transfers to public enterprises and investment.<sup>13</sup> Social security spending was reduced through more effectively fighting fraud and abuse. New techniques to finance infrastructure investment (such as Public Private Partnerships) allowed cushioning the reductions in public investment. Having achieved Maastricht convergence, however, discretionary spending adjustment came to a halt in 1998.

From an **institutional perspective**, the consolidation effort was implemented through highly effective expenditure control mechanisms as of 1995 and through further strengthening the say of the already powerful Ministry of the Economy and Finance (Nieto 1996, Rato, 2004). Each ministerial department received monthly spending ceilings and the government could centrally distribute discretionary spending cuts across the board whenever necessary. A further set of expenditure control devices and stricter monitoring was introduced in 1997, placing further restraint on public crediting and curtailing the carrying forward of expenditures to future budgets. In addition, Spain introduced an internal Stability Pact in order to contain the fiscal behaviour of regional governments, thereby improving the commitment quality of fiscal policy. Political coordination was improved within the ‘Fiscal and Financial Policy Council’, setting four-year deficit and debt targets for regional governments in conjunction with legal borrowing constraints for regional and local administrations (Garcés Sanagustín 2004).

**Complementary reform measures** included a comprehensive labour market reform in 1994, which, together with tightened eligibility for social benefits, contributed to strong employment increases (see also Toharia and Malo 2000). Additionally, the government took first steps toward a pension reform. The tax code was reformed to enhance transparency and tax collection. Direct tax reform was financed via indirect tax increases and the dividend from expenditure re-

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<sup>13</sup> Cuts in subsidies and capital transfers to public enterprises were facilitated by restructuring the ownership of public enterprises to allow a more beneficial accounting treatment of the support of loss-making firms by profitable ones.

form.<sup>14</sup> Public sector wage restraint was mirrored by moderate wage developments in the private sector. Finally, an ambitious privatisation programme and the liberalisation of financial markets improved the economic environment.

On the macroeconomic side, exchange rate devaluations of 1992-93 coupled with fiscal reform and stability-oriented monetary policies helped create a regime change away from earlier cycles of devaluation gains eroded by lax wage, monetary and fiscal policies. This helped the adaptation of wage setting and made resulting competitiveness gains more lasting.

**In sum**, the Spanish experience of a determined expenditure reform, coupled with significant structural reforms, not only safeguarded the sustainability of Spain's public finances (De Castro and Hernández de Cos 2002) but indeed laid the ground for a broad-based fiscal consolidation and coincided with a pronounced economic recovery (De Castro 2003). This achievement was facilitated by institutional improvements as well as by constructively engaging in the Maastricht convergence process. A strong rebound in growth and employment occurred already in the early years of the expenditure reform.

### 3.8 United Kingdom

United Kingdom: The macro picture (% of GDP)

	Phase 1			Phase 2		
	T0	T0-T2	T0-T7	T0_2	T0-T2	T0-T7
	1981	1981-198	1981-1988	1992	1992-1994	1992-1999
Total revenue	46.3	-0.8	-5.6	40.1	-1.9	0.4
Total expenditure	50.7	-1.8	-10.5	46.5	-1.6	-7.1
Primary expenditure	45.4	-1.5	-8.2	44.3	-1.9	-7.2
Fiscal balance	-4.4	1.0	4.8	-6.5	-0.3	7.5
Cyclically adj. balance	-2.3	0.4	1.0	-4.7	-1.5	5.6
Cyclically adjusted primary balance	3.0	0.1	-1.3	-2.5	-1.2	5.7
Public debt	53.5	-0.9	-11.3	39.2	9.3	5.6
Real GDP growth (%)	-1.4	5.0	6.4	0.3	4.1	2.8
Trend GDP growth (%)	1.4	0.8	1.4	2.0	0.4	0.9
Inflation (RPI growth in %)	11.9	-7.3	-7.0	3.7	-1.3	-2.2
Employment ratio	66.7	-2.4	3.3	68.3	-0.2	2.9

Source: Ameco, OECD, National statistics (UK)

United Kingdom: The disaggregated picture (% of GDP)

	Phase 1			Phase 2		
	T0	T0-T2	T0-T7	T0_2	T0-T2	T0-T7
	1981	1981-1983	1981-1988	1992	1992-1994	1992-1999
Total expenditure	50.7	-1.8	-10.5	46.5	-1.6	-7.1
Interest	5.3	-0.3	-2.3	2.3	0.3	0.1
Primary expenditure	45.4	-1.5	-8.2	44.3	-1.9	-7.2
Government consumption	22.2	-0.3	-2.5	21.1	-1.2	-2.7
Thereof: Compensation of employees	13.4	-0.3	-1.6	12.3	-1.3	-2.4
Transfers and subsidies	15.4	0.3	-2.0	16.5	0.0	-2.6
Transfers	13.4	0.7	-0.9	15.6	0.0	-2.2
Subsidies	2.0	-0.5	-1.1	0.9	-0.1	-0.4
Investment	2.1	0.1	-0.3	2.4	-0.1	-1.1
<i>Functional:</i>						
Education	5.5	-0.3	-0.8	5.26	0.0	-0.8
Health	5.2	0.0	-0.3	5.77	0.0	-0.1
Pensions	6.0	0.2	-0.5	8.25	-0.1	-0.4
<i>Memorandum item:</i>						
Government employment (change in %)	-2.7	-3.2	-12.1	-0.7	-7.0	-9.5

Source: Ameco, OECD, Worldbank

<sup>14</sup> See González-Páramo, De Castro and Hernández de Cos (2003) for an analysis of the interaction between spending and revenue developments.



In 1979, the United Kingdom found itself in the deepest recession of post-war times, following the second oil shock. Unemployment was rising sharply and inflation went up to levels of 20%. Disinflation became the top priority of the incoming Thatcher government. But with very high tax rates, rising public expenditure considerable deficits, expenditure reductions moved increasingly to the fore after 1981 to support price stabilisation and a broader economic revival. After the bust of the early 1990s with record deficits, expenditure-based fiscal consolidation was again prioritised.

**Fiscal retrenchment** in the UK was undertaken in two phases. Phase 1 started when public expenditure had reached a peak level of over 50% of GDP in 1981. In the following two years, public spending was cut by nearly 2% of GDP and by a total of 10.5% of GDP in the seven-year period until 1988 (in the latter years also helped by strong growth). The fiscal balance was turned from a deficit of over 4% of GDP into a small surplus. Half of the total spending reductions were used for consolidation and the other half for tax cuts. Public debt started declining in proportion to GDP as consolidation took hold. In the second phase, starting in 1993, total expenditure was reduced by over 7% of GDP in seven years. As interest payments had stabilised, the retrenchment during this period was entirely due to cuts in primary expenditure. Between the early 1980s and late 1990s, total spending declined by over 11% of GDP, half of which was, however, reversed in recent years.<sup>15</sup>

During the first adjustment phase, a number of important **reforms** occurred in different categories of discretionary spending. Government consumption declined markedly and lastingly when public employment was cut by more than 12% between 1981 and 1988 and by 4.8% alone in 1985. Subsidies were reduced resolutely as of 1984, while transfers were brought down significantly after 1986. A large-scale privatization programme and the introduction of public private partnerships helped further reducing current expenditure and public debt while generating taxes from profits (rather than budget financed-losses) of the newly privatised enterprises.<sup>16</sup> The second consolidation phase addressed the budgetary deterioration caused by another downturn in the early 1990s. The new spending peak was reached in 1992 and, subsequently, the three categories of government consumption, public employment and transfers were cut down in parallel by more than 2% of GDP until 1999. Individual measures included a freezing of government departments' running costs and public sector wage bills

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<sup>15</sup> Primary spending increased by over 5% of GDP between 1999 and 2004. The main reason for the now limited difference in spending between the UK and much of continental Europe lies in lower pension spending.

<sup>16</sup> See Bishop, Kay and Mayer (1994, 1995) and Tanzi and Schuknecht (2000) for more discussion on the British reform experiences especially with privatisation.

at 1993 levels for three years, tighter eligibility criteria for social benefits as well as savings on defence, housing and transport programmes. Unlike in the first phase of expenditure reforms, the spending reductions in the 1990s did not sizeably come at the expense of public investment.

As regards **fiscal institutions**, in both consolidation phases, the persistent re-trenchment course was ultimately based on the political will of the government and the large degree of institutional control that the Chancellor wields over the budget, backed by the Prime Minister (Thain and Wright 1995). The significant fiscal tightening also followed major institutional improvements (Kell 2001). The government introduced a so-called ‘Medium Term Financial Strategy’ in 1981 and committed to multi-annual monetary and budgetary targets with the aim to stabilise expectations. As budgetary targets were frequently not met, a more effective balanced budget rule was introduced in 1985. Following the ERM crisis, a so-called ‘New Control Total’ was introduced, which established a budgetary envelope and a more clear-cut system of top-down budgeting (Hallerberg 2004). After 1997, the labour government reformed the UK’s fiscal institutions (with a golden rule and stable net debt over the cycle being key elements of the new “code for fiscal stability”) (Kilpatrick, 2001; Kennedy et.al, 2001). This initially helped implement fiscal consolidation and expenditure restraint.

**Policy measures complementary** to the expenditure reform initially prioritized disinflation. Important tax reforms were undertaken in parallel to the first fiscal consolidation phase in the 1980s to reduce incentive distortions. The measures included a lowering of the corporate tax rate from 52% in 1979 to 35% by 1986 and the basic and top rates of personal income tax from 33% and 83% to 25% and 40%, respectively, by 1989. A shift from direct to indirect taxes improved supply conditions and prevented the revenue base from eroding, which was also supported by the proceeds from North Sea oil. The combination of privatization with deregulation and liberalisation greatly enhanced the efficiency of formerly public enterprises as well as the economy as a whole. Both expenditure reform phases were accompanied by important changes to the labour market, turning the United Kingdom in one of the least regulated countries in the OECD, as well as wide-ranging improvements to educational and training institutions.

In the second reform phase, the independence of the Bank of England in 1997 as well as continued tax reforms, especially in the area of corporate taxation and social contributions in the low-wage sector, were the most important complementary measures. Additionally, the government improved legislation on corporate governance and competition while continuing the course of regulatory reform in the utilities sector.

**All in all**, the United Kingdom undertook ambitious expenditure reforms in the 1980s and 1990s which were embedded in one of the most far-reaching privatisation and structural reform programs of industrialised countries. This allowed the return to sound public finances and preceded a sustained revival of employment and economic growth, which commenced already at a relatively early stage of the reform process.

## **4 Expenditure reforms in OECD countries – horizontal analysis**

The preceding section has analysed a number of ambitious expenditure reform episodes which have been undertaken in OECD countries within the last 25 years. The purpose of this section is to identify common patterns and differences across the case studies and to compare these countries' fiscal and growth performance with that of countries that undertook more timid reforms.<sup>17</sup>

### **4.1 Common patterns and differences across case studies**

When looking at expenditure reform efforts, it becomes apparent that all countries focused efforts strongly on government consumption (wages and employment) and transfers and subsidies. About 2/3 of the reduction in the total expenditure and over 80% of the cuts in the primary expenditure ratio occurred in these two categories. Table 5 illustrates that 9 out of 11 reform episodes reported a decline in public consumption by more than 2% of GDP and 8 out of 11 featured a fall in transfers and subsidies by over 3% of GDP. All reform episodes are marked by public wage restraint and tightened eligibility criteria as well as reduced benefits for social transfers (see Table 5 and the Annex Table 3). By contrast, only few episodes contained major declines in public education. We will come back to these findings below when comparing ambitious with timid reformers.

From Table 5 it also becomes apparent that expenditure reform was always part of a broader reform agenda. In all but one episode, expenditure reform went hand in hand with a strengthening of fiscal institutions (for more details, see the Annex Table 3 and Joumard et al., 2004 or Brumby, 1999). Pervasive institutional change points to the eminent role of political economy factors in determining both the feasibility and the success of expenditure reforms (see also Alesina and Ardagna 1998).

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<sup>17</sup> A crude robustness check for the results presented below consists of excluding Ireland, which features by far the greatest increase in growth dynamics. Also without Ireland, the results are very similar; both in terms of the comparison between timid and ambitious reformers and between large and small countries.

A majority of episodes, mainly in the early 1980s, also featured complementary macroeconomic reforms towards the establishment of monetary and external stability. In some cases, exchange rate devaluation proved supportive of the reform strategy. All countries undertook structural reforms that aimed at improving labour market performance, be it through liberalisation, benefit reform or tax reform. Privatization and recourse to public-private partnerships also featured in a large majority of episodes. This may suggest powerful synergies from a determined and comprehensive reform strategy, including a strong commitment to ambitious expenditure retrenchment.

**Table 5: Summary findings for ambitious reform episodes**

	Expenditure reform		Institutional reform	Other macroeconomic reform	Structural reform		
	Public consumption 1/	Transfers & subsidies 1/			Labour market incentives	Taxation	Privatisation
Ireland 1	XX	XX	X	X	X	X	X
Ireland 2	X	XX	X	X	X	X	X
Sweden	X	XX	X	X	X	X	X
Canada	XX	XX	X		X	X	X
Finland	XX	XX	X	X	X	X	X
Belgium	XX	XX		X	X		
Netherlands 1	X	X	X	X	X	X	
Netherlands 2	~	XX	X		X	X	X
Spain	~	XX	X	X	X	X	X
UK 1	X	X	X	X	X	X	X
UK 2	X	X	X	X	X	X	
<b>All</b>	<b>9</b>	<b>11</b>	<b>10</b>	<b>9</b>	<b>11</b>	<b>10</b>	<b>8</b>

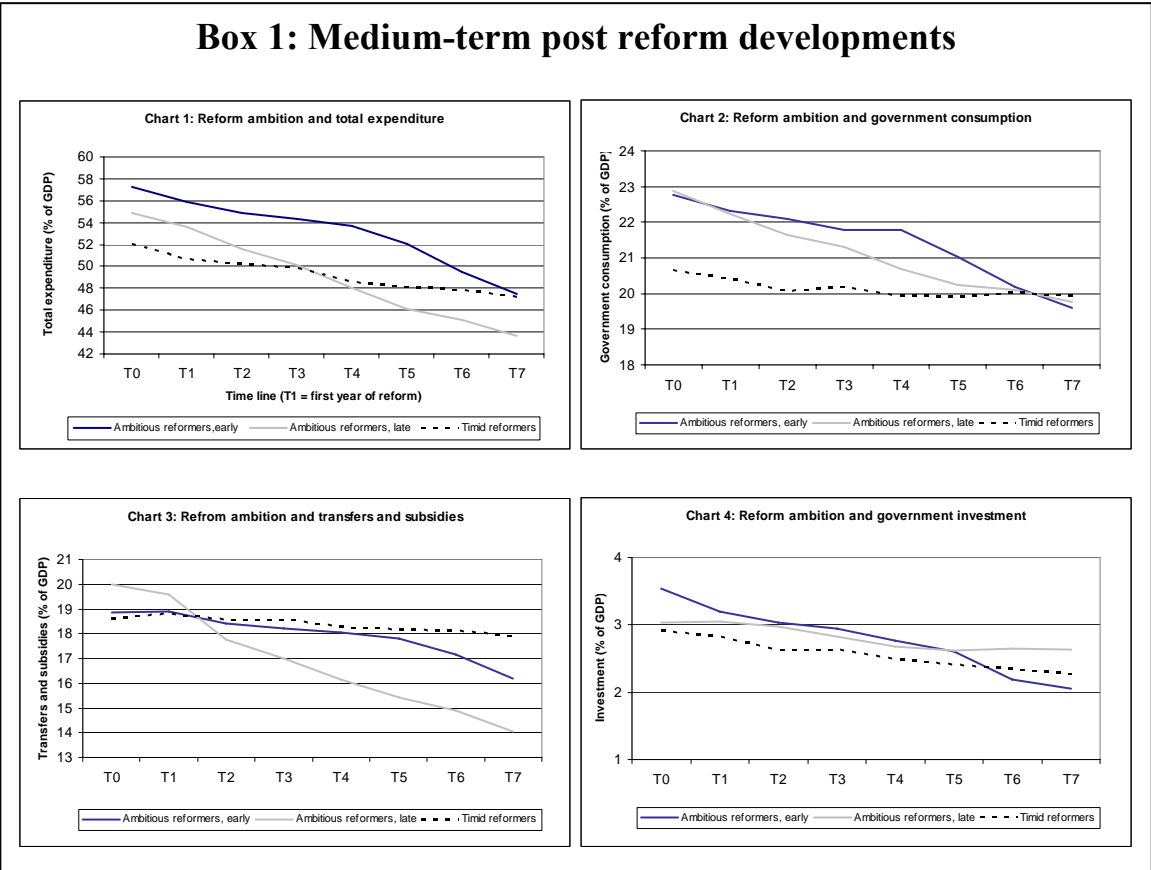
1/ Decline in 7 years by: more than 1% of GDP: ~  
more than 2% of GDP: X  
more than 3% of GDP: XX

## 4.2 Comparing ambitious and timid reformers: expenditure developments

When comparing expenditure developments in the episodes of ambitious reform with those that featured more timid reforms, some interesting differences emerge. We focus on medium-term developments within a seven year window (T1-T7) and we also distinguish the early ambitious reform episodes from the later ones.<sup>18</sup> Charts 1-4 in Box 1 illustrate the main findings by showing un-weighted averages for the three groups.

<sup>18</sup> Note that Switzerland is excluded as the expenditure maximum is too recent to allow the case study approach. Moreover, the primary spending decline of 0.3% was only minimal.

The differences in expenditure reduction are very substantial between the two groups. Within seven years, ambitious reform countries reduced total expenditures by around 10% of GDP (Chart 1). This is more than twice as much as the decline achieved by timid reformers.<sup>19</sup> Late ambitious reformers brought average spending significantly below the average of timid reformers. But efforts also differed markedly in the beginning of reform phases (i.e. the first two years) when primary spending went down by 3% for the average of ambitious reformers versus only 1% for timid reformers.



Source: Ameco

There are also major differences as regards the composition of the expenditure decline, with ambitious reformers showing on the whole “higher quality” changes. Both timid as well as ambitious reform countries benefited from reduced interest payments. But for timid reformers, reductions in interest spending amounted to around 1/2 of the overall expenditure decline, whereas this share

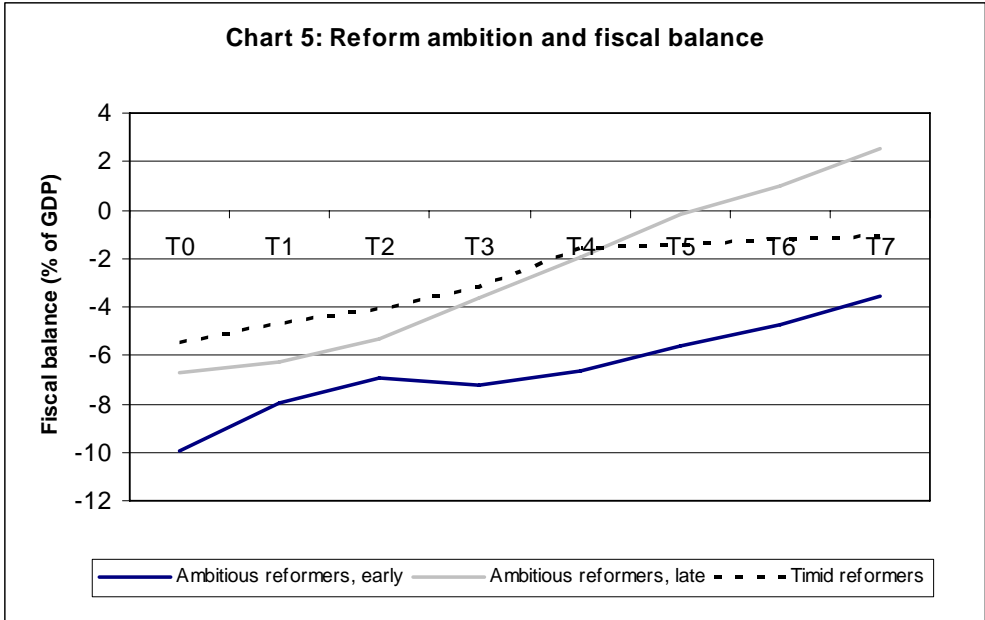
Also notice that, in order to include Japan in the analysis, we used forecasted data for T7 (2005) in this case. Moreover, due to data shortcomings, Luxembourg is excluded from the horizontal analysis.

<sup>19</sup> Note that, in contrast to Table 1, we now take account of all reform periods. Therefore, the countries which are characterised by two reform phases are included twice.

represented only about 10% for ambitious reformers. Most importantly, the two ambitious reform waves reduced government consumption as well as transfers and subsidies more decisively (see Charts 2–3). Within the seven year reform period, ambitious reform countries reduced government consumption by around 3% of GDP (compared to hardly 1% for timid reformers). Spending on transfers and subsidies declined by 3% of GDP for early ambitious reformers and by 6% of GDP in the case of late ambitious reformers, whereas it staid broadly constant for timid reformers. Public investment was cut strongly by the group of early ambitious reformers but only moderately by the other two groups (Chart 4). Education spending was touched little in the reform process for all groups on average.

### 4.3 Comparing ambitious and timid reformers: fiscal performance

Ambitious expenditure reform episodes have also affected more profoundly the soundness of public finances than timid ones (Chart 5). Within seven years, early and late ambitious reformers were able to improve their fiscal balance by 6.4% and 9.3% of GDP respectively. Timid reformers, on the other hand, accomplished an improvement by 4.4 percentage points. Ambitious expenditure reforms also yielded significant scope for tax cuts: ambitious reformers reduced taxes significantly, by 2-3% of GDP within seven years, as compared to little more than ½ percent tax cuts by timid reformers (Table 4).



Source: Ameco

Concerning the sustainability of fiscal policies, it is also important to examine whether expenditure reforms (via consolidation) helped reduce public debt. The

findings require some explanation. Table 6 shows that, on average, early ambitious reformers did not immediately succeed in reducing public debt levels. Initial deficits in some of the sample countries were so high that, despite significant spending and deficit reductions, debt dynamics failed to reverse.

**Table 6: Public debt and tax ratios, changes**

Percent of GDP					
<i>Public debt</i>	<b>TO</b> (or nearest) <b>ratio</b> (% of GDP)	<b>T7</b> (or nearest) <b>ratio</b> (% of GDP)	<b>2004</b> (or nearest) <b>Ratio</b> (% of GDP)	<b>TO-T7 change</b> (% of GDP)	<b>TO-2004 change</b> (% of GDP)
<b>Ambitious reformers, early</b>	63.8	70.9	45.4	7.1	-18.4
<b>Ambitious reformers, late</b>	72.2	59.4	51.9	-12.8	-20.3
<b>Timid reformers</b>	87.8	86.8	82.9	-1.0	-4.9
<i>Tax ratio</i>	<b>TO</b> (or nearest)	<b>T7</b> (or nearest)	<b>2004</b> (or nearest)	<b>TO-T7</b>	<b>TO-2004</b>
<b>Ambitious reformers, early</b>	47.7	44.9	43.2	-2.9	-4.5
<b>Ambitious reformers, late</b>	48.5	46.5	45.1	-2.0	-3.4
<b>Timid reformers</b>	46.1	45.5	44.7	-0.7	-1.4

Source: Ameco and own calculations

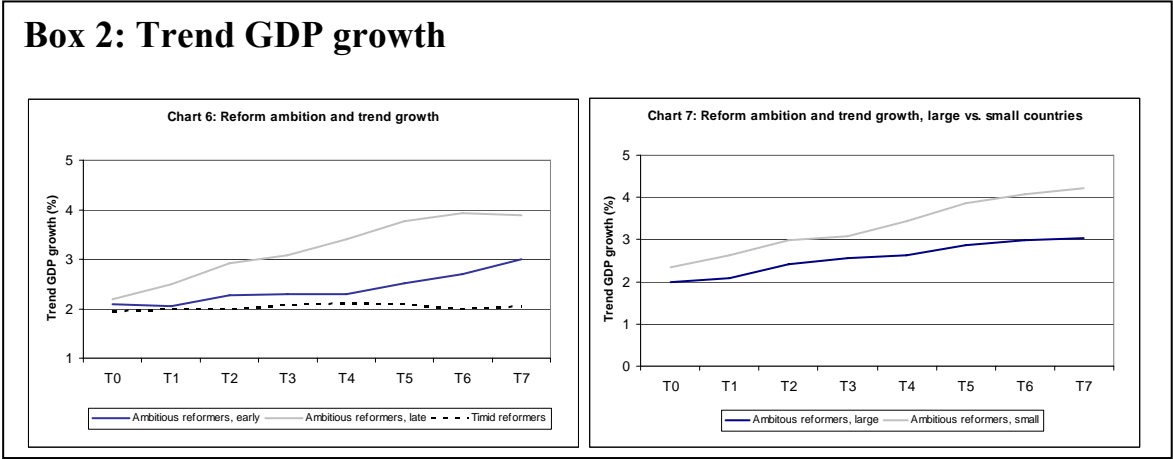
Therefore, most of these countries initiated a second reform phase, starting in the early to mid-1990s. For these “repeated” reform episodes and for “new” reforming countries, debt dynamics were brought on a strong downward trend during the mid- to late-1990s. Debt fell on average by almost 13% within 7 years. For all ambitious reformers, debt was 20% of GDP lower in 2004 than before the start of reform. By contrast, timid reformers, on average, did not experience noteworthy declines in their public debt ratios at all.

#### **4.4 Comparing ambitious and timid reformers: economic performance**

Our analysis also shows that all three groups started at similar rates of trend growth. However, countries that undertook ambitious expenditure reform experienced more favourable trend output developments.<sup>20</sup> Chart 6 shows that in the seven years following the expenditure peak, trend growth picked up in both

<sup>20</sup> Note that within the framework of our analysis we do not intend to identify a causal relationship between expenditure retrenchment and supply-side or growth effects. The better growth performance may be due to expenditure reform, other complementary reform, or as we see as most likely, a combination of the two. Nevertheless, the differences are striking (on the macroeconomic effects of fiscal adjustments in OECD countries, see Alesina and Perotti 1997).

ambitious reform groups leading to an average improvement of 1.3% (more than 1.5% for the late reformers). At the same time, trend growth stayed broadly stable for the “timid” reformers. Note also that it took 4 years until trend growth improved markedly in the early and ambitious reform category.



Source: Ameco

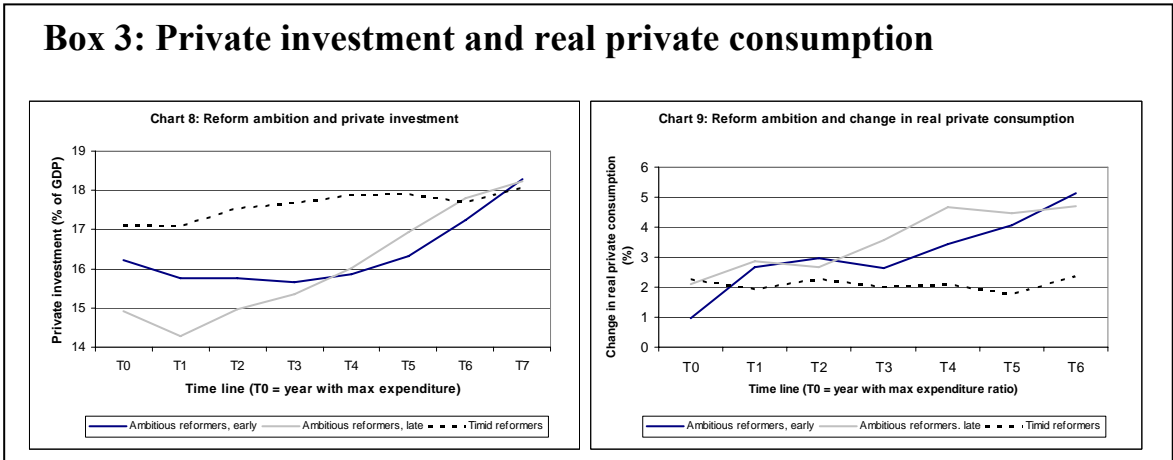
We also distinguished between small and large countries to see whether the dynamics on the supply-side and growth are correlated with country size.<sup>21</sup> Chart 7 displays that for small countries ambitious reform phases coincided with a faster pick-up in trend growth. Also, the overall improvement within the reform period was stronger in the small and ambitious category. For these episodes, trend growth rates, on average, increased by nearly 2 percentage points within seven years. In contrast, for large economies we observe a more lagged and substantially lower overall rise in trend growth rates, amounting to 1 percentage point. Furthermore, we analyzed employment developments and found that, on average, all three groups experience improvements in the employment ratio within seven years. This increase was largest for late and ambitious reformers which experienced an increase of almost 7 percentage points.

When assessing the effects of fiscal consolidation in the short run, actual growth as well as private investment and consumption are key. Actual growth was below trend in all three groups and averaged only 0.3% as most countries started reforms in periods of low growth or even crisis. Subsequently, in almost all countries that undertook ambitious reforms, output growth recovered quickly and faster than for timid reformers. We find some indication that positive confidence effects may have been rather strong (and for consumption also immediate)

<sup>21</sup> This is of course a very crude examination and can only give very “preliminary and illustrative” evidence. Canada, the Netherlands, Spain and the UK are the “large” economies amongst the group of ambitious reformers while the group of “small” countries contains Belgium, Finland, Ireland and Sweden.



in the group of ambitious reformers and possibly contributed to the quick growth rebound. Chart 8 and 9 in Box 3 show the development of private investment and consumption for the different reform categories.



Source: Ameco

With a lag, private investment started growing strongly for early and, particularly, late ambitious reformers with investment ratios catching up with the “timid” reform group. The development in real private consumption is also interesting. Ambitious reforms appear to start after a period of low consumer confidence. Consumption growth, however, recovers quickly and exceeds that of timid reformers as of the first reform year.

**4.5 Comparing ambitious and timid reformers: testing for differences**

In order to underpin the findings from the preceding horizontal analysis we also carried out a standard statistical test for differences in post-reform developments concerning “ambitious” and “timid” reform phases. Again, we focus on changes within a seven year reform period. Table 7 reports the results for Wilcoxon-Mann-Whitney rank-sum tests.

First of all, these tests further confirm the “higher quality” of ambitious expenditure retrenchment efforts. While reductions in government consumption and transfers and subsidies are significantly higher within the ambitious reform category, there is no evidence for a stronger reliance on cuts in government investment. When assessing the effects of expenditure-based consolidation on the soundness of fiscal policies we do not find significant differences in the underlying deficit and debt developments. While the results for debt are in line with the findings from Section III.3, the missing significance for the change in fiscal balance is somewhat surprising. Nevertheless, the reported p-value is close to the

10% significance level and, moreover, the result seems to be driven by an influential observation.<sup>22</sup>

As regards economic performance, the picture, again, becomes more clear-cut. The tests yield strong support for differences in trend growth developments, as growth rate improvements tend to be significantly larger for ambitious reform periods. We also find partial confirmation on potential confidence effects. While private investment changes do not turn out to be significant, we observe that expenditure-based consolidation efforts tend to coincide with more favourable developments in real private consumption when carried out in an ambitious manner.

**Table 7: Wilcoxon-Mann-Whitney rank-sum test**  
for differences between ambitious and timid reform phases

	p-value	significance level <sup>1)</sup>	probability <sup>2)</sup>
<i>expenditure developments</i>			
$\Delta^3$ <b>government consumption</b>	0.00	***	0.94 (-)
$\Delta$ <b>transfers and subsidies</b>	0.00	***	0.95 (-)
$\Delta$ <b>government investment</b>	0.46		0.60 (-)
<i>Soundness of fiscal policies</i>			
$\Delta$ <b>fiscal balance</b>	0.12		0.72 (+)
$\Delta$ <b>public debt</b>	1.00		0.00 (-)
<i>economic performance</i>			
$\Delta$ <b>trend gdp growth</b>	0.00	***	0.92 (+)
<i>Confidence effects</i>			
$\Delta$ <b>private investment</b>	0.16		0.69 (+)
$\Delta$ <b>change in real private consumption</b>	0.02	**	0.82 (+)

<sup>1)</sup> \*\*\*/\*\*/\* denotes significance at 1%, 5% and 10% significance levels

<sup>2)</sup> Probability that the reduction (-) or the improvement (+) is larger within the ambitious reform category

<sup>3)</sup> Change T0-T7

<sup>22</sup> When disregarding the low fiscal-balance improvement within the Netherlands' first reform phase we observe a p-value of 0.06.

## 5 Conclusion

In this paper we have taken a close look at the experiences with expenditure reform in industrialised countries with special emphasis on ambitious reform programs. We have conducted an in-depth analysis of such episodes by examining the concrete reform measures undertaken and their effect on total spending and expenditure composition. We also looked at the institutional context in which these reforms were undertaken, the comprehensiveness of reform programs and the economic and fiscal performance in the wake of reforms.

We found that ambitious reform programs have a number of common features: the reduction in total spending is truly ambitious and averages about 10% of GDP within seven years. This is achieved by focusing mainly on government consumption, transfers and subsidies while mostly sparing spending on education. Ambitious expenditure reform was always part of a comprehensive reform package that most of the times included labour market reform, tax reform and privatisation and, in about half of the episodes, the establishment of monetary and external stability. Virtually all episodes of ambitious reform featured the strengthening of national and sub-national budgetary procedures and institutions.

Ambitious reform episodes appear to secure more lasting fiscal consolidation than “timid” expenditure reforms while also yielding an important “tax cut premium”. Ambitious reformers also experience a much more favourable growth performance than “timid” countries, which is particularly fast and strong for relatively small ambitious countries. Ambitious reformers have also typically not experienced significant short term economic costs of retrenchment, despite an average adjustment effort of around 3% of GDP in the first two years of reform, as consumer and investor confidence picked up rather quickly. When looking at the reform programmes and subsequent experiences, there are clear signs of significant improvements in the “economic policy regime” in many of these countries.

From a perspective of political economy, it appears that ambitious expenditure reform programs have been mainly implemented in the context of recession or even economic crises. This contrasts with the call of many economists and politicians to limit consolidation to good times (where the urgency of reform is, however, hardly felt).

Lastly, it appears that a medium term comprehensive strategy with emphasis on expenditure adjustment is rightly warranted not least from the perspective of the euro area and the recently reformed Stability and Growth Pact. Concerns about ambitious reforms undermining economic growth appear unfounded. The case studies in particular demonstrate that fiscal adjustment can and should be more

ambitious than the 0.5% of annual improvement in the cyclically adjusted budgetary balance, as required by the medium-term budgetary objective under the revised pact. Claims to the effect that more ambitious efforts would require tax increases appear unfounded. One could even speculate that more rather than less expenditure retrenchment seems desirable to achieve lasting fiscal consolidation and economic revival. Also assertions that structural reforms would justify a delay in adjustment appear equally dubious as successful reformers undertook comprehensive reforms more or less simultaneously with fiscal adjustment.

Concluding on a note of caution, it is worth stressing that this study looks at the changes in spending ratios since their peak and their correlation with other reforms and with fiscal and economic performance from a case study perspective. While the ambitious and timid group's experiences are significantly different (as suggested by relevant tests), we do not establish causality between reforms and performance, for which much further analysis would be warranted.

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**Annex Table 1: Robustness of Categorisation (cumulative change primary expenditure from T0 or nearest, % of GDP)**

T0		Change T0-T1	Change T0-T2	Change T0-T3	Change T0-T4	Change T0-T5	Change T0-T6	Change T0-T7	Change T0-T8
fin	1993	-1.0	-4.6	-4.7	-8.0	-10.9	-11.2	-14.0	-13.7
swe	1993	-2.7	-6.1	-8.5	-10.5	-12.0	-11.7	-14.0	-13.4
irl1	1982	-0.5	-2.1	-3.6	-3.3	-4.8	-7.4	-12.4	-12.1
bel1	1983	-3.3	-4.7	-5.7	-7.0	-8.8	-11.7	-12.3	-10.5
can	1992	-1.0	-3.4	-5.2	-6.7	-8.3	-8.0	-9.5	-10.8
gbr1	1981	-1.2	-1.5	-1.8	-3.5	-4.4	-6.2	-8.2	-8.5
nld2	1993	-2.0	-4.1	-5.6	-6.6	-7.2	-7.2	-7.5	-5.7
gbr2	1992	-0.8	-1.9	-2.6	-4.3	-6.1	-7.3	-7.2	-6.8
esp	1993	-1.4	-2.8	-4.3	-5.8	-5.9	-6.5	-6.4	-6.8
irl2	1992	0.3	0.1	-2.0	-3.2	-4.9	-6.8	-6.2	-8.2
lux	1981	-2.4	-3.1	-6.1	-7.1	-7.9	-5.7	n.a.	n.a.
nld1	1983	-1.3	-2.7	-3.1	-1.9	-3.6	-5.3	-5.1	-5.3
aut	1993	-0.3	-0.3	-1.0	-3.1	-2.8	-2.8	-4.3	-5.3
dnk	1993	0.4	-0.2	-0.5	-2.1	-2.0	-2.5	-3.9	-2.8
nzl	1985	n.a.	-4.2	-2.3	-3.4	-1.6	-3.6	-3.8	-6.9
usa	1992	-0.4	-1.4	-1.6	-2.0	-2.9	-3.5	-3.4	-3.4
ita	1993	-1.5	-2.8	-2.9	-2.9	-3.0	-2.5	-3.0	-2.0
jpn	1998	-2.0	0.0	-1.5	-0.8	-1.1	-2.0	-2.7	n.a.
bel2	1993	-0.7	-0.9	-0.4	-1.0	-1.4	-1.5	-2.1	-1.6
deu	1996	-0.9	-1.3	-1.0	-1.7	-1.5	-0.9	-0.6	-2.0
fra	1996	-0.4	-1.5	-1.4	-2.3	-2.3	-1.3	-0.5	-0.3
che	1998	-1.5	-2.0	-1.1	-0.3	n.a.	n.a.	n.a.	n.a.
prt	2004	0.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
grc	2000	-0.5	-0.5	0.2	0.4	n.a.	n.a.	n.a.	n.a.
aus	1985	-0.5	-2.6	-4.2	-3.9	-2.0	0.0	0.4	0.1

**Annex Table 2: Robustness of Categorisation (cumulative change cyclically adjusted primary expenditure from T0 or nearest, % of GDP)**

T0		Change T0-T1	Change T0-T2	Change T0-T3	Change T0-T4	Change T0-T5	Change T0-T6	Change T0-T7	Change T0-T8
fin	1993	-0.3	-3.6	-3.4	-6.0	-8.6	-8.9	-11.5	-11.7
swe	1993	-2.2	-5.3	-7.8	-9.8	-11.0	-10.4	-12.4	-12.1
irl1	1982	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
bel1	1983	-3.2	-4.5	-5.5	-6.8	-8.1	-10.8	-11.3	-9.7
can	1992	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
gbr1	1981	-1.2	-1.5	-1.8	-3.4	-4.2	-5.9	-7.8	-8.1
nld2	1993	-1.9	-3.9	-5.2	-5.8	-5.8	-5.3	-5.3	-3.9
gbr2	1992	-0.8	-1.8	-2.4	-4.1	-5.9	-7.1	-6.9	-6.6
esp	1993	n.a.	n.a.	-1.5	-2.8	-2.7	-3.1	-2.7	-3.2
irl2	1992	-0.2	-0.5	-2.2	-3.2	-4.4	-6.3	-5.3	-7.2
lux	1981	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
nld1	1983	-0.7	-1.9	-2.0	-1.0	-2.6	-3.4	-2.7	-3.1
aut	1993	-0.3	-0.3	-1.0	-3.1	-2.7	-2.7	-4.1	-5.2
dnk	1993	1.4	0.5	0.5	-0.9	-0.8	-1.1	-2.1	-1.3
nzl	1985	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
usa	1992	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
ita	1993	-1.5	-2.7	-2.9	-2.8	-2.9	-2.4	-2.8	-1.8
jpn	1998	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
bel2	1993	-0.5	-0.7	-0.3	-0.8	-1.2	-1.0	-1.4	-1.1
deu	1996	-2.0	-3.2	-2.6	-4.6	-4.3	-3.2	-2.2	-3.0
fra	1996	-0.3	-1.2	-1.1	-1.8	-1.8	-0.9	-0.3	-0.1
che	1998	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
prt	2004	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
grc	2000	-0.4	-0.5	0.3	0.5	n.a.	n.a.	n.a.	n.a.
aus	1985	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

### Annex 3: Breakdown of expenditure and complementary reforms by episode

		Ireland 1	Ireland 2	Sweden	Canada	Finland	Belgium 1	Netherlands 1	Netherlands 2	Spain	UK 1	UK 2	Total
Cuts in specific expenditure categories	Public wage restraint	X	X	X	X	X	X	X	X	X	X	X	11
	Public employment reductions	X		X		X					X	X	5
	Transfers 1: tightened eligibility	X	X	X	X	X	X	X	X	X	X	X	11
	Transfers 2: reduced benefits	X		X	X	X	X	X	X	X	X	X	10
	Transfers 3: co-payments / user charges	X							X			X	3
	<i>Expenditure reduction by at least 1% of GDP:</i>												
	Subsidy cuts			X		X	X				X		4
	Investment	X	X				X			X		X	5
	Education				X	X	X	X					4
	Health	X			X	X							3
Pensions		X	X			X		X				4	
Improvements to fiscal institutions	Strengthening the Minister of Finance	X		X						X	X	X	5
	Fiscal contracts		X			X		X	X	X			5
	Fiscal council							X	X	X			3
	Improved parliamentary control over budget			X		X							2
	Multi-year budget planning		X	X		X				X	X	X	6
	Expenditure ceilings			X	X	X			X	X		X	6
	Deficit/surplus rule			X				X			X		3
	'carry-over' provisions or contingency funds			X	X								2
	Maastricht convergence/external anchor		X	X			X		X	X			5
Macro stability	Exchange rate devaluation /depreciation	X	X	X		X				X		X	6
	Central bank independence		X	X		X		X	X	X		X	7
	Monetary stabilisation	X	X	X		X	X	X	X		X		8
Structural reforms	Privatisation and public-private partnerships	X	X	X	X	X				X	X		7
	Reforms to the benefit system	X	X	X	X	X	X	X	X	X	X	X	11
	Pension reform			X		X				X			3
	Labour Market reforms		X	X	X	X	X	X	X	X	X	X	10
	Tax reform/cuts	X	X	X	X	X		X	X	X	X	X	10
	Wage-setting reform	X					X						2
	Wage moderation	X	X			X		X					4
Financial sector reform				X	X				X	X		4	