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Budgetary Consolidation in EMU

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BUDGETARY CONSOLIDATION IN EMU

1. **OVERVIEW**

There is a general consensus that monetary stability in Economic and Monetary Union (EMU) requires sustainable public finances of the member states. The idea that persistent fiscal laxity would undermine the European Central Bank's ability to fulfil its mandate of price stability runs through all important documents and decisions marking the progress towards EMU, from the Delors Report in1989 to the fiscal convergence criteria for entry into EMU defined by the Maastricht Treaty, to the Stability and Growth Pact adopted in Amsterdam. Indeed, the EMU member states undertook strenuous efforts to achieve fiscal consolidation in the run-up to EMU, which allowed them to meet the deficit limit of 3% of GDP, and, in most countries, to reduce the level of public debt.

The commitment to sustainable public finances and budgetary discipline continues in Stage III of EMU, as the member states must meet the obligations of the Maastricht Treaty and of the Stability and Growth Pact. The important question for the future is, how can a sufficient degree of budgetary discipline be maintained, now that the immediate pressure of the numerical criteria for entry into the EMU has receded? In some EMU member states, the efforts to achieve a fiscal consolidation in the 1990s were heavily concentrated on the last few years before EMU started, and were clearly motivated by the wish to qualify for monetary union. Such experiences are unlikely to be repeated in the future.

Recent research on the quality of fiscal adjustments has stressed the importance of achieving budgetary consolidations on the proper side of the budget. There is ample empirical evidence showing that budgetary consolidations relying too heavily on raising taxes rather than cutting (the proper kind of) spending are less likely to last and be successful (Alesina and Perotti, 1995, 1997; Buti and Sapir, 1998; Buti et al. 1997; Perotti et al. 1998).

Empirical evidence and economic theory also show that the quality of the institutions governing the budget process is an important determinant of the durability and success of fiscal consolidations and the ability of governments to maintain a high degree of budgetary discipline (von Hagen, 1992; von Hagen and Harden, 1994a, 1994b, 1996; Perotti et al. 1998). During the run-up to EMU, the hurdles set by the numerical deficit and debt limits represented an important institutional innovation for many EU countries. Once membership has been achieved, however, the pressure of the convergence criteria loses political force, and there is a fear that 'convergence fatigue' might set in (Harden, Brookes, and von Hagen, 1995).

These results suggest that, in order to maintain a high degree of sustainability in Stage III of EMU, attention might shift away from the numerical criteria regarding overall deficits and debts, and focus more on the quality of fiscal adjustments and of the institutions governing public finances in the member states. This study provides an empirical analysis of the budgetary consolidations in the EU member states to support and further develop that proposition. Section 2 begins with a detailed analysis of the importance of the quality of for the success of budgetary consolidations. In contrast to earlier studies, we analyse the factors influencing the durability of consolidation efforts, and we consider the role of economic conditions accompanying fiscal adjustments and their interaction with the quality of the adjustments undertaken. Given this background, section 3 provides a detailed anatomy of the fiscal adjustment processes in the EMU member states during the 1990s, considering in particular the composition of the adjustments and their duration. We use the evidence produced in section 2 to evaluate the consolidation strategies and the special role of the Maastricht process in achieving budgetary consolidation.

Section 4 of this study turns to the quality of the budgetary institutions of the member states and the changes in these institutions that have occurred during the 1990s. Some EMU member states have

improved their budgetary institutions during the 1990s to achieve more lasting fiscal discipline, for others this remains a task to be done in future years. We use this to assess the durability of the achievements regarding fiscal consolidations and to identify the need for institutional improvements. Furthermore, we ask whether or not there is any correlation between the effectiveness of the numerical rules embedded in the Excessive Deficit Procedure, the Convergence Programs, and now the Stability and Growth Pact, and the design of national budgetary institutions assuring sustainable public finances.

Section 5 of this study looks at macroeconomic aspects of fiscal consolidations. Here, we are interested primarily in the interaction between fiscal policy, monetary policy and the cyclical development of the economy, and in the macroeconomic effects and costs of the fiscal adjustments of the 1990s. Specifically, we wish to know whether there is any evidence for "non-Keynesian" effects of the fiscal retrenchments, i.e., whether the fact that the fiscal consolidations of the 1990s were part of politically very visible efforts to prepare for monetary union had any influence on their macroeconomic effects. Section 6 concludes with the main implications for fiscal policy in the EMU.

2. QUALITY AND SUCCESS OF BUDGETARY CONSOLIDATIONS

There is a growing consensus among economists and policy makers that the success of efforts to consolidate the government budget depends importantly on the quality of the budgetary adjustments undertaken. In this context, the "quality" of fiscal adjustments refers to the relative contribution of different budgetary items to the adjustment effort. "Good quality" fiscal adjustments are marked by a strong emphasis on expenditure cuts rather than increased revenues, and on tackling those expenditures that are politically sensitive such as transfers, subsidies, and wage expenditures.

In this chapter, we study the budgetary adjustments of OECD countries from the 1960s to the 1990s with a special view towards the quality of the adjustments. We proceed as follows. In section 2.1, we replicate the analysis of the quality of fiscal adjustments for the success of budgetary consolidation efforts, following Alesina and Perotti (1995, 1997), and Perotti et al. (1998). We do this do verify that we obtain the same results they do with a larger data set covering 20 OECD countries in the period from 1960 to 1998.

The key insight from these studies is that the quality of the fiscal adjustment is an important determinant of the "success" of consolidation efforts. A consolidation effort is regarded successful, if the reduction in the budget deficit achieved after a certain number of years reaches a certain minimum size. While the earlier studies discuss the robustness of the results with regard to the length of the time period considered and minimum adjustment called for, these criteria still remain arbitrary. To overcome this arbitrariness, we look at the issue in a different way, using duration analysis. In section 2.2, we ask how the quality of the adjustment affects duration of consolidation episodes. We show that consolidation efforts tend to be more durable when the quality of the fiscal adjustment is high.

Earlier studies in this literature look at consolidation efforts in isolation of the economic environment, in which the fiscal adjustments were undertaken. This may be an important weakness, because it seems plausible that a country's position in the business cycle, its monetary policy, and the international economic environment have an impact on the success of fiscal adjustments. In section 2.3 we extend the earlier analysis in this direction. Specifically, we study the impact of the economic environment on the likelihood of governments to start and pursue fiscal adjustments. We combine this with the earlier results to analyse how the economic environment and the quality of fiscal adjustments matter for the success of budgetary consolidations.

The empirical results reported in this section indicate that the initial conditions of budgetary consolidations help predict the beginning and the success of consolidation efforts. However, they lose much of their predictive power for the success and duration of consolidation episodes when considered together with the quality of the adjustment effort. This suggests that initial conditions and quality are not independent. Instead, the initial conditions may be an important factor in the governments' choice of adjustment strategies, i.e., the choice between expenditure and revenue-based fiscal adjustments. In section 2.4 we consider this question asking whether the initial conditions help predict the quality of adjustment efforts.

Another potential shortcoming of the earlier studies is they disregard the timing of individual steps in the adjustment program. Does it matter whether the spending cuts were undertaken early on in the consolidation effort, or whether the government adopted a "switching strategy," raising taxes first then cutting expenditures? In section 2.5, we extend the earlier analysis in order to answer this question.

2.1 Composition and Success of Fiscal Adjustments

This section summarizes and updates the evidence presented in Perotti et al (1998). It is based on government budget data of 20 OECD countries spanning the years 1960-1998. Here, we focus on fiscal consolidations defined as episodes in which the cyclically adjusted government budget balance increased by at least 1.25 percent of cyclically adjusted GDP in two consecutive years, or if the change in the cyclically adjusted budget balance exceeds 1.5 of cyclically adjusted GDP in one year and was positive but perhaps less than 1.25 percent in the preceding year and in the subsequent year. Cyclical adjustments are made based on a linear-quadratic trend for each country. While the percentage criteria are arbitrary, they help us to concentrate on episodes in which governments made strong and deliberate efforts to reduce the budget deficit.[1] There are 65 such episodes in the data set.

We take these episodes and divide them into *successful* and *unsuccessful* ones. A consolidation effort is deemed successful, if, two years after the initial adjustment, the government budget balance stands at no less than 75 percent of the balance in the first year of the consolidation episode. A consolidation is called unsuccessful, if this condition is not met. Thus, unsuccessful consolidations are short-lived, as the initial cut in the deficit could not be maintained. [2]

The following Table 1 reports the contributions of various budget items to the fiscal consolidations in this sample. Let S_t be the structural budget balance relative to potential output in the year before the consolidation started, and S_T the structural balance relative to potential output in the year when the consolidation ended. Similarly, let X_t and X_T be the ratio of budget item X to potential output in the same years. The difference $S_T - S_t$ indicates the size of the fiscal adjustment in terms of the improvement in the ratio of the structural balance to potential output achieved. The difference $X_T - X_t$ shows by how much the budget item X changed relative to potential output during the consolidation episode. Finally, the ratio $(X_T - X_t)/(S_T - S_t)$ indicates the contribution of this budget item to the consolidation effort.

The first row of the table shows that the average fiscal consolidation in this sample amounted to a reduction of the deficit by 2.29 percent. The average size is statistically the same for successful and unsuccessful consolidations. Thus, the simple notion that large consolidations are more successful than small ones is dismissed by the data.

However, the *composition* of the adjustments is drastically different between successful and unsuccessful consolidations. Successful consolidations come with expenditure cuts of an average of 1.23 percent of GDP, while expenditure cuts in unsuccessful consolidations are not even statistically significant on average. Expenditure cuts contribute 52 percent (1.23 in 2.37) to the adjustment in successful consolidations, compared to only 12 percent in unsuccessful ones. In contrast, total revenues increase by an average 1.13 percent of potential output in successful consolidations, compared to 1.91 percent in unsuccessful ones. That is, raising revenues accounts for 48 percent of the adjustment effort in successful consolidations, but for 88 percent in unsuccessful ones. Unsuccessful consolidations thus rely almost exclusively on increasing revenues, while successful ones put heavy emphasis on cutting government spending.

[1] See Alesina and Perotti (1995, 1997) , and Perotti et al. (1998) for a discussion of the robustness of the results with regard to changes in these definitions.

[2] Alesina and Perotti (1995, 1997) and Perotti et al. (1998) discuss the robustness of the results with regard to these definitions.

Table 1: Composition of Fiscal Adjustments

Budget item (relative to potential output)	All Consolidations	Successful Consolidations	Unsuccessful Consolidations	Difference
Structural surplus	2.29 (23.61)	2.37 (18.30)	2.17 (14.96)	0.20
Total expenditures	-0.84 (-5.00)	-1.23 (-5.57)	-0.26 (-1.18)	-0.97***
Total revenues	1.45 (10.24)	1.13 (6.24)	1.91 (9.83)	0.78***
Current expenditures	-0.45 (-3.69)	-0.70 (-4.58)	-0.07 (-0.41)	-0.63**
Capital expenditures	-0.39 (-3.88)	-0.53 (-3.34)	-0.18 (-2.56)	-0.35*
Subsidies, transfers	-0.22 (-2.70)	-0.35 (-3.31)	-0.02 (-0.17)	-0.33**
Social transfers	-0.07 (-1.34)	-0.09 (-1.42)	-0.03 (-0.38)	-0.06
Government consumption	-0.23 (-3.91)	-0.35 (-4.70)	-0.05 (-0.61)	-0.30**
Spending on goods and services	-0.11 (-3.96)	-0.10 (-3.02)	-0.12 (-3.52)	0.02
Wage expenditures	-0.12 (-2.65)	-0.25 (-4.93)	0.06 (0.85)	-0.31***
Tax revenues	1.38 (10.71)	1.10 (6.71)	1.79 (9.86)	-0.69**
Non-tax revenues	0.07 (1.16)	0.03 (0.38)	0.12 (1.86)*	-0.09

Note: Numbers in parentheses are t-ratios. ***, **, and * indicate that the difference between the two averages is statistically significant at a level less than one percent, between one and five percent, and between five and ten percent, respectively.

A further message of this table concerns the composition of the expenditure cuts. On average, cutbacks in current expenditures account for 57 percent of the average spending reduction (and for 30 percent of the total deficit reduction) in successful consolidations. In contrast, they account for only 27 percent of the average spending (and only three percent of the total deficit adjustment) in unsuccessful consolidations. Correspondingly, cuts in capital expenditures account for 43 percent of the average spending cuts in successful consolidations, compared to about 70 percent of the average spending cuts in unsuccessful consolidations. Thus, successful consolidations put much less emphasis on cutting public investment than unsuccessful ones.

Cuts in subsidies and transfers contribute 50 percent on average to the reduction in current spending during successful consolidations, but only 29 percent in unsuccessful ones. Cutbacks in government wage expenditures contribute an average 36 percent to the reduction in current government spending during successful consolidations, while they do not fall significantly in relation to GDP during unsuccessful ones. Since cutting transfers, subsidies, and wage expenditures is politically more difficult than cutting other spending items including public investment, these results suggest that tackling politically sensitive budgetary items is a characteristic of successful consolidations; avoiding significant adjustments in these items is a characteristic of unsuccessful consolidations.

In sum, the evidence shown above forcefully confirms the results of earlier research. Specifically, successful consolidations on average put more emphasis on spending cuts than unsuccessful ones, and less emphasis on raising more revenues. Successful consolidations also involve larger cutbacks of current government spending and smaller cutbacks of investment spending than unsuccessful ones. In the same vein, successful consolidations tackle politically sensitive spending items such as transfers, subsidies, and government wages more forcefully than unsuccessful ones.

Table 2 provides more evidence by studying the post-consolidation performance of governments in the same time period. Specifically, we compute the average change in each budgetary item in the two years after the end of the consolidation episode.

Table 2: Post-Consolidation Performance

Budget item (relative to potential output)	Successful Consolidations	Unsuccessful Consolidations	Difference
Structural balance	0.84 (5.62)	-1.43 (-7.00)	2.27***
Total expenditures	-0.22 (-1.37)	1.08 (4.87)	-1.30***
Total revenues	0.62 (4.93)	-0.35 (-1.47)	0.97***
Current expenditures	-0.15 (-1.08)	0.95 (4.56)	-1.10***
Capital expenditures	-0.07 (-1.19)	0.12 (1.69)	-0.19**
Subsidies, transfers	-0.13 (1.27)	0.60 (4.06)	-0.73***
Social transfers	-0.01 (-0.22)	0.47 (4.51)	0.48***
Government consumption	-0.02 (-0.29)	0.35 (4.08)	-0.37***
Spending on goods and services	0.05 (1.80)	0.12 (3.26)	-0.07
Wage expenditures	-0.07 (-1.47)	0.23 (3.16)	-0.30***
Tax revenues	0.58 (4.65)	-0.36 (-1.54)	0.94***

Note: Numbers in parentheses are t-ratios. ***, **, and * indicate that the difference between the two averages is statistically significant at a level less than one percent, between one and five percent, and between five and ten percent, respectively.

The first important result is that, on average, successful consolidations are characterised by continued improvements in the budget balance in the third and fourth year after the initial budgetary adjustment, although these improvements are mainly the result of increasing revenues. In contrast, unsuccessful consolidations are followed by years of significant deterioration of the budget balance, reflecting rising expenditures rise and declining revenues relative to potential output. Tables 1 and 2 together indicate that successful consolidations on average lead to a reduction in the ratio of government spending to potential output, while unsuccessful ones ultimately lead to an increase in this ratio.

Second, we observe that subsidies, social transfers, and wage expenditures all increase significantly relative to potential output after unsuccessful consolidations. In contrast, they do not change following successful consolidations. This indicates that governments fail to control politically sensitive budget items following unsuccessful consolidations. Although the data do not prove this, a suggestive interpretation is that consolidation efforts tend to fail because governments do not tackle these sensitive items successfully.

2.2 Composition and Duration of Fiscal Adjustments

A possible weakness of this analysis is that we have judged the success or failure of consolidation episodes on the basis of the observed fiscal performance in the third year after the initial fiscal adjustment, and on the basis of an admittedly arbitrary criterion regarding the change in the budget deficit. Now we check the robustness of the results by a change in the question we ask. Specifically, we are interested in explaining the duration of fiscal adjustments, i.e., the likelihood of consolidation episodes to continue into the future.

2.2.1 Data and Model

We look at consolidation episodes defined in the same way as before, but now we allow each episode to have a different length. That is, we use neither any particular threshold for the size of the adjustment, nor any fixed time criterion to evaluate the success of the consolidations. We use the same data as in the previous section.

Consider a consolidation episode that started in period t-1. Given the starting period and a set of conditioning variables, z_t, there is a certain probability, $p(t|z_t)$, that the consolidation has been uninterrupted and will last beyond period t, and there is a probability, $q(t|\ z_t)$, that period t will be the last period of the consolidation. [3] The *conditional hazard rate*, $\lambda(t|\ z_t)$, is the ratio of these two probabilities, $q(t|\ z_t)/p(t|\ z_t)$. A low hazard rate indicates that the consolidation is very likely to continue into the next period, while a large hazard rate indicates that it is likely to end in period t. Thus, the hazard ratio is an indicator for the duration of a consolidation effort from one period to the next. We now ask whether the hazard ratio depends significantly on variables describing the quality of fiscal adjustments.

To do this, we employ the standard parametric Weibull hazard rate model:

$$\lambda(t \mid z) = \rho t^{p-1} \exp(\boldsymbol{Z}_t' \beta) \qquad . \tag{1}$$

The conditional hazard rate follows a *Weibull* distribution, which is convenient in our context as it contains the time variable as an explicit explanatory variable. This allows us to test the hypothesis that consolidation efforts are plagued with "consolidation fatigue" (Harden, Brookes, and von Hagen, 1995), which implies an increasing hazard over time ($\rho > 1$). Note that there is no impact of the time variable on the hazard rate when $\rho = 1$.

Apart from the time variable, our empirical estimates use the debt-GDP ratio in the first year of the consolidation episode and various measures of the quality of the fiscal adjustment as explanatory variables for the hazard rate. Using the debt ratio, we can check whether the fiscal position at the start of a consolidation episode has any influence on its duration. Following the analysis of section 2.1, we describe the quality of the adjustment by means of the contribution of individual budget items to the total deficit reduction achieved in the consolidation.

Let

$$Contr = -\frac{X_\tau - X_T}{S_\tau - S_T} \tag{2}$$

be the contribution of a given budget category X to the adjustment in the surplus, *S*, achieved between the first year of the consolidation episode, T, and the year under consideration, τ. The vector β in equation (1) denotes the unknown parameter values on these variables. Recall that a positive parameter indicates an increase in the hazard rate, i.e., an increasing probability that the consolidation will end in period t+1, given that it lasted through period t.

[3] Technically, consolidation episodes are assumed to be independent spells with absorbing end states. This may appear overly restrictive, because it presupposes that the experience of, say, a five-year consolidation is irrelevant for the duration of the next consolidation, even if there is only one year of fiscal expansion in between. Nonetheless, it still is a natural starting point. The alternative would be to define consolidation episodes with multiple entry and exit observations, but this requires a specification of the maximum length of the relevant history, which is equally arbitrary.

2.2.2 Empirical Results

Table 3 reports the empirical results. A first point is that consolidation fatigue is significant, as indicated by the parameter ρ being significantly larger than unity. Thus, the longer a consolidation episode lasts, the greater the likelihood that the budget surplus will decline again. The coefficient for the debt level has a negative sign in all specifications, indicating that consolidations tend to last longer if they start from large debt-GDP ratios. This finding corroborates evidence found by Alesina and Ardagna (1998) for OECD countries showing that the likelihood of a consolidation success, i.e. a persistent adjustment effort, increases in the debt level. However, the effect is not statistically significant in most specifications.

Table 3: The Impact of Expenditures and Revenues on the Consolidation Hazard

Constant	-2.77***	-3.17***	-3.44***	-2.89***	-2.26***	-2.44***	-3.70***
	(0.42)	(0.49)	(0.52)	(0.42)	(0.37)	(0.41)	(0.70)
Debt ratio	-0.006	-0.005	-0.004	-0.007	-0.02***	-0.02**	-0.006
	(0.008)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.008)
Primary Expenditures	-0.9***						
	(0.4)						
Current Expenditures		-1.4***					
		(0.4)					
Transfers & Subsidies			-2.0***				
			(0.4)				
Wages				-3.0**			
				(1.00)			
Purchases					3.0*		
					(2.00)		
Capital Expend.						0.4	
						(0.5)	
Revenues							0.9***
							(0.4)
ρ	2.63***	2.80***	3.00***	2.62***	2.51***	2.46***	2.63***
	(0.16)	(0.19)	(0.19)	(0.18)	(0.17)	(0.18)	(0.16)
Log likelihood	-30.65	-27.72	-24.86	-30.08	-32.54	-33.60	-30.64
Chi_squared	12.24***	18.98***	29.51***	10.27***	7.98**	4.52*	12.26***

Note: The number of consolidation episodes is n=51 due to missing data for the debt level, among them 47 that end before the end of the sample period. The numbers in brackets are standard errors. The stars indicate a 10% (*), 5% (**) and 1% (***) significance level. ρ is the ancillary parameter of the Weibull distribution, which is tested against the hypothesis rho=1.

The impact of the contribution of individual budget items on the hazard rate is significant in most cases. The results indicate consolidations tend to last longer, if the contribution of cutbacks in primary and current expenditures to the total deficit reduction is large. Similarly, consolidations last longer, if cutbacks in transfers and subsidies and in wage expenditures contribute much to the deficit reduction. In contrast, large contributions from reducing government purchases of goods and services and capital expenditures increase the likelihood of consolidation episodes to end early, although the effect from capital expenditures is not statistically significant. Finally, the results indicate that the durability of consolidation episodes is reduced, if the contribution of increased revenues to the total fiscal adjustment is large.

To interpret these estimates, we compute hazard rate elasticities with respect to the contribution variables. The first and the last specifications say that a ceteris paribus 10 percent-increase in the contribution of primary expenditures to a given fiscal adjustment lowers the hazard rate by about nine percent, while a 10 percent-increase in the contribution of revenues to a given fiscal adjustment increases the hazard rate by about nine percent. Increasing the contribution of cutbacks in current expenditures by 10 percent lowers the hazard rate by 13 percent; increasing the contribution of cutbacks in transfers and subsidies and wage expenditures lowers the hazard rate by 18 percent and 26 percent, respectively. Thus, the results are statistically and economically significant.

These empirical results confirm and strengthen the findings of section 2.1 and earlier studies. Consolidation efforts that operate to a large extent on the spending side of the government budget have a higher chance to survive than consolidations that rely mostly on increased revenues. Among current expenditures, we find that large contributions of cuts in politically sensitive budget items have strong positive effects on the durability of fiscal consolidations.

2.3 Initial and Accompanying Conditions of Fiscal Adjustments

In this section, we analyse the importance of initial and accompanying conditions for fiscal consolidations. We continue to use the data set of section 2.1 above. We describe the economic environment of fiscal consolidations in four aspects. One is the cyclical position of the domestic economy in the year before and during the start of the consolidation episode. We use the output gap, i.e., the relative difference between aggregate demand and potential output, as defined by the OECD for this purpose. The second aspect is the stance of monetary policy. Here, we construct a *monetary conditions index* for each country. The index is the sum of the short-term real interest rate and the real exchange rate, each weighted by its sample standard deviation, for this purpose. An increase in the monetary conditions index thus indicates either a rise in the short-term real interest rate or a real appreciation of the currency. Both can be interpreted as a tightening of the stance of monetary policy. Third, we use the debt-GDP ratio to describe the country's fiscal position. Finally, we describe the international economic environment using the OECD average output gap and the OECD average structural government budget balance.

2.3.1 Undertaking Fiscal Consolidations

Can we characterize the conditions under which fiscal consolidations are likely to be started by OECD governments? To answer this question, we define a dummy variable which takes the value "one" in periods in which fiscal consolidations were started, and the value "zero" otherwise. The following Table 4 reports the results of a set of probit regressions of these variable on the indicators of initial and accompanying conditions defined above. The probit model estimates the likelihood of a fiscal consolidation to be started depending on the realizations of the explanatory variables in a given period.

Table 4: Probit models explaining the undertaking of fiscal consolidations

Indicator	Current level		Lagged level		First difference	
	Univariate	Multivariate	Univariate	Multivariate	Univariate	Multivariate
Output gap	0.05 (0.03)	0.15*** (0.04)	-0.03 (0.03)	0.10** (0.048)	0.12*** (0.04)	0.07 (0.05)
Relative output gap	0.10** (0.04)		0.05 (0.04)		0.05 (0.04)	
Real monetary conditions	0.08 (0.06)	-0.001 (0.01)	-0.05 (0.05)	-0.14** (0.06)	0.12** (0.05)	0.13** (0.06)
Debt-GDP ratio	0.009 (0.0025***)	.011 (0.0032***)	0.009 (0.0025***)	0.012 (0.003)	-0.03 (0.02)	0.03 (0.03)
OECD output gap	-0.06 (0.04)	-0.28*** (0.07)	-0.19*** (0.05)	-0.28*** (0.08)	0.16*** (0.05)	-0.16 (0.11)
OECD structural balance	0.02 (0.07)	0.16 (0.12)	-0.23*** (0.07)	-0.001 (0.01)	0.55*** (0.13)	0.62*** (0.21)

Note: Dependent variable is the probit for a fiscal consolidation to occur in each period. Number of observations is 601. Numbers in parentheses are absolute standard errors. ***, **, * indicate significance at levels below one percent, between one and under five percent, and between five and under 10 percent, respectively.

The results show, first, that governments are more likely to undertake fiscal consolidations in periods when the domestic economy is doing well. [4] In contrast, the OECD output gap enters negatively both in current and lagged levels, indicating that a persistently weak international environment strengthens the pressure on governments to enter a consolidation experiment. The suggestive interpretation is that governments are more likely to undertake consolidation efforts when the domestic economy is doing well relative to the OECD economy.

Current monetary conditions as measured by the real monetary conditions index contribute nothing to the explanation of the start of consolidations. However, monetary conditions in the previous year do. Tight monetary policy appears to reduce the likelihood of a consolidation starting in the following year, but the effect is barely significant and only in a multivariate specification. The third pair of columns indicates that the change in monetary condition affects the probability of consolidation efforts to start. Tightening monetary policy has a positive effect on this probability, but this effect is statistically not very strong.

Large debt-GDP ratios significantly raise the likelihood of fiscal consolidations to start. This confirms the notion that governments react to pressures arising from high debt levels. Due to the persistence of this variable, the effect can be attributed either to the current or the lagged debt-GDP ratio.

Fiscal policy in the OECD countries has an important and strong impact on the likelihood of countries to undertake a fiscal consolidation. The table shows that a high level of structural surpluses in the current increases the likelihood of a fiscal consolidation to be started, while a large surplus in the previous year reduces the likelihood of a fiscal consolidation significantly. Thus, governments are more likely to begin fiscal consolidations in their own country if the stance of fiscal policy in other countries changes in the direction of tightening.

[4] Note that the definition of the dependent variable, by treating periods in which consolidations are continued and periods in which no consolidation occurred alike, biases the results against finding an impact of the explanatory variables.

One might object to the results concerning the OECD output gap and the OECD structural balance that the 1990s saw a large number of fiscal consolidations in the OECD, and that this decade was characterised by weak growth outside the US. Thus, the results might be due to special circumstances of the 1990s. However, estimating the same models with data running only up to 1991 does not change the results.

2.3.2 Initial Conditions and the Success of Fiscal Consolidations

Next, we turn to a set of regressions that use the economic conditions in the starting year and the year before to explain the likelihood of a fiscal consolidation, given that it has started, be successful. The dependent variable is a dummy variable being "one" if a fiscal consolidation is successful. Table 5 reports the results.

Table 5: Probit models explaining the success of fiscal consolidations

Indicator	Current level		Lagged level		First difference	
	Univariate	Multivariate	Univariate	Multivariate	Univariate	Multivariate
Output gap	-0.25 (0.083***)	-0.16 (0.11)	-0.29 (0.096***)	-0.35 (0.15**)	-0.02 (0.13)	0.06 (0.13)
Relative output gap	-0.161 (0.087*)		-0.16 (0.10))		-0.02 (0.19)	
Monetary conditions	0.13 (0.063**)	0.11 (0.17)	0.11 (0.13)	0.30 (0.19))	0.05 (0.13)	-0.05 (0.15)
Debt-GDP ratio	0.03 (0.007***)	0.02 (0.09**)	0.03 (0.007***)	0.02 (0.009**)	-0.06 (0.04)	0.06 (0.05)
OECD output gap	-0.53 (0.19***)	-0.58 (0.29**)	-0.21 (0.12*)	-0.08 (0.25)	-0.12 (0.15)	-0.03 (0.25)
OECD structural balance	-0.09 (0.18)	0.36 (0.40)	0.04 (0.17)	-0.19 (0.45)	-0.10 (0.26)	0.22 (0.59)

Note: Dependent variable is the probit for a fiscal consolidation to occur in each period. Number of observations is 65. Numbers in parentheses are absolute standard errors. ***, **, * indicate significance at levels below one percent, between one and under five percent, and between five and under 10 percent, respectively.

A first and striking observation is that the influence of the domestic cyclical position is reversed compared to the results of table 4. Taking the two results together implies that a large output gap increases the likelihood of a fiscal consolidation being started, but reduces the likelihood of the consolidation being successful. Furthermore, an improvement in the cyclical position increases the likelihood of a consolidation, while the likelihood of a successful consolidation is greater if the output gap is persistently small in a country. Similarly, a bleak external environment, indicated by a low OECD output gap, raises the likelihood of a consolidation to be successful.

A second result from this table is that consolidations are more likely to be successful, if the accompanying monetary policy is tight, although the effect is not very strong. This dispels the notion that central banks can help making fiscal consolidations successful fiscal by easing monetary policy. Note, however, that this effect is not significant in the multivariate specification. The probability of a consolidation to be successful is not affected by the change in the stance of monetary policy.

Third, consolidations are more likely to be successful if started from high debt-GDP ratios. Again, this confirms the notion that high debt levels exert pressures for correction on governments. Finally, the stance of fiscal policy in other OECD countries does not affect the probability of a consolidation to be successful.

Table 6 compares the average initial conditions in terms our indicators for successful and unsuccessful fiscal consolidations. We observe that the initial conditions are "worse" for successful consolidations than for unsuccessful ones in the sense that the average output gap is significantly smaller in years when successful consolidations start than in years when unsuccessful consolidations start. Furthermore, the international environment, characterised by the OECD output gap, is weaker on average when successful consolidations start than when unsuccessful ones begin. Similarly, domestic monetary policy is tighter on average in years when successful consolidations start than in years when unsuccessful consolidations are begun. In contrast, average fiscal conditions in the rest of the OECD less tight in years when successful consolidations begin than in years when unsuccessful ones begin. Note, however, that the lagged OECD surplus before the start of successful consolidations is smaller than the current OECD surplus, i.e., on average the beginning of successful consolidations is marked by a tightening of fiscal policy in the OECD.

Table 6: Initial conditions of successful and unsuccessful fiscal consolidations

	Output gap	Relative output gap	Monetary conditions	OECD output gap	OECD structural balance
Current level, successful	-0.21 (-0.54)	0.39 (1.16)	0.45 (2.54)	-0.77 (-3.15)	-0.87 (-4.30)
Current level, unsuccessful	1.62 (3.18)	1.36 (3.08)	-0.12 (-0.48)	0.21 (0.69)	-0.11 (-0.45)
Difference	1.90***	-0.97*	0.56*	-0.97***	-0.76**
Lagged level, successful	-0.93 (-2.36)	0.15 (0.45)	0.03 (0.18)	-1.14 (-4.71)	-1.02 (-5.15)
Lagged level, unsuccessful	0.83 (1.62)	1.02 (2.27)	-0.38 (-1.57)	-0.46 (-1.56)	-0.32 (-1.33)
Difference	-1.76***	-0.87	0.38	-0.68*	-0.70**
First difference successful	0.70 (2.18)	0.21 (0.75)	0.38 (2.27)	0.38 (1.52)	0.21 (2.13)
First difference unsuccessful	0.76 (1.82)	0.31 (0.84)	0.22 (1.02)	0.67 (2.22)	0.26 (2.19)
Difference	0.06	0.10	0.16	0.29	0.05

Note: T-ratios in parentheses. ***, **, * indicate significance at levels below one percent, between one and under five percent, and between five and under 10 percent, respectively.

Next, we cast the same analysis in the framework of duration analysis applied in section 2.2. For this purpose, we return to the empirical model explaining the conditional hazard rate of consolidation episodes. Here, however, we use the variables describing the economic environment of the consolidation episode to explain the hazard rate. For each consolidation episode, we update these

variables as the episode continues. Thus, we can now look at the influence of initial and accompanying economic conditions.

Table 7 confirms the importance of consolidation fatigue given the economic environment of consolidations ($\rho > 1$). It also confirms that consolidations tend to last longer (i.e., be successful) if they start from high debt-GDP ratios. Domestic monetary conditions during a consolidation episode do not play a significant role in explaining the duration of consolidation episodes. In contrast, in each year of a consolidation episode, a large domestic output gap in the preceding year tends to raise the probability of the consolidation to end. This confirms our earlier finding (Table 5), that a bleak domestic economy raises the likelihood of consolidations to be successful. In contrast, a favourable cyclical stance in the OECD raises the likelihood of a consolidation effort to continue. Thus, while a weak international economy tends to raise the likelihood of a successful consolidation to begin, it tends to reduce the probability of a consolidation episode to continue, once the consolidation is on its way. Finally, table 7 indicates that a tightening of fiscal policy in the OECD accompanying a consolidation in a particular country increases the likelihood of a fiscal consolidation to continue.

Table 7: Initial and Accompanying Conditions and Consolidation Hazard

	Current levels	Lagged levels	First differences
Constant	-2.75***	-3.15***	-2.94***
	(0.37)	(0.50)	(0.47)
Debt-GDP ratio (t-1)	-0.01*	-0.007	-0.007
	(0.006)	(0.006)	(0.006)
Domestic output gap	0.02	0.18**	-0.24***
	(0.07)	(0.08)	(0.09)
Monetary conditions index	0.21	0.09	0.15
	(0.13)	(0.14)	(0.10)
OECD Output gap	-0.12	-0.28*	0.29
	(0.19)	(0.17)	(0.18)
OECD Structural balance	-0.17	-0.01	-0.52**
	(0.19)	(0.15)	(0.21)
ρ	2.62***	2.62***	2.49***
	(0.20)	(0.22)	(0.09)
Log likelihood	-26.00	-25.73	-23.84
Chi_square	10.36*	10.83**	21.94***

Note: The numbers in brackets are absolute standard errors. The stars indicate a 10% (*), 5% (**) and 1% (***) significance level. ρ is the ancillary parameter of the Weibull distribution, tested against the hypothesis rho=1.

2.3.3 Quality of Adjustments, Initial Conditions, and the Success of Consolidation Efforts

In section 2.1, we have shown that the quality of fiscal adjustments is an important determinant of the success of consolidation efforts. In the preceding section, we have shown that the likelihood and the success of consolidation efforts also depend significantly on the economic environment. Next, we combine these two steps. For this purpose, table 8 reports the results of a set of probit regressions

explaining the likelihood of a consolidation episode to be successful in terms of the quality of the adjustment and the initial conditions.

The regressions reported in this table use the contribution of government expenditures to the total consolidation achieved over entire episode as an explanatory variable together with various indicators of the initial economic conditions. Results for the remaining variables describing the quality of the fiscal adjustments are very similar and are not reported here for brevity. The initial conditions are described in terms of the current levels of the output gap, at home and in the OECD, the domestic monetary conditions and the OECD fiscal stance in the first period of the consolidation episode, while the initial fiscal position of the government is characterised in terms of the debt-GDP ratio in the year before the first deficit reduction.

Table 8: Quality, Initial Conditions, and Success of Consolidation Efforts

Indicator						
Contribution of Spending (average over consolidation episode)	0.88 (2.73)***	0.68 (1.87)*	-0.79 (1.99)**	0.95 (2.44)**	0.84 (2.85)***	0.89 (2.77)***
Output gap (current level)		-0.19 (-2.16)**				
Debt-GDP ratio (lagged level)			0.024 (3.32)***			
Monetary conditions index (current level)				0.16 (1.31)		
OECD output gap (current level)					-0.55 (-2.70)***	
OECD structural balance (current level)						-0.15 (-0.79)

Note: Dependent variable is the probit for a successful fiscal consolidation. Number of observations is 65. ***, **, * indicate significance at levels below one percent, between one and under five percent, and between five and under 10 percent, respectively.

The first column of Table 8 reproduces what we already know from section 2.1. Increasing the contribution of spending cuts to the consolidation effort raises the likelihood of a consolidation to be successful significantly. The following columns pair the contribution of government spending with various indicators of the initial and accompanying conditions. As before, we find that a weak economy, both at home and in the OECD, raises the likelihood of a consolidation effort to be successful. Furthermore, a large debt-GDP ratio raises the probability of a consolidation to be successful. Neither the stance of domestic monetary policy not the average fiscal stance in the OECD, however, contributes to explaining the probability of success of fiscal consolidations.

Following the line of reasoning above, our next step is to use the initial and accompanying conditions together with the average contributions of the various budget items to the total consolidation achieved as explanatory variables in our models for the hazard rate of consolidation episodes. Table 9 shows the results. Here, we only use models where the initial and accompanying conditions are used in first differences. Models using levels of these variables produced no significant parameters for the economic variables at all. The results are reported in Table 9. Note that the models reported in Table 9 use different variables to measure the contribution of individual budget items to the consolidation.

These items are indicated in the column headers, while the estimated coefficients are reported in the row called "contribution."

Table 9: Adjustment Quality, Initial and Accompanying Conditions, and Consolidation Hazard

	Budget Item					
	Primary Expenditures	Current Expenditures	Revenues	Transfers and Wages	Transfers	Wages
Cons.	-2.17 (0.46***)	-3.60 (0.58***)	-4.09 (0.75***)	-3.85 (0.61***)	-3.46 (0.50***)	-3.63 (0.58***)
Debt (t-1)	-0.02 (0.06)	-0.001 (0.006)	-0.002 (0.006)	-0.00 (0.006)	-0.005 (0.005)	0.002 (0.007)
Domestic output gap	-0.19 (0.09**)	-0.16 (0.09*)	-0.19** (0.09)	-0.13 (0.09)	-0.15 (0.09*)	-0.22 (0.10**)
Monetary conditions	0.14 (0.11)	0.01 (0.19)	0.14 (0.11)	0.11 (0.10)	0.09 (0.11)	0.19 (0.10*)
OECD output gap	0.29 (0.18)	0.24 (0.18)	0.29 (0.18)	0.25 (0.18)	0.24 (0.17)	-0.31 (0.20)
OECD Structural. Surplus	-0.49 (0.20**)	-0.39 (0.23*)	-0.49 (0.20**)	-0.35 (0.22)	-0.43 (0.21**)	-0.42 (0.20*)
Contribution of budget item	-0.9 (0.4**)	-0.2*** (0.07)	0.9 (0.4**)	-0.3 (0.07***)	-0.3 (0.08***)	-0.5 (0.1***)
ρ	2.68 (0.23***)	2.93 (0.30***)	2.58 (0.22***)	3.12 (0.33***)	2.97 (0.31***)	2.77 (0.26***)
Log likelihood	-22.32	-19.59	-22.30	-17.84	-19.54	-20.05
Chi_square	23.88***	36.20***	23.92**	41.86***	31.84***	46.60***

Note: The numbers in brackets are standard errors. The stars indicate a 10% (*), 5% (**) and 1% (***) significance level. ρ is the ancillary parameter of the Weibull distribution, which is tested against the hypothesis rho=1.

Table 9 has two important results. First, the average quality of the fiscal adjustment remains a significant determinant of the duration consolidation episodes even when the initial and accompanying conditions are taken into consideration. As before, the likelihood of a consolidation episode to continue rises with the contribution of expenditures to the total consolidation achieved and falls if the consolidation relies on increased revenues. Furthermore, the likelihood of a consolidation to continue increases with the contribution of current spending and, within this category, of the politically more sensitive items, transfers and wage expenditures. The contribution of capital expenditures and of government purchases did not have any significant explanatory power in these models; these specifications were not reported for brevity.

The second important result is that the initial and accompanying economic conditions lose much of their explanatory power when considered together with the quality of the fiscal adjustment. Only the domestic output gap and the indicator of the OECD fiscal stance retain significant coefficients. Given the quality of the fiscal adjustment, an improving domestic output gap and a tightening fiscal policy in the OECD both reduce the hazard rate, i.e., they increase the likelihood of a fiscal consolidation to continue.

2.4 Initial Conditions and the Choice of Adjustment Strategy

This result suggests that the quality of the adjustment might not be independent of the initial and accompanying conditions. More specifically, it is possible that governments are more likely to rely primarily on expenditure reductions to consolidate the budget under one set of initial conditions than under others.

To test this suggestion empirically, we estimate models explaining the probability of a consolidation to be based primarily on expenditure cuts on the basis of the initial conditions. More specifically, we estimate a probit model where the dependent variable is a dummy that takes the value of one when an expenditure-based consolidation is started and zero elsewhere. We call a consolidation expenditure-based when expenditure cuts contribute at least half of the total deficit reduction achieved during the consolidation episode. Thus, the model explains the probability of a consolidation to rely primarily of expenditure cuts given that a consolidation is started.

Table 10 has the results. Here, we see that a low output gap, both domestic and at home, and a high debt-GDP ratio raise the likelihood of consolidations being expenditure-based. Furthermore, a tight stance of fiscal policy in the OECD raises the likelihood of a consolidation to be expenditure-based. The picture emerging from this is that, in a relatively weak economic environment and under strong pressures from a large debt burden, governments tend to rely more on expenditure cuts than on increasing revenues to consolidate their budgets. Similarly, a tight fiscal stance in the OECD makes governments opt for expenditure cuts, if they wish to achieve consolidations. Monetary easing the year before the beginning of the fiscal adjustment raises the likelihood of an expenditure-based consolidation strategy.

Table 10: Initial Conditions and Choice of Consolidation Strategy

Indicator	Current level		Lagged level		First difference	
	Univariate	Multivariate	Univariate	Multivariate	Univariate	Multivariate
Output gap	-0.19 (-2.28)**	-0.12 (-1.23)	-0.12 (-1.58)	-0.03 (-0.31)	-0.19 (-1.71)*	-0.15 (-1.20)
Relative output gap	-0.19 (-2.06)**		-0.02 (-0.25)		-0.23 (-2.45)**	
$DebtGDP_{t-1}$	0.02 (3.57)***	0.01 (1.69)*	0.02 (3.51)***	0.02 (2.10)**	0.05 (1.09)	0.04 (0.90)
Monetary conditions (real)	-0.04 (-0.36)	-0.21 (-1.42)	-0.08 (-0.65)	-0.36 (-1.78)*	0.03 (0.25)	-0.08 (-0.56)
OECD output gap	-0.20 (-1.31)	-0.67 (2.07)**	-0.24 (-2.03)**	-0.80 (-2.58)**	0.16 (1.13)	0.13 (0.48)
OECD structural balance	0.09 (.52)	0.99 (2.79)***	-0.02 (-0.14)	1.08 (2.34)**	0.28 (1.00)	0.32 (0.58)

Note: Dependent variable is the probit for an expenditure-based fiscal consolidation to occur. Number of observations is 65. ***, **, * indicate significance at levels below one percent, between one and under five percent, and between five and under 10 percent, respectively.

One might argue that this result could be driven by the consolidations occurring in the EU during the 1990s, which took place in a general environment of low growth, and that, therefore, this result reflects the effects of the Maastricht process more than the typical policy choices of OECD governments. However, the results of these estimates do not change much when we limit the sample to the period ending in 1991.

2.5 Economic Conditions and Adjustment Strategy

Until now, we have used the average contributions of each budgetary item over an entire consolidation episode to explain the duration of the episode. This procedure begs the question whether timing matters. Given that, say, 60 percent of a deficit reduction were achieved by cutting expenditures, it is possible that the government pursued an expenditure-based strategy from the beginning, but it is also possible that the government started the consolidation by raising additional taxes and cut expenditures later, i.e., the government pursued a "switching strategy" from revenue to expenditure-based consolidation.

To analyse the importance of such timing patterns, we now redefine the contribution variable in our empirical models to measure the cumulative contribution of each spending item from the beginning of a consolidation episode to the year, t, under consideration:

$$Contr_t = -\frac{X_t - X_T}{S_t - S_T}. \qquad (3)$$

Thus, the contribution variable now changes in each year of the consolidation episode.

Table 11: Evolving Quality of Adjustments and Consolidation Hazard

Constant	-2.81	-3.20***	-3.18***	-2.91***	-2.34***	-2.43***	-3.92***
	(0.43)	(0.49)	(0.49)	(0.42)	(0.39)	(0.40)	(0.70)
Debt	-0.005	-0.04	-0.007	-0.007	-0.02**	-0.01**	-0.05
	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.008)
Primary Expenditures	-1.00***						
	(0.3)						
Current Expenditures		-1.00***					
		(0.4)					
Transfers & Subsidies			-2.00***				
			(0.5)				
Wages				-3.00***			
				(1.00)			
Purchases					2.00		
					(2.00)		
Capital Expend.						0.3	
						(0.5)	
Revenues							1.00***
							(0.4)
ρ	2.63***	2.80***	3.00	2.62***	2.51***	2.46***	2.63***
	(0.16)	(0.19)	(0.19)	(0.18)	(0.18)	(0.18)	(0.16)
Log likelihood	-29.91	-27.05	-26.47	-29.45	-33.06	-33.71	-29.90
Chi_sq	14.54***	21.53***	25.52***	11.95***	5.53*	4.01	14.57***

Note: The numbers in brackets are standard errors. The stars indicate a 10% (*), 5% (**) and 1% (***) significance level. ρ is the ancillary parameter of the Weibull distribution, which is tested against the hypothesis rho=1.

Table 11 reports the results of regressions using these contribution variables together with the initial debt level to explain the hazard rate. The important result from this table is that the earlier findings carry over to the redefined contribution variables. That is, a large share of the fiscal adjustment in the first year coming from expenditures raises the likelihood of the consolidation to carry on to the second year, a large contribution from cutting expenditures in the first and second year raises the likelihood of the consolidation episode to carry on to the third year etc. Conversely, a large share of the fiscal adjustment in the first year coming from increased revenues raises the probability that the consolidation ends after the first year, a large contribution from increased revenues in the first and second year raises the likelihood of the consolidation episode ends after the second year etc. These results imply that a switching strategy increasing revenues first and cutting expenditures later is significantly less likely to lead to a lasting deficit reduction than a strategy that starts with expenditure cuts from the beginning.

Table 12 combines this model again with our variables describing the accompanying and initial economic conditions. As before, we only report specifications using the first differences of the indicators of accompanying economic conditions. The results using levels of these variables are very similar.

Table 12: Evolving Quality of Adjustment, Accompanying Conditions, and Consolidation Hazard

	Budget Item					
	Primary Expenditures	Current Expenditures	Revenues	Transfers and Wages	Transfers	Wages
Constant	-3.20***	-3.62***	-4.22***	-3.90***	-3.50***	-3.69***
	(0.46)	(0.57)	(0.75)	(0.60)	(0.50)	(0.60)
Debt Ratio(t-1)	-0.001	0.0004	-0.001	0.0007	-0.004	0.002
	(0.006)	(0.006)	(0.006)	(0.006)	(0.005)	(0.007)
Domestic output	-0.19**	-0.17*	-0.19**	-0.15	-0.15	-0.23**
gap	(0.09)	(0.09)	(0.09)	(0.10)	(0.09)	(0.10)
Monetary	0.13	0.11	-0.13	0.11	0.10	0.20*
conditions	(0.11)	(0.11)	(0.11)	(0.10)	(0.11)	(0.11)
OECD output gap	0.29*	0.24	0.29*	0.25	0.24	0.32
	(0.18)	(0.18)	(0.18)	(0.18)	(0.16)	(0.21)
OECD Structural.	-0.48**	-0.37	-0.48**	-0.33	-0.43**	-0.38*
Surplus	(0.20)	(0.24)	(0.20)	(0.23)	(0.21)	(0.23)
Contribution of	-1.00**	-2.00***	1.00**	-2.00***	-2.00***	-5.00***
Budget Item	(0.4)	(0.7)	(0.4)	(0.7)	(0.8)	(1.00)
ρ	2.69***	2.93***	2.69***	3.13***	2.97***	2.80***
	(0.23)	(0.29)	(0.23)	(0.33)	(0.30)	(0.26)
Log likelihood	-21.88	-19.28	-21.86	-17.74	-19.37	-19.96
Chi_square	25.07***	37.13***	25.12***	42.06***	33.13***	46.62***

Note: The numbers in brackets are standard errors. The stars indicate a 10% (*), 5% (**) and 1% (***) significance level. ρ is the ancillary parameter of the Weibull distribution, which is tested against the hypothesis rho=1.

The first result from this table is that it corroborates the findings from Table 11, namely that the evolving quality of the fiscal adjustment has a significant effect on the duration of consolidation episodes. Consolidations relying on expenditure cuts from the beginning are more likely to last than

consolidations starting with raising additional revenues. Again, this dismisses the suggestion that "switching strategies" might be more successful than strategies relying on expenditure cuts from the beginning.

The second result is that, among the indicators of accompanying economic conditions, the domestic output gap and the OECD structural budget balance are the only ones that consistently appear to have a significant effect on the duration of budgetary consolidations. A weakening domestic economy lowers the hazard rate and, hence, increases the probability of consolidations to go on. Similarly, a tightening of fiscal policy in the OECD raises the likelihood of consolidations to continue. Given the results from the previous section, the suggestive interpretation is that, in a weak economic environment and faced with tight fiscal policy in the main industrialized countries, governments tend to turn to expenditure cuts rather than raising taxes to achieve budgetary consolidations, and this raises the chances of the consolidations to be successful.

2.6 Conclusions

In this section, we have studied the importance of the quality and the initial and accompanying conditions for the success of budgetary consolidations. Extending earlier studies in this direction, we have used duration analysis to assess the success of consolidation efforts. Our results show that the quality of fiscal adjustments is an important determinant of success. In particular, the likelihood of success rises when governments tackle politically sensitive items on the budget, such as transfers, subsidies, and government wages. Furthermore, initial and accompanying economic conditions matter for explaining the probability of consolidations to start and to be successful. Specifically, a strong domestic economy, a weak international economic environment, and strong pressures from a high debt-GDP ratio all raise the likelihood of consolidations to start. Once the consolidation is on its way, however, it is more likely to continue in a weak domestic and international economic environment. Duration analysis confirms that consolidation efforts tend to last longer in a bleak economic environment and when they start from a high debt-GDP ratio.

Combining initial and accompanying factors and the quality of fiscal adjustments to explain the probability of success, however, only the cyclical stance of the domestic economy and the average fiscal stance of the OECD survive as significant explanatory factors together with the quality of the fiscal adjustment. Our evidence suggests that a high debt-GDP ratio and a weak domestic and international economy induce governments to attack deficit problems by expenditure-based rather than revenue-based strategies. Thus, to some extent at least, the economic environment in which consolidations are started and take place influences the quality of fiscal adjustments.

3. FISCAL CONSOLIDATIONS IN THE 1990S: A DETAILED ACCOUNT

In the following we provide an analysis of the adjustment experience of the individual EU member states during the Maastricht convergence process and after the start of the third stage of the Economic and Monetary Union. The purpose is to apply the previous ideas more specifically to the European countries. Since this task requires a more detailed examination of country histories and policy measures, the evidence gained here can also yield suggestive insights for potential qualifications or refinements of the general findings in previous chapters.

Section 3.1 presents the consolidation experiences in the 11 EMU member states during the 1990s. The presentation of each case is confined to the main elements of their fiscal strategies as spelled out in the Convergence and Stability Programs. A more extensive review of the countries' experiences is found in Appendix 8.2.

Section 3.2 collects and assesses the evidence gained in the country sections in a summary fashion. In addition, it combines and compares country experiences with the evidence of other EU member states, not (yet) participating in the third stage of the Monetary Union, since this may shed some light differences between these two groups of countries. The section in general addresses the determinants of successful consolidations.

3.1 Country Experiences

For a sensible analysis of the countries experiences we need a concept to detect fiscal strategies and episodes, which differs somewhat from the previous parts of the study. Section 2 followed earlier literature and looked at consolidation episodes that started with relatively large adjustments. This is useful for analytical reasons. Now, however, the task is to describe country histories, and we need an analytical concept that is sufficiently fine-grained to gauge most or all developments. One possibility is to call each improvement of the budget balance a consolidation, and each deterioration an expansion. But this would not be useful to describe episodes during which a specific fiscal strategy prevailed, since small developments can be caused by small, short-term exogenous changes or unexpected consequences of policy measures. For a strategic analysis such a measure would have introduced excessive "noise". To avoid this, we speak of fiscal expansions or contractions only when the primary structural budget balance changes by more than 0.5 percentage point of potential output in one or over several consecutive years.[5] Moreover, the presentation will be based on the OECD method of calculating cyclically adjusted data. The main reason for this is that it may be easier for the reader to follow and up-date our analysis, since these data are generally available data.

In this section, we use the insights from section 2 to develop a standard of comparison against the observed fiscal strategies in the 1990s. More specifically, we ask to what extent the observed fiscal performance of the 1990s could be expected on the basis of the experience of OECD countries reviewed in section 2. Due to this change in the data set and the different concepts defining fiscal episodes, it is necessary to re-estimate our econometric models. The results are very similar to those in the earlier section and are not reported here for brevity. In Appendix 8.1, we do report the preferred specifications of the models used below.

In the following, we present this standard of comparison by showing charts of the fitted values from these models for each country, using the data from the 1990s. In these charts, the thick line called *start* indicates the predicted probability of starting a consolidation effort. The line for the survival rate (*surv*) indicates the conditional survival probability, i.e. the probability that the country continues

[5] This definition is derived from Perotti et al. (1998).

its consolidation effort into the next year given the probability of a consolidation persisting into the current fiscal year.[6] The line called *time* reformulates the survival rate by transforming it into a time scale. It indicates the time interval over which the consolidation episode is expected to continue, given that it "survives" the current year and that the external circumstances do not change. Since the estimation of the hazard rate model includes only economic conditions and the debt level, the residuals between the predicted and the actual duration reflect the impact of the adjustment strategy chosen and/or a "Maastricht effect". To separate the two, we also calculated the probability of starting an expenditure-based consolidation. Any “Maastricht effect”, however, might well have also affected the choice of strategy itself. Thus, including variables reflecting the adjustment strategy in our models for the survival rate could have given rise to an endogeneity problem. For this reason, the predicted values present a "baseline model" and an informed discussion of the different strategic influences is necessary to interpret the results.

3.1.1 Austria

Austrian public finances deteriorated shortly before the country joined the EU in January 1995. This brought the country into the unfavourable position of having to improve the budget balance from - 5 percent in 1994 to -3 percent in 1997 and to at least stabilise the debt level staying at its 1994 value of 65.4 percent of GDP. Thus, the actual timing and size of the consolidation were clearly determined by the governments’ determination to enter EMU, although the general economic conditions were also supportive to the start of a consolidation episode.[7]

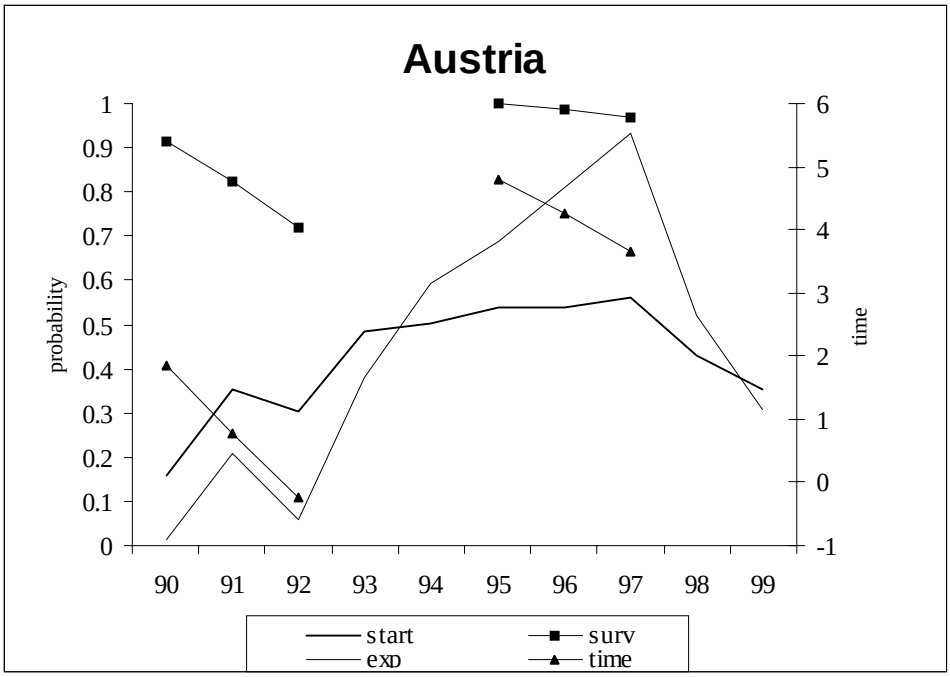
The budget of 1995, designed to achieve some fiscal retrenchment was clearly ineffective on this score as indicated by a change of the primary cyclically adjusted surplus by 0.1 percentage points of GDP. Given the increasing interest burden of the country, the actual deficit even increased by the same amount. Therefore, the entire adjustment had to be achieved by the consolidation package, which the incoming government presented in 1996. Given the task to adjust the deficit by two percentage points, the package included measures in almost all spending and revenue categories. On the expenditure side, short-term measures, such as the stabilisation of purchases at the level of 1995 were taken. But also policies affecting unemployment, pension and health care expenditures having a more long-term effect were implemented. As the Convergence Program (CP) specified, two thirds of the required adjustment were to be achieved by expenditure reductions and the rest by revenue measures.[8] This deficit target was eventually surpassed since these fiscal measures, as well as some statistical reclassification, reduced the primary cyclically adjusted deficit from -1.1 percent of GDP in 1995 to 1.9 percent in 1997 and the actual deficit from -5.1 to -1.9 percent of GDP, so that the country comfortably met the three percent reference value.

After a strong decline of public spending until 1997, the spending level remained virtually stable. At the same time social security contributions and other revenues were reduced by a pension reform. Therefore, the primary structural balance declined by 0.7 percent of GDP and the consolidation ended.

[6] More precisely, it is the survival rate for the year t divided by the survival rate of year t-1.

[7] The predicted probability from the probit model are almost 54 percent.

8 The expenditure-based strategy was in line with the general economic conditions, i.e. the increasing debt level and the tightening of the OECD public surplus, since the predicted probability of our model at the start of the consolidation is 0.69.



Our estimates, shown in the chart above, indicate that the economic circumstances for starting a consolidation were increasingly favourable in Austria in the early 1990s. The estimated probability increased from about 15 percent to over 50 percent in 1995. The predicted conditional survival rate was above 90 percent in 1995. Given the economic circumstances of 1997, the survival rate was still 90 percent, when the consolidation ended in 1998. Note that the fact that the consolidation was expenditure-based should have further increased the survival rate. Thus, the consolidation strategy, which had explicitly been designed to achieve the accession to EMU through a vigorous retrenchment, ended earlier than predicted by our model.

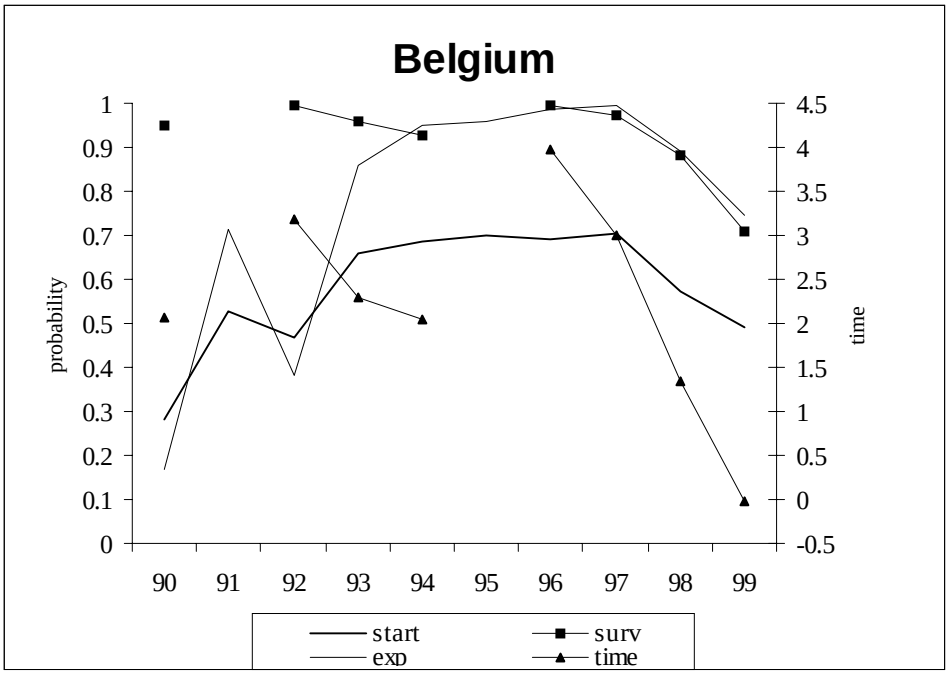
3.1.2 Belgium

When the Belgian government presented its first CP in June 1992, the deficit of the public sector was close to seven percent and public debt close to 130 percent of GDP. Accordingly, the government recognised the need to reverse previous developments and set the country on a sustainable fiscal policy track.[9] The government also recognised that it had to bring the country in line with the fiscal Maastricht criteria to avoid being punished by markets by a high risk premium on public debt. For that reason, it conceded that it first had to enlarge public receipts although its general consolidation strategy was based on expenditure reductions. Despite the generally unfavourable circumstances for such a decision, the government launched a revenue-based consolidation effort in 1992.[10] The focus on increasing revenues was in line with the previous development and the economic environment.[11] But, whereas cyclically adjusted public revenues increased a modest 0.7 percentage points of GDP between 1990 and 1992, they jumped three percentage points until 1994, among others due to a special crisis contribution imposed on income.

[9] This fact is also reflected in the predicted values for the start of a consolidation effort, which were relatively bad for Belgium staying at 47 percent, but high in relation to other countries due to the debt level.

[10] The predicted probability as estimated by the probit model is 47 percent.

[11] The predicted probability for launching an expenditure-based consolidation is 0.38 in 1992.



From 1994 onwards, tax policy became somewhat more systematic and, according to the Global Plan for Employment, Competitiveness and Social Security, was geared toward the long-term creation of employment. The plan envisaged substantial reductions in employers' contributions to social security to increase employment. The corresponding shortfall should be financed through indirect taxes and taxes on property. Due to the measures immediately taken, social security contributions actually fell in 1995 as a share of GDP, but so did indirect tax revenues potentially due to a change in consumption behaviour reacting to an increase in the VAT rate.[12] Since expenditures did not fall at the same rate, this decline of revenues produced a short-term interruption of the Belgian consolidation process, although external circumstances would have been supportive to a continuation of the episode, as the predictions of our model indicate. After 1996, social security contributions continued to fall, but this development was partly offset by direct and indirect tax revenues and sufficed to not produce another revenue-driven interruption of the consolidation efforts.

Restraint on expenditures had already started in 1992, as envisaged by the CP. Apart from cuts in purchases, e.g. in defence, more lasting initiatives were taken regarding temporary and part-time unemployment. These measures reduced the cyclically adjusted primary expenditures from 47 percent of GDP in 1991 to 43.8 percent of GDP in 1994, and stabilised actual primary expenditures despite of the economic crisis affecting the country. The measures restraining health and unemployment related expenditures were complemented by the initiatives taken in line with the Global Plan. More effective policies to curb health expenditures and a reform of the wage indexation affecting social security benefits and wages in the public sector contributed to the reduction of primary cyclically adjusted expenditures by 1.3 percentage point until 1999. The focus on expenditure reduction[13] and the duration of the consolidation effort was certainly supported by external economic circumstances and the debt level, as the predicted value of three years in 1997 and one and a half year in 1998 suggest. Since interest payments already started to fall and the economy moved closer to potential output, this allowed a reduction actual expenditures from 54.5 percent of GDP in 1994 to 50.8 percent of GDP in

[12] According to the National Bank of Belgium (Annual Report 1995) indirect revenues fell particularly due to a reduction in the sale of cars, which is the most important category of product to which the new 20.5 percent rate was applied.

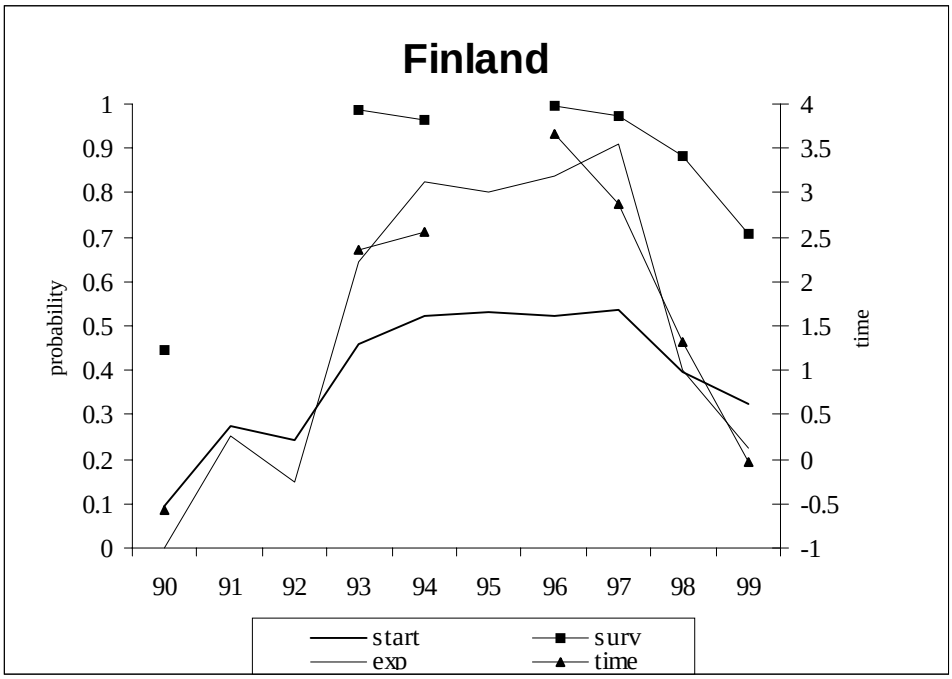
[13] The predicted probability of implementing an expenditure-driven consolidation effort is 0.99 in 1996 due to the debt level, the low output gap and the tightening of the OECD surplus.

1998. As a result, Belgium was able to sufficiently reduce the deficit level to meet the deficit reference value in 1997 and continuously reduced its debt level after 1993.

3.1.3 Finland

The Finish government coming into power in 1995 promised to continue the austere fiscal policy strategy, which the previous government had initiated after the economic crisis of the early 1990s. The twofold strategy, expressed in the CP, was to reduce expenditures, particularly transfer and social security payments, and to change the tax structure to encourage employment and working. The strategy and the governments concern about the high tax and social security burden imposed on economic agents was reiterated in later programmes.

Due to an improvement of the OECD surplus and a relatively large negative output gap, our model predicts somewhat more than a fifty percent likelihood of initialising a consolidation at the mid-1990s.[14] The fiscal package designed to implement this strategy mostly became effective from 1996 onwards. Then the system of municipal financing was revised and a pension reform package launched. Moreover, new labour market measures were introduced inducing unemployed to participate in training measures, but at the same time, eligibility to unemployment benefits was tightened. Already from 1995 onwards incentives for employers to hire unemployed and special support for small and medium-sized firms were integrated into the tax scheme and the system of social security contributions. Off-setting financing through higher indirect taxes and taxes on corporate and capital income was enacted since 1996.



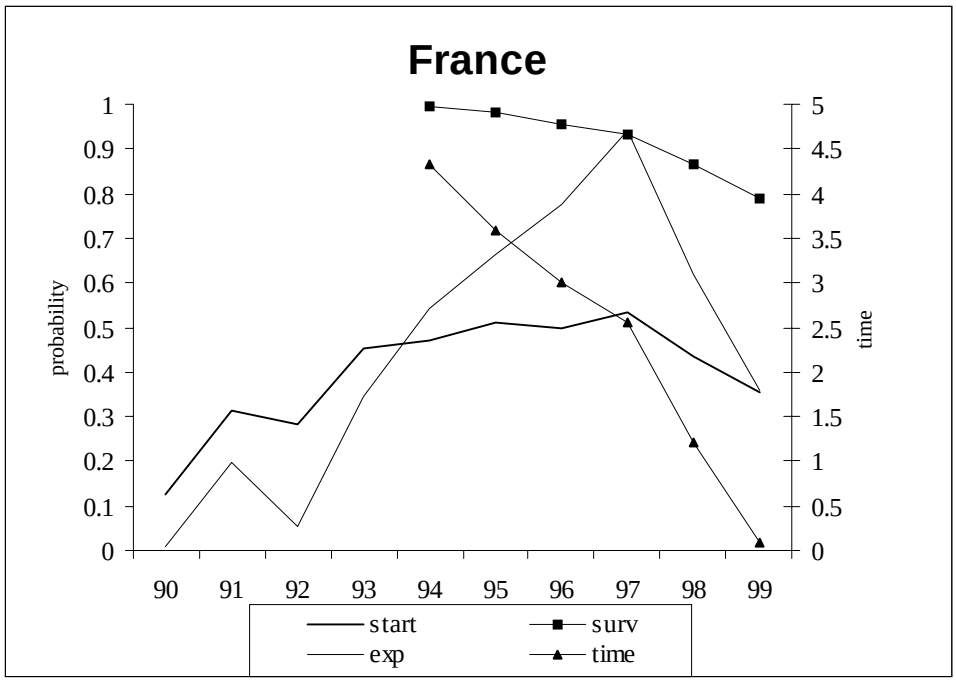
After a short revenue reduction in 1995, which was caused by a deterioration of social security contributions and indirect taxes, these financing tax measures helped to largely stabilise actual revenues as a percentage share of GDP. But most of the stabilisation was induced by the improving economic conditions as the fall of the cyclically adjusted revenue levels, particularly for social

[14] The predicted values for starting a consolidation is 52 percent and the likelihood of choosing an expenditure-based strategy 0.84 in 1996.

security contributions, indicates. On the expenditure side of the budget, the level of cyclically adjusted primary spending continuously declined from 1992 onwards due to the reforms introduced by successive Finish governments until 1999. Thus, the dominant expenditure-based strategy of the consolidation effort actually characterised the fiscal development for almost the entire decade. The strongly improving primary balance, resulting from the above average economic performance of the economy, the continuous consolidation efforts and the falling interest payments allowed the Finish government to comfortable meet the three percent deficit limit and to reverse the growth trend of the debt level. The consolidation, moreover, proved to be persistent by continuing into 1999.[15]

3.1.4 France

France experienced a considerable fiscal expansion at the turn of the decade, which led to a sharp deterioration of the fiscal balance during the economic crisis. Thus, the public deficit mounted to six percent of GDP in 1993, when the French government submitted its first CP. The French government proposed to reduce the deficit to less than 2.5 percent of GDP in 1997, which would suffice to stabilise the debt level at the end of the CP. Given the level of taxation, this should be done by an expenditure-driven consolidation strategy.



Since the debt-GDP ratio remained low despite the fiscal expansion of the turn of the decade our model predicts a moderate probability of starting a consolidation effort and choosing a strategy of expenditure reduction in 1994, when measures of the consolidation strategy were set into force.[16] In fact, the consolidation effort initially was somewhat half-hearted and overall unsuccessful regarding the government's objective to reduce the expenditure and debt level. The reason was a combination of contractionary and expansionary spending initiatives, which had to be compensated by higher taxes and offset by short-term budget adjustments. Among the long-term expenditure reducing measures

[15] Although this would also have been predicted by the estimates of the hazard rate model, these results are less informative. As argued above, the dominant consolidation strategy predates the actual consolidation period so that the survival probability is potentially much smaller.

[16] The predicted probability is 47 percent for the start of a consolidation and 0.54 for an expenditure based strategy.

were a pension reform, enacted in 1994, a tightening of unemployment benefits and a health care reform package initialised in 1995. The effect of these initiatives was partly undone by various programmes granting support to specific sectors, implementing active labour market measures and providing additional social security benefits, e.g. for craftsmen and the elderly. On balance the effect of these initiatives reduced the cyclically adjusted social security spending by 0.9 percentage points of GDP between 1993 and 1997, but did not lower actual social security expenditures. In addition, the government resumed to short-term instruments, such as blocking appropriations, temporary freezing of wages etc., to lower public spending. Overall these measures yielded a reduction of the primary cyclically adjusted deficit of 1.6 percentage points of GDP from 1993 to 1997.

On the revenue side of the budget, similarly contradictory tendencies were evident, though the overall effect particularly of the legal changes introduced in 1996 was an increase of the tax burden. Initially a tax reform was launched reducing the income tax level and a tax scheme supporting small and medium sized firms was installed, partly financed through indirect tax hikes. Later on a social security debt repayment levy was imposed on almost all income to finance the deficit of the social security deficit and the corporate tax rate on larger firms increased as an emergency measure to comply with the Maastricht criteria in 1996. Overall, cyclically adjusted and actual revenues enlarged as compared to GDP and the deficit level could be reduced to three percent of GDP in 1997.

The consolidation effort continued into 1999, but lost considerable force so that the cyclically adjusted primary deficit actually decreased slightly, which relates to a renewed expansionary tendency in transfer payments and a substitution of social security contributions for the health system to direct taxation. The improvement of the actual deficit in recent years is, thus, largely the result of falling interest payments. As shown in the chart, the external circumstances after 1997 contributed to an accelerated deterioration of the survival rate, although the estimates of the model would have predicted a continuation of the consolidation effort, given the debt level, irrespective of the fiscal strategy.

3.1.5 Germany

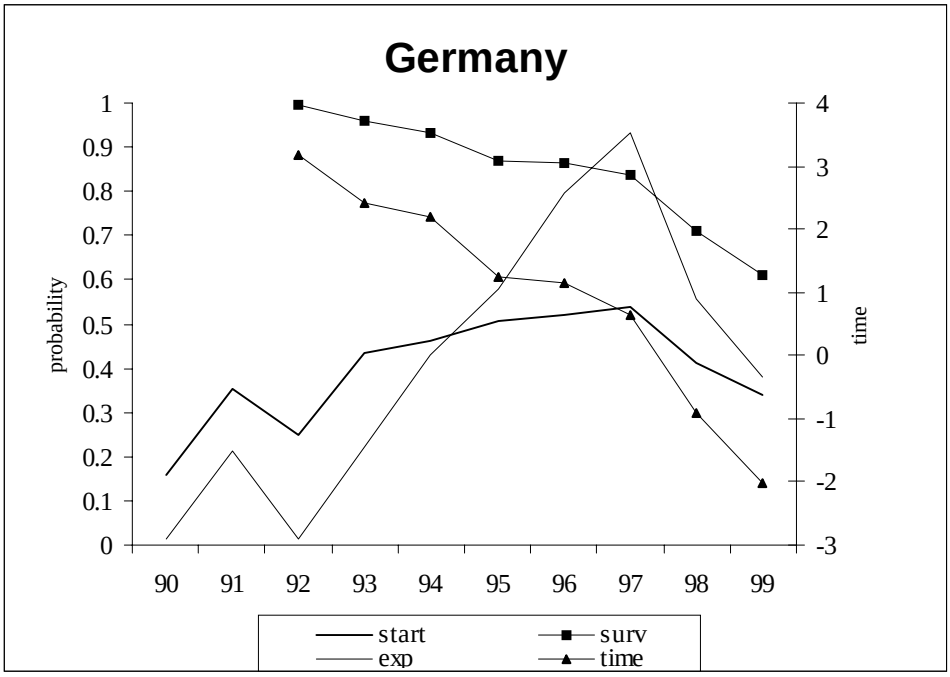
When the German government submitted its first CP in 1991, it envisaged a consolidation of public finances reversing the unification-related fiscal expansion. The consolidation should have been based on a restrained expenditure growth, lowering the spending to GDP ratio, and rising revenues. In the revised CP, presented in 1993, the government reiterated its willingness to achieve a consolidation, reducing the deficit ratio below one percent of GDP in 1997. In contrast to the previous programme, however, it put more emphasis on growth-oriented measures easing the tax burden on business. This second element became more important in the revision of 1996 and the first Stability Program, where the government set forth a two-handed strategy of reducing the overall tax burden and consolidating the budget deficit through a strong restraint on nominal expenditure growth.

The adjustment problems in East Germany proved more severe than expected and the situation worsened when the West German economy entered a recession in 1993. The impact of these two factors is partly evident in the evolution of the general government deficit during these years. Starting from a small surplus in 1989, and a comfortable non-cyclical primary surplus of 2.7 percent of GDP, the budget balance deteriorated to -2.9 percent of GDP in 1991. The consolidation started in 1992, in line with the projections of the CP. But, the budget data do not reflect the actual government strategy since public finances were marked by the creation of several special funds and semi-governmental entities in the post-unification period (Strauch and von Hagen, 1999a). Therefore, a large part of the support to East Germany was not included in government spending bill until finally the stock of

liabilities was ascribed to the federal government, which caused the reported debt level to jump 10 percentage points in 1995.[17]

The government initiated a new consolidation effort in 1993 as part of a "social pact" to end the unification period. The retrenchment program included cuts in unemployment and related transfers, an increase in indirect taxes and social security contributions and several measures to reduce tax expenditures. But the German government pursued conflicting goals with its tax policy during the following years. On the one hand, it had to meet further financing needs due to its inability or unwillingness to curtail social transfers, which would have hit particularly the New Länder. On the other hand, it wanted to reverse the unification- related increase in the tax burden on businesses to promote investment. Contradicting tax initiatives were taken, including tax reductions on corporate income, the extension of a temporary "solidarity" income-tax surcharge, the increase of taxes on wealth and contributions to a new insurance system, which alleviated the heavy deficits incurred in pension and health insurance funds in the short-run. On the expenditure side, a reduction in social assistance payments and a phased reform of pension benefits prolonging working age was enacted.

However, social transfers continued to increase until 1996 and only moderately decreased thereafter. Therefore, aggregate cyclically adjusted primary expenditures in 1998 were 0.6 percentage points above the level of 1994 and any the consolidation achieved from the mid-1990s onwards, has to be ascribed to a higher taxes.



Although the government improved the primary cyclically adjusted balance from 0.36 percent of GDP in 1994 to 2.21 percent of GDP in 1999, this did not suffice to reduce the actual deficit due to the weak economic performance and a slightly rising interest burden. Moreover, the multitude of tax measures taken by the government eventually rendered revenues unpredictable. Both developments forced the government to take some short-term emergency measures, such as blocking disbursements of appropriated funds in 1995 and 1997 (Strauch and von Hagen 1999a) to meet the three percent

[17] For a more detailed account see von Hagen & Strauch (1999a).

deficit limit in 1997. The consolidation effort was continued thereafter, showing more persistence than would have been suggested by the predicted values of our hazard rate model. But as argued above, the survival and time curve should be shifted upward since the actual consolidation started later. This would considerably reduce the residual between the predicted and the actual duration of the episode.

3.1.6 Ireland

When Ireland joined the Maastricht convergence process, it was in the advantageous position of having a positive primary surplus and not breaching the three percent limit since several years. The need for adjustment, thus, emerged primarily from the high debt level, which had been accumulated during the 1970s and 1980s. Correspondingly, the first CP set force the target to maintain a deficit below the reference value and to reduce the debt level further. Importantly, it made any other policy choice conditional on the compliance with these objectives. Within this confinement, the guiding objective of the governments' policy was to improve labour market conditions and to reduce unemployment.

Ireland started a consolidation effort in 1991, when the overall economic conditions for this were relatively unfavourable, although, due to its high debt level, the predicted probability was larger (0.44) than in other cases at the time. Our model indicates that the government was relatively indifferent regarding the dominant fiscal strategy.[18] The revenue increase driving the first consolidation was primarily based on a broadening of the corporate tax base and surcharge of one percent on income. Later on, the effect was reversed by the enactment of an income tax reform, concentrating reductions on low-paid workers to increase work incentives and widening the tax deductions for business. The level of the direct tax burden dropped by two percentage points in 1995, which caused the consolidation episode to end. The interruption produced by the new tax measure, nonetheless, was in line with the development that external circumstances would have supported. As

[18] The predicted probability of an expenditure-based strategy was 0.49 in 1991.

shown in the chart, the predicted time horizon for a consolidation effort fell somewhat below one year in 1994.[19]

Although the reduction of the level of expenditures had already started in 1993, it did not suffice to "switch" immediately from a revenue- to an expenditure-based the consolidation. As the figures for cyclically adjusted transfer payments indicate, the reduction of expenditures was not entirely based on the economic recovery, but also the result of discretionary measures. During several years, the government introduced a tightening of eligibility criteria to unemployment benefits or increased those at a rate below inflation or wage increases. In addition, a relative reduction of wage payments, among others due to wage moderation agreed upon with public sector unions, contributed to this development. As a result, primary cyclically adjusted expenditures fell from 34.1 percent of GDP in 1992 to 28.7 percent of GDP in 1999. The strong economic growth, far above the European average, as well as falling interest payments further reduced the actual expenditure level allowing Irish governments to offset the accompanying fall of the revenue level and to build up an overall budget surplus from 1997 onwards. The expenditure-based consolidation produced by these measures[20] goes beyond the duration that would have been predicted based on external circumstances. Particularly the stark decrease of the debt level contributed to a rapidly falling predicted survival rate. Accordingly, external circumstances would have indicated that the consolidation ends in 1998.[21]

3.1.7 Italy

When the Maastricht Treaty was approved and Italy submitted its first CP in October 1991, a tremendous consolidation effort seemed necessary for Italy to meet the Maastricht reference values, since its debt level was above GDP and the fiscal deficit stood at 10 percent of GDP. Concomitantly, the CP enumerated a range of policy initiatives in all areas of public finance, at an aggregate level leading to a strong expenditure based consolidation. The Italian CP and the first Stability Program later confirmed this strategy.

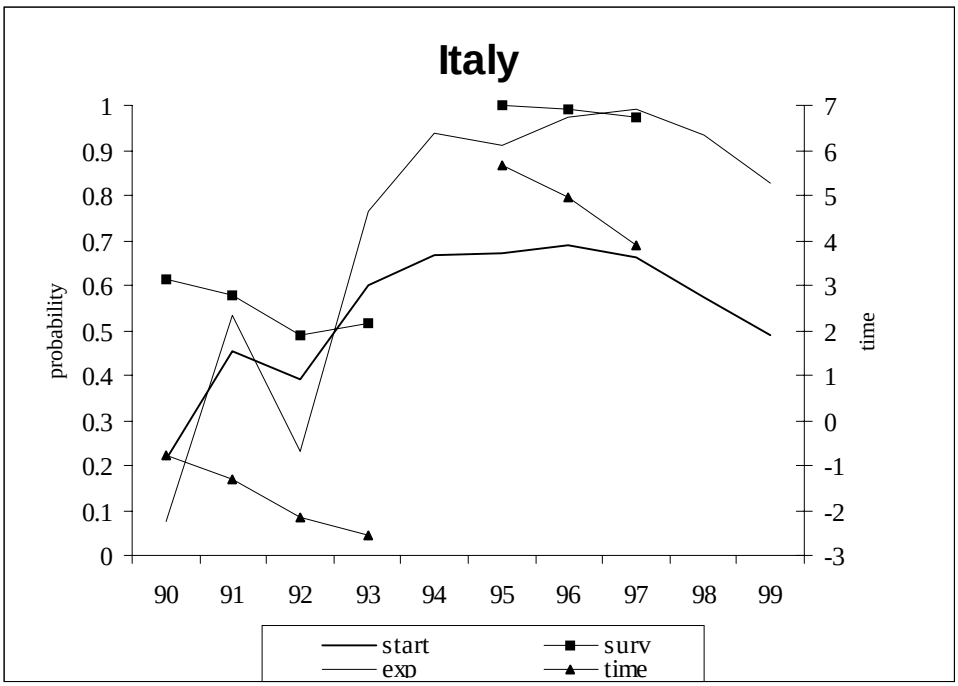
Italy had already pursued a consolidation since 1986, though the overall effect of this effort, which experienced small setbacks in between, was relatively moderate. From 1985 to 1990 the primary structural deficit was reduced by 1.7 percentage points of GDP. The consolidation process gained force in the subsequent years, when the external conditions were rather adverse for starting such an effort and the predicted survival rate was quite low. Actually, our estimates would have predicted the end of the process even before 1990.

Contrary to the announcement of the CP, the government undertook initially more pronounced steps to raise revenues. Many of those measures were temporary and enacted as part of supplementary budgets to achieve a short-term adjustment. Among others, personal income tax rates were increased, social security contributions raised and corporate property reassessed. The impact of these measures was an increase of revenues from 41.7 percent of GDP in 1990 to 48.3 percent of GDP in 1993. In addition, the government was able to reduce expenditures due to lower public investment and inter-governmental transfers. Other measures, such as restrictions on public sector pay and an initial pension reform were not effective, as indicated by rising spending levels in both categories. The fiscal stance of the government changed in 1994, when several of the temporary measures ended and the government decided not to renew or replace them to not undermine the economic recovery of the country. This produced a sudden revenue shortfall, where actual public resources dropped 2.2 percentage points, which was not offset by a corresponding spending cut.

[19] The reduction of the debt level and the improvement of the overall deficit would have exercised a counter-veiling impact on the actual hazard rate.

[20] The predicted probability of an expenditure-based strategy is 0.85 in 1996.

[21] Considering the fact that the expenditure reduction on which the consolidation was based, already started in the early 1990s, which is not captured in the estimations, it could be argued that the prediction error is probable even larger.



From 1994 onwards, the government undertook more serious efforts to cut public spending: transfers to sub-national governments were reduced, a pension reform implemented, the health care sector reformed and more effective restraints concerning pubic wage payments exercised. This reduced the cyclically adjusted spending level from 43.4 to 40.9 percent of GDP between 1993 and 1997. The effect was even slightly supported by the economic situation, since actual expenditures fell 3.9 percentage points during this time period. But since the public deficit still remained at 6.5 percent of GDP in 1996, in addition, several revenue raising "emergency measures" where implemented when the government eventually decided to definitely meet the three percent criterion. Among others, a "Euro tax", i.e. a surcharge on income, was temporarily imposed. According to the emergency package, actually most of the remaining adjustment should be achieved through higher revenues.[22] In fact, cyclically adjusted revenues increased 2.3 percentage points of GDP while primary expenditures declined 0.7 percentage points.

In 1998, the consolidation ended after this extraordinary effort has been made. The reduction of revenues due to a broad based income tax reform implemented in 1998 was not matched by similar expenditure cuts, although the government imposed restraints on social transfers and health care expenditures. Thus the consolidation effort ended, even though the actual deficit improved slightly by 0.1 percentage points due to the growing economy and the significantly falling level of interest payments.

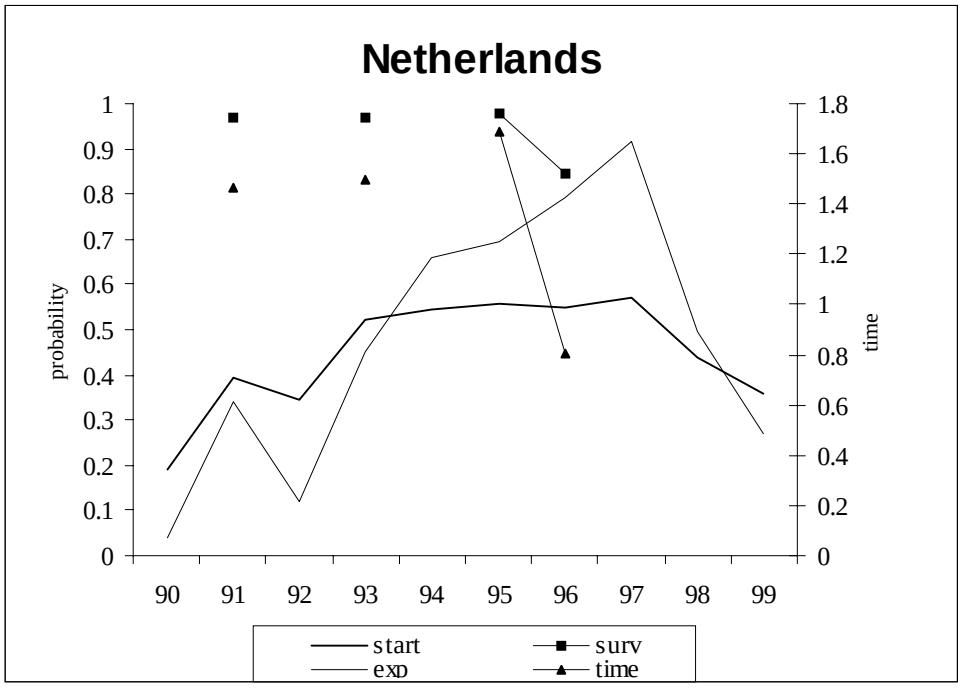
3.1.8 The Netherlands

Compared to Italy, the fiscal position of the Netherlands was relatively favourable in 1992, when the government submitted the first CP. The deficit was 4.4 percent of GDP and the debt level 76.4 percent of GDP. In line with the coalition agreement taken by the government, the CP forecasted to meet the reference value already in 1993 and the debt level to start declining from 1994 onwards. The consolidation was planned to be mostly expenditure based. This strategy was reconfirmed by the

[22] Due to the high debt level, relatively low OECD output gap and the improving OECD surplus, the estimates of our probit model would have suggested the choice of an expenditure based strategy in 1995 with a likelihood of 0.91.

subsequent CP (1994-1998), which used the spending level as the primary fiscal planning variable. In addition, the CP put particular emphasis on structural measures and integrated fiscal policy into the overarching macro-economic strategy to reduce unemployment.

After the start of the Maastricht process, the first fiscal consolidation occurred in 1993 when the external circumstances were relatively favourable to such a strategy. The predicted probability for the beginning of a consolidation episode was 0.52. The effort was based on revenue and expenditure reducing measures, although the former prevailed.[23] The government took several measures to avoid an excessive overrun of the budget, such as across-the-board cuts and delays of payments. On the revenue side of the budget, the advanced collection of revenues and higher social security contributions were imposed. These measures lead to an increase of cyclically adjusted revenues by 1.4 percentage point of GDP and of actual revenues by 0.7 percentage points of GDP from 1992 to 1993. But the revenue gains were quickly reversed in the following year by a tax policy geared toward a lower tax burden on labour and the anti-cyclical stimulation of the economy. As a consequence of tax and social security rate reductions, revenues fell 2.8 percentage points and the fiscal consolidation ended. Predictions based on external conditions indicate that the survival rate was still close to one and the consolidation could have persisted for more than a year under stable economic circumstances.



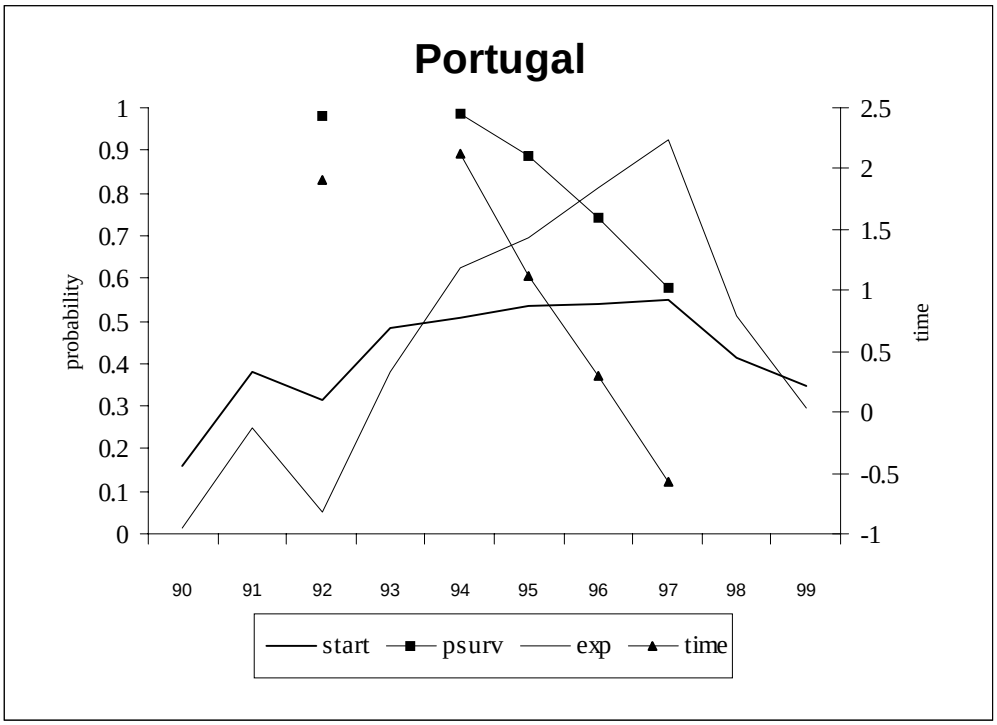
Apart from short-term expenditure measures, the government took also more lasting steps to overhaul the social security system from 1992 onwards, such as a health care reform, a tightening of the disability and unemployment scheme and restrictions on minimum social security benefits. The effect of these policy initiatives was a reduction of cyclically adjusted primary expenditures from 45.9 percent of GDP in 1992 to 39.9 percent in 1998. This more than compensated the labour oriented decrease of revenues in 1995 and 1996, producing an improvement of the budget balance by 2.5 percentage points of GDP.[24] Supported by an above average domestic demand, the primary deficit improved to 2.9 percent of GDP in 1996, permitting the government to even somewhat relax the fiscal stance from 1997 onwards and still staying well below the three percent deficit limit. The

[23] The predicted probability of an expenditure-based strategy is 0.45 for 1993.
[24] The pobability of choosing an expenditure-based consolidation strategy is 0.70 for 1995.

ending of the consolidation episode was in line with the evolution of external conditions as the predicted value of the time variable (0.8) for 1997 suggests. Due to falling interest rate payments from 1997 onwards and a cyclical improvement of the primary balance, the total deficit however even improved from 1.2 percent of GDP in 1997 to 0.6 percent of GDP in 1999.

3.1.9 Portugal

In 1991, when the first Portuguese CP was released, the rising debt level peaked at 67.3 percent of GDP and the overall deficit reached six percent of GDP. Correspondingly, the CP proposed a "tough" consolidation course, which would have lowered the budget deficit to less than three percent between 1993 and 1995. Since the consolidation was embedded in the broader objective to achieve price stability, the level of spending was to be determined in line with the targeted inflation rate. After an initial setback, the CP had to be up-dated and fiscal consolidation became an objective *per se*. The revised CP envisaged reaching a deficit level of 3.25 percent of GDP on average between 1995 and 1997. This as well as the CP submitted in 1997, moreover, put some emphasis on expenditure reduction. Yet the latter also emphasised the "social responsibilities" of the government, indicating a somewhat expansionary fiscal stance.



The first consolidation started in 1992, when economic conditions were rather adverse according to our econometric estimates. The probability of starting a fiscal adjustment was 0.32, among others, due to the deterioration of the budget balance in OECD countries. The consolidation effort was entirely revenue based due to changes in income taxes, VAT rates and the beginning of efforts to improve the tax administration.[25] Cyclically adjusted revenues rose from 36.4 percent in 1991 to 40 percent in 1992 and produced a short-term consolidation. But the effort immediately ended, when the government reacted to the economic crisis with expansionary measures, such as subsidised loans to

[25] This is clearly in line with the predictions of our probit model which find a probability of 0.05 of implementing an expenditure-based consolidation strategy.

farmers, subsidies for exporters and a program of low cost housing loans. These measures drove cyclically adjusted primary expenditures from 36.6 percent of GDP in 1992 to 39 percent of GDP in 1993, despite a tightening pension reform. Since the output gap strongly deteriorated at the time, this is what may have also been expected by looking at external circumstances, as the estimates in the chart suggest.

When the international economy improved and the higher debt level increased the need for fiscal tightening, the external conditions for a consolidation effort improved and a second consolidation effort was undertaken from 1994 onwards. The effort was initially based on expenditure reductions resulting from relatively low wage payments and smaller transfer payments, but then switched to an exclusively revenue driven process, since spending moved to back to its crisis level of 39 percent in 1997.[26] Cyclically adjusted revenues rose two percentage points between 1994 and 1997 largely reflecting the changes in income tax legislation in 1993/4, the more effective tax administration and higher indirect taxes. Although the level of public revenues continued to rise, the consolidation effort since the spending policy of the government, again, became more expansionary.

The consolidation effort was supported by strongly falling interest rate payments from 1995 onwards. This allowed the government reduce the deficit despite new expansionary measures. More specifically, the government introduced a minimum income scheme and subsidised housing loans. The resulting increase in primary cyclically adjusted spending by 0.9 percentage point of GDP was not compensated by a similar tax rise. The end of the consolidation effort in 1998 actually was much later than the estimates of our model would have suggested. The predicted values for the time horizon were already close to one in 1995, predicting an end of the consolidation in 1996 or 1997 if conditions remain stable. On this score, the residual between predicted and actual performance could be termed a "Maastricht effect", since the revenue dominated strategy should have reduced the survival probability even further.

3.1.10 Spain

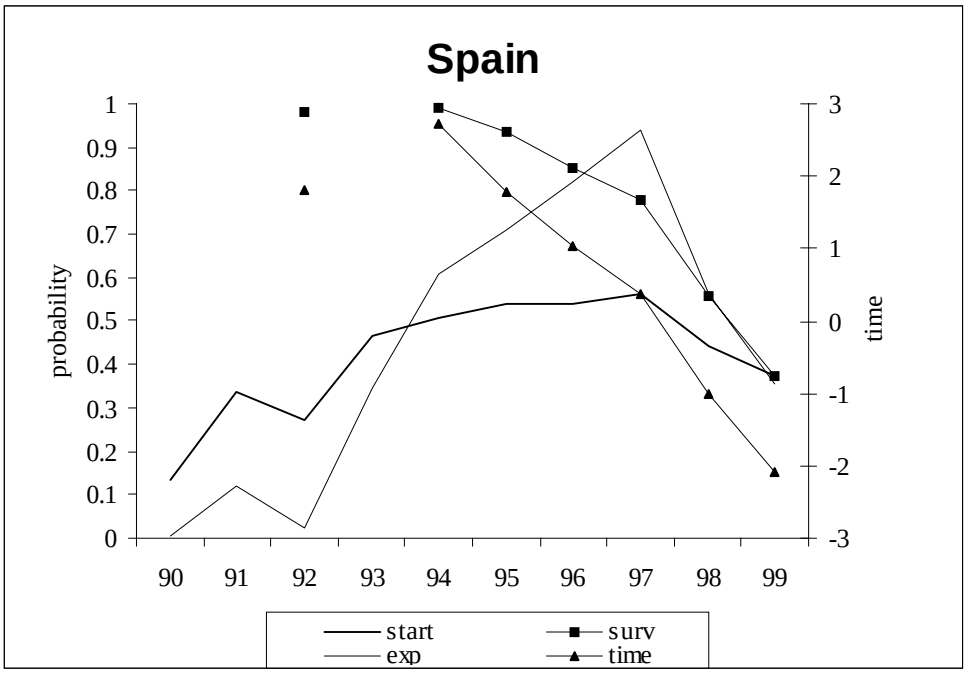
In 1992, when the Spanish government launched its first CP, the deficit was 3.9 percent of GDP and the debt level amounted to 52.1 percent of GDP. Thus the debt level remained well below the critical Maastricht reference value, while the deficit level would have required a mild adjustment to meet the three-percent benchmark. The CP included fiscal policy into a broader two-pronged strategy: a general change in macro-economic policy and structural reform, particularly in the labour market and the service sector. The updated CP as well as the new CP presented in 1997 and the first Stability Program by and large reconfirmed the strategy of structural change and proposed a consolidation path based on a reduction of expenditures relative to taxes.

As in other countries in Europe, the government started its consolidation in 1992, when external circumstances were not supportive to starting such a strategy.[27] An increase of cyclically adjusted public revenues by more than 2 percentage points as share of GDP produced this fiscal tightening.[28] This tax hike was the result of various "emergency initiatives" taken to reverse the tax shortfall due to a previous income tax reform in 1991. Although the government also tightened social security legislation for unemployment and disability transfers, these measures were not effective in reducing the spending level. Thus the consolidation effort ended, when the economic crisis propelled a more expansionary spending strategy. Transfer payments to social security funds were the primary source of

[26] The predicted probability of an expenditure-based strategy is 0.62 for 1994.
[27] The predicted value for the probability to initiate a fiscal consolidation is 0.27
[28] The predicted probability of starting a revenue-based consolidation was 0.98 at the time.

the fiscal expansion following in 1993. Thus a largely crisis induced policy set ended the consolidation effort earlier as it would have been the case under more stable fiscal conditions.[29]

Since the overall budget deficit had deteriorated to 6.6 percent of GDP in 1993, a more rigorous consolidation effort was necessary to reach the three percent benchmark deficit level in 1997. From 1994 onward, the government contained public wage payments through agreements with unions, changes in indexation and a modification of wage setting institutions. Intergovernmental transfers, particularly for health care, were contained by an agreement with lower levels of governments. Social security benefits were further tightened and the spending pressure resulting from pension payments was eased by a reform package enacted in 1996. On the revenue side of the budget, policies were geared towards stimulating economic recovery and employment, on the one hand, and rationalising the tax system on the other hand. Social security contributions were set on a long-term declining path, among others, through reductions for employers creating employment. Primary cyclically adjusted expenditures declined from 39.4 percent of GDP in 1994 to 35.1 percent of GDP in 1999. Over the same time period, cyclically adjusted revenues remained largely stable, indicating that revenue shortfalls from lower social security contributions where cancelled out by other tax enlargements.[30]



The overall consolidation pattern was only to a very limited extent supported by lower interest payments allowing a reduction of the deficit level to 1.4 percent of GDP in 1999 as well as the reduction of the debt level. According the estimated model, external conditions lead to an accelerated decline of the survival rate after 1997 and the model would have predicted an end of the consolidation effort already in 1997. It thus underestimates the persistence of the expenditure based consolidation episode.

[29] The predicted value for 1992 was 1.8. Given the strong economic downturn - the output gap deteriorated 3.5 percentage points, a reduction of the expected value is obvious.

[30] Our model yields a predicted probability of imposing stronger expenditure cuts of 0.62 in 1994.

3.2 General Patterns

The different episodes and dominant fiscal strategies for all EU member states from the early 1990s onwards are described in appendix Table A.2.15. Three different adjustment patterns can be distilled. One group of countries, notably Austria, Finland, Sweden and the United Kingdom, pursued exclusively expenditure-based consolidations.[31] Another group of countries, prominently Greece, Portugal and Germany, is marked by revenue-based consolidation strategies preceded or interrupted by spending-induced fiscal expansions.[32] Finally, a group of countries, notably Belgium, Denmark Ireland, Italy and the Netherlands, followed a strategically more volatile pattern. They started with primarily revenue-based consolidations leading into fiscal expansions due to a reduction of revenues. The expansionary episodes are succeeded by expenditure-based consolidation efforts. The European Commission refers to this pattern as a "switching strategy" (EC 1998).

Was there a specific “Maastricht effect” leading the European governments to undertake fiscal adjustments when the conditions for such adjustments were otherwise unfavourable ? An affirmative answer to this question would indicate that the Maastricht process created its own strong political dynamic and helped the governments achieve fiscal adjustments.

To answer the question, we look at the probabilities of starting fiscal consolidations as estimated by our empirical model. This model summarises the fiscal performance of governments in the years from 1970 onwards. Table 13 reports these probabilities for each year a consolidation episode was started by one of the EU member states during the 1990s. We say that the model predicts a consolidation when the estimated probability is at least 50 percent; it predicts no consolidation otherwise.

Table 13 reveals an interesting pattern. There are 11 consolidation starts in the years 1991-94, and 10 in the years 1995-97. These are all as predicted by the model. That is, the consolidations that started after 1995 did so under economic circumstances that made these consolidations quite likely. In contrast, only three of the 11 consolidation starts before 1995 were predicted by our model. The consolidations started in Belgium, Finland, France, Germany, Ireland, Portugal, Spain, and the UK all occurred at times when the economic circumstances did not lead one to expect a consolidation start. Thus, the results suggest that the Maastricht process did create some political pressure of its own on the governments to undertake fiscal consolidations, and this pressure was effective mainly in the first half of the 1990s.

Did the Maastricht process induce a specific choice of fiscal adjustment strategy? To see this, Table 13 reports the estimated probability of the governments to start expenditure-based fiscal consolidations. Comparing this predicted strategy choice with the actual choice we can infer the existence or not of a “Maastricht effect.” Table 13 shows that the model fails to predict the actual choice correctly in six instances. In these cases, the government adopted a revenue-based or a mixed strategy when our model predicted an expenditure-based strategy. Again, it is interesting to note that five of these six errors are in the early 1990s; all but one of the choices after 1995 are predicted correctly. The wrong predictions in the early 1990s are all cases were our empirical model suggests the choice of an expenditure-based consolidation, when the government actually adopted a revenue-based one or went for a mixed strategy. Thus, if there was a “Maastricht effect” inducing governments to undertake fiscal consolidations, the same effect may also have tilted the strategy choice somewhat towards a revenue-based strategy, perhaps because governments hoped to achieve visible results more quickly in this way.

[31] Greece, Sweden and the UK were not discussed above for not being members of Stage III of EMU. The United Kingdom is marked by the most persistent consolidation effort among those three countries, starting in 1994 and lasting until 1999. The Swedish case shows a shorter, but forceful consolidation episode.

[32] Most of the remarkable Greek fiscal consolidation occurred at the beginning of the decade. Then, the consolidation episode was interrupted for one year in 1995 to, finally, continue afterwards until 1999.

Table 13: Probabilities of Starting Fiscal Consolidations and Using an Expenditure-based Strategy in EU Member States During the Maastricht Process

Country	Year	Probability of Starting a Consolidation	Probability of an Expenditure Based Strategy	Actual Strategy
Austria	1995	0.54	0.69	E
Belgium	1992	0.47	0.38	R
	1996	0.69	0.99	E
Denmark	1993	0.53	0.62	R
	1996	0.55	0.78	E
Finland	1993	0.46	0.64	E
	1996	0.52	0.84	E
France	1994	0.47	0.54	M
Germany	1992	0.25	0.01	R
Greece	1996	0.65	0.96	R
Ireland	1991	0.44	0.49	R
	1996	0.58	0.85	E
Italy	1995	0.67	0.91	M
Netherlands	1993	0.52	0.45	M
	1995	0.56	0.70	E
Portugal	1992	0.32	0.05	R
	1994	0.51	0.62	R
Spain	1992	0.27	0.02	R
	1994	0.51	0.61	E
Sweden	1995	0.57	0.77	E
United Kingdom	1994	0.49	0.52	E

Note: The abbreviations of the strategy indicate an expenditure-based (E), revenue-based (R) fiscal consolidation or a mixed strategy (M) based on an adjustment of both resource flows.

As mentioned above, the European Commission (1997, 2000) speaks of a "switching strategy," referring to countries that started with a revenue-based consolidation and later switched to an expenditure-based improvement of the budget balance. A potential rationale for such a strategy could have been that it allowed countries to lock in the benefits of a probable accession to EMU in terms of lower interest rates. This would have improved the overall budget performance and facilitated a later expenditure based consolidation. In fact, this reasoning can be found in the Belgian CPs. The Belgian government explained that it had to show success in the fiscal convergence process from the beginning to stabilise markets expectations and that, therefore, it was necessary to impose hard measures on the revenue side of the budget. But similar reasoning cannot be found in the CPs of the other countries.[33] Furthermore, the revenue-based consolidations were always interrupted by fiscal expansions before the governments adopted expenditure-based adjustment strategies. In the Dutch and the Italian cases at least these expansions were deliberate attempts to revive the economy after the

[33] The European Commission (2000) also characterizes Austria as a country pursuing a switching strategy in 1995-7, changing from a revenue-based consolidation in 1995/6 to an expenditure driven process in 1997. The above description of the Austrian case (see also the Appendix) clearly shows that this is a mis-specification. It may well be that the effect of the measures taken to achieve accession produced a more revenue respectively expenditure leaning consolidation. But the measures taken in 1996/7 were part of one consolidation package, which did not have a specific phasing as an objective.

economic crisis of 1992/3. Thus, it is hard to argue that “switching” was part of a well thought-out strategy.

An alternative notion of "switching" is that the effect of legislation that eventually leads to reduced government spending could be effective only with a time lag. Initially, then, it is dominated by the effect of measures to increase revenues. Therefore, a consolidation may appear as revenue-driven, although the steps taken by the government aimed primarily at cutting public spending. To evaluate this notion, Appendix Table 8.2.16 presents the timing of expenditure and revenue reductions since 1990. The bars provide us with an impression of whether developments leading to specific patterns of consolidations had already started in advance. The upper bar in each country box indicates the consolidation period by a grey shaded area. If the consolidation is expenditure-driven, a line pattern is added. The middle bar indicates the periods of revenue expansion by grey-shaded areas, and the lower bar the periods of expenditure reduction in a similar way.

The table shows that there has been barely a switching pattern as suggested by the above argument. An exception is the Finish consolidation episode in the early 1990s. However, the chart illustrates also that in several cases the strategy driving the consolidation, in fact, already emerged before the beginning of the consolidation episode. This holds for the expenditure-based episodes in Austria (in the second half of the 1990s), Belgium, Denmark, Finland (in the second half of the 1990s), Ireland, Italy, Netherlands, and Sweden. Moreover, it continued beyond the consolidation episode in Austria (in the second half of the 1990s), Italy, and Sweden. Unfortunately the sample is censored for the remaining countries pursuing expenditure based consolidations so that the persistence of the expenditure strategy is not obvious. Regarding revenue-based strategies, a similar "fore-running" pattern emerged in Belgium (in the early 1990s), France, Germany, Greece, the Netherlands (in the early 1990s) and Portugal (in the early 1990s). Still, this pattern illustrates the fact that the prevailing fiscal strategies during the Maastricht process pre-dated the actual consolidation episode and, hence, the consolidation achieved was in some cases the result of longer-term effort. This finding does not invalidate the previous consideration about the choice of expenditure or revenue-based strategies. As evident from the detailed country studies, lasting expenditure reductions or revenue increases where never the result of a one-off measure, say a pension reform, but continuous policy initiative in a specific direction. Moreover, new initiatives could quickly overturn the fiscal tightening, whatever the previous direction has been. In other words, certainly no government pursued a consolidation strategy "by default" because everything necessary had been done before.

Finally, can we explain the duration of consolidation episodes and interruptions or setbacks during the Maastricht Process? In light of the previous parts of the study, the immediate question is whether the greater persistence of expenditure-based consolidations can also be confirmed for the sample of EU countries from the early 1990s to the present. To answer this question, Table 14 reports the predicted time to continue in the last year of the consolidation episodes during the 1990s. The estimated time to continue indicates for how long the consolidation episode is expected to go on given the empirical model. A negative value means that the model predicts an earlier end to the consolidation episode than the actual one. The episodes are ordered according to the time variable.

Table 14: Predicted Conditional Survival Rates and Duration of Fiscal Consolidations of EU Member States During the Maastricht Process

Country	Year	Survival	Time	Strategy
Italy	1993	0.51	-2.54	R
Spain	1999	0.37	-2.10	E
Germany	1999	0.61	-2.01	R
United Kingdom	1998	0.68	-0.76	E
Denmark	1999	0.52	-0.75	E
Sweden	1998	0.56	-0.64	E
Portugal	1997	0.58	-0.57	R
Austria	1992	0.72	-0.23	E
Finland	1999	0.71	-0.04	E
Belgium	1999	0.71	-0.02	E
France	1999	0.79	0.09	M
Ireland	1998	0.77	0.45	E
Netherlands	1996	0.84	0.80	E
Ireland	1994	0.85	1.06	R
Greece	1994	0.86	1.18	R
Netherlands	1993	0.97	1.49	M
Greece	1998	0.90	1.71	R
Spain	1992	0.98	1.80	R
Portugal	1992	0.98	1.91	R
Belgium	1994	0.93	2.05	R
Denmark	1993	0.99	2.46	R
Finland	1994	0.96	2.56	E
Austria	1997	0.97	3.65	E
Italy	1997	0.97	3.91	R

Note: The abbreviations of the strategy indicate an expenditure-based (E), revenue-based (R) fiscal consolidation or a mixed strategy (m) based on an adjustment of both resource flows.

The table shows that most of the consolidation episodes that lasted longer than predicted were expenditure-based (7 of 10) and ended in 1998 or 1999. Since 1999 is the last year of our sample, the consolidation might have continued even further in cases where 1999 is indicated as the "last" year, leading to even smaller time values. Conversely, most cases where the consolidation ended earlier than predicted are episodes of revenue-based or mixed approaches, and most of these cases ended before 1998. Since the empirical model does not include the quality of the adjustment as an explanatory variable, these findings are consistent with our earlier result, that the quality of the adjustment has a positive effect on the persistence of consolidation episodes. In view of this, it is difficult to extract a genuine "Maastricht effect" from these results. Together with the evidence from Table 13, however, we may conclude that a positive "Maastricht effect" on the likelihood of consolidations to start especially during the first half of the 1990s also created a bias towards revenue-based adjustments and, therefore, towards adjustments that did not last as long as the economic circumstances might have warranted otherwise.

4. BUDGETARY INSTITUTIONS FOR SUSTAINABLE PUBLIC FINANCES

A growing body of empirical and theoretical literature suggests that the institutions governing the budget process are important determinants of a country's fiscal performance (von Hagen 1992, von Hagen and Harden, 1994b; see also the international contributions in Poterba and von Hagen, 1999, and von Hagen and Strauch, 2000; see also Buti and Sapir, 1998). Budgeting institutions encompass the formal and informal rules governing the drafting of the budget law, its passage through the legislature, and its implementation. These rules distribute strategic influence among the participants in the budget process and regulate the flow of information. In doing so, they have important effects of the outcomes of budgeting processes.

4.1 Budgeting Institutions for Sustainable Public Finances

The starting point of the institutional approach to public budgeting is to recognise the externality resulting from the fact that government spending is commonly targeted at specific groups in society while being financed from a general tax fund to which all tax-payers contribute. The resulting incongruence between those who pay for and those who benefit from individual public policies implies that individuals bidding for the funding of such policies tend to recognise their full benefit but only a part of their social cost, as the costs are spread out more widely over the entire society. In such situations, common to all modern democracies, policymakers engage in excessive spending, since the constituencies they represent and who benefit from the public policy programs they bid for do not bear the full costs of these programs. Putting the argument into a dynamic context, one can show that the externality problem results in excessive deficits and debts (Velasco, 1999).

4.1.1 Fragmentation of the Budget Process

In the American form of the argument, politicians representing individual electoral districts use the federal budget process to direct money taken out of the national general tax fund to public policy projects benefiting their electoral districts. The difference between the spatial incidence of the costs and benefits of these projects creates a tendency to overestimate the net marginal benefit from spending. As a result, federal government spending grows too large. Applying this paradigm to a European political context, where politicians often represent countrywide groups in society rather than regions or electoral districts requires a translation of the geographical dimension into one of different constituencies in society. Still, politicians representing different groups in society spend money taken out of a general tax fund on programs aimed at different groups in society.[34]

The core of the argument then is that public budgeting involves a co-ordination failure among the relevant decision makers. The argument suggests that the tendency to spend more and to run large deficits increases with the number of representatives of individual spending interests that are allowed to make autonomous spending decisions, i.e., the more *fragmented* the budget process is. Since the most important representatives of individual spending interests in European governments are the individual spending ministers, an implication of this proposition is that government spending and deficits grow with the number of spending departments and ministers in a country's government. Kontopoulos and Perotti (1999) confirm this proposition empirically for OECD countries.

[34] Italy's experience with growing welfare payments is a prime example for this mechanism. In the past 30 years, Italian politicians used the disability pension system quite openly to buy voter support. See New York Times, Sept. 19, 1997.

4.1.2 Centralisation of the Budget Process: Delegation and Contracts

Interpreting the problem of excessive spending and deficits as a co-ordination failure leads one to look at similar problems in practice for solutions. Political economy emphasizes the importance of decision-making rules that promote a comprehensive view of the externality problem, i.e., one that takes the full benefits and costs of the costs and benefits of all public policy projects. The solution to fragmentation is thus *centralisation* of the budget process, the creation of institutions forcing the participants in the budget process to recognise the true marginal cost and benefit of the projects financed from the general tax fund, and thus to internalize the budgeting externality.

There are two basic institutional approaches to achieve centralisation (Hallerberg and von Hagen, 1998): the *delegation approach* and the *contracts approach*. Both can be found among the budget processes in Europe (von Hagen, 1992). The former emphasizes hierarchical relationships, the latter horizontal relationships among the relevant decision makers. Under the delegation approach, the budget process vests one decision maker with significant strategic powers over the other participants. This is usually the finance minister who is less bound by special interests than ministers heading spending departments. Internalizing the relevant externalities, the finance minister will promote more efficient decisions.

The delegation approach builds on the following key characteristics:

- A finance minister vested with strong agenda-setting power relative to the remaining members of the executive; typically, this involves the right to make binding proposals for the broad budgetary categories and information advantages.
- A finance minister vested with strong monitoring capacity in the implementation of the budget and the power to correct deviations from the budget plan, e.g., through cash limits and the requirement of disbursement approvals from the finance department;
- A strong position of the executive relative to the legislature in the parliamentary phase of the budget process; this involves strict limitations on the scope of parliamentary amendments to the executive's budget proposal and a limited role of the upper house of parliament in the process where applicable.

Under a contract approach, the participants start the budget process by negotiating and agreeing on a set of key budgetary parameters, usually spending targets for the individual spending departments. Here, it is the process of negotiation that makes the participants realize the externalities created by the general tax fund.[35] The following features of the process characterize the contract approach:

- A strong emphasis on budgetary targets negotiated among all members of the executive at the beginning of the annual budget cycle and which are regarded as binding for all spending departments; often these targets are backed up by a multi-annual fiscal program as part of the coalition contract among the ruling parties.
- A finance minister vested with strong monitoring capacities in the implementation of the budget; yet little agenda setting powers.
- A weak position of the executive relative to the parliament exemplified by weak or no limits on parliamentary amendments to the budget proposal, and strong monitoring capacities of parliamentary committees overseeing the activities of individual departments of the executive.

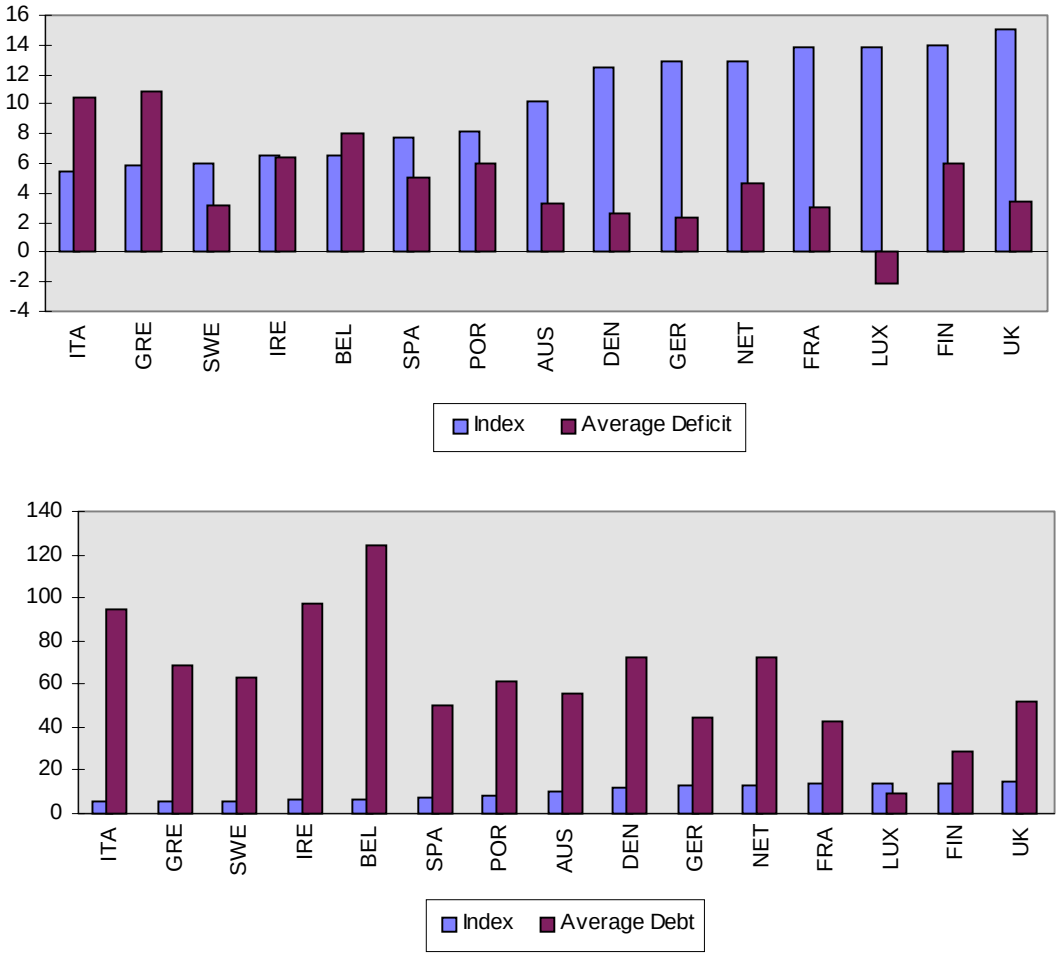
To evaluate the importance of centralisation of the budget process for budget deficits and debts, von Hagen and Harden (1994, 1996) following von Hagen (1992) construct an *index of centralisation* capturing the most important features of the budget process in European governments. A high value

[35] See von Hagen and Harden (1996) for a formal discussion of the two approaches.

on the index, which ranges from zero to 16, indicates the prevalence of strong elements of centralisation in a country's budget process.

Figure 1 shows this index together with the average deficit ratios and debt ratios of the EU countries over the 1980s and early 1990s. The upper chart clearly shows that countries with a low degree of centralisation have larger deficits than countries with a high degree of centralisation. The lower chart shows that the same conclusion can be reached regarding the level of public debt. Strengthening institutions that reduce fragmentation of budget decisions and promote a comprehensive view of the costs and benefits of government activities reduces the government deficit.[36]

Figure 1: Budget Processes, Deficits and Debt



Note: OECD Economic Outlook (1997), European Commission (1996) and von Hagen & Harden (1995). Deficit and debt averages are based on the period 1981-1995.

More detailed empirical studies for the EU member states (Hallerberg and von Hagen, 1999), for Latin American countries (Stein et al., 1999), for Asian countries (Lao-Arayo, 1997), and for state governments in the US (Strauch, 1998) all confirm that centralisation of the budget process reduces

[36] Statistical tests confirm this visual impression. The rank correlation between the degree of centralization of a country's budget process as measured by the index and its average deficit over the period considered is significant and negative ($\rho = -0.69$). Similarly, the rank correlation between the degree of centralization of the budget process and the debt ratio is significant and negative ($\rho = -0.60$). While these statistics are based on long-run averages, Hallerberg and von Hagen (1999) show that the index of centralization has a negative and significant coefficient in panel regressions explaining the annual deficits in the 15 EU member states over the 1980s and 1990s.

the deficit bias of fiscal policy. The literature shows that this is true in very different cultural and political settings. In addition, Hallerberg and von Hagen (1999) and von Hagen and Harden (1994) show that countries ranking high on the index of centralisation conducted more effective counter-cyclical stabilisation policies. Thus, the fear that less deficit-prone budget processes become overly rigid and prevent effective stabilisation is not empirically warranted.

This body of research, then, provides important background to the provision of the Maastricht Treaty (Article 3 of the Protocol on the EDP) that the governments of the member states ought to implement institutions that enable them to fulfil their obligation to maintain sustainable public finances.

4.2 Institutional Reform and Institutional Choice

The potential of institutions to improve sustainability raises the question, which is the appropriate approach to solving the externality problem of the budget process for a given country. Hallerberg and von Hagen (1998, 1999) show that the two approaches are suited for different types of governments. Delegation is the proper approach for single-party governments, while contracting is better suited for multi-party coalition governments. In a nutshell, it is difficult for a coalition government to work under a strong finance minister, since the latter necessarily comes from one of the coalition parties. Vesting him with special authorities raises concerns among the other parties about a fair treatment of their spending interests in the budget process. At the same time, a commitment to fiscal targets is harder to keep for a single-party government, since there is no effective threat against reneging on the targets. In contrast, the threat to break up the coalition is a very effective one for enforcing negotiated budget targets in multi-party governments. Enforcement of the budget targets under the delegation approach ultimately relies on the ability of the head of the executive to remove incalcitrant spending ministers from office. This power may exist in single-party governments, where the hierarchy in cabinet conforms to the hierarchy of party power structures. But it does not usually exist in coalition governments, where the individual parties in the coalition each have the right to choose the individuals filling the positions assigned to them in the coalition agreement.

The important factor in this context is the national electoral system. Since electoral systems of proportional representation are most likely to produce coalition governments, the contract approach is the more adequate one for states with such systems. In contrast, plurality electoral systems typically produce one-party governments, which makes the delegation approach more adequate for states with such systems. Among the EU states, the suggested pattern of institutional choice is strongly confirmed. As shown in Table 15, states with PR systems chose a contract approach to the budget process to achieve a higher degree of centralisation, while states with plurality systems chose a delegation approach as a solution.[37]

Obviously, if the same institutional model does not fit all countries, institutional choice is a difficult and important matter, in which a country's political, economic, and cultural characteristics all come to play. The implication, however, is not to put aside the importance of institutional reforms as an element of regaining sustainability of public finances. Instead, it is important recognise that institutional reform must take into account the peculiarities of the national political systems.

[37] The odd case in this table is Germany. To understand this case, it is important to realize that Germany's PR system is augmented by a minimum vote requirement: Parties winning less than five percent of the votes do not obtain any seat in parliament. As a result of this, post-war German governments have typically been two-party coalitions a one large and one small party (the liberal democrats). In this situation, neither coalition partner could threaten effectively to break up the coalition, since neither one would easily find an alternative partner for a new coalition. The ineffectiveness of the threat implies that the contracting approach does not work, making Germany a delegation state instead.

Table 15: Electoral Systems and Institutional Choice

Electoral System	Institutional Choice		
Proportional Representation (PR)	Contract	Delegation	Fragmentation
A, B, DK, SF, IRL, L, NL, P, E, S	A, B, DK, SF, IRL, L, NL, P, S*, E*		I, E*, S*
Countries with plurality systems or with PR and restrictive minimum vote requirements			
D, F, GRE, UK		D, F, UK	GRE

Source: von Hagen (1997). *Sweden and Spain introduced measures moving towards a contract model in the 1990s.

4.2.1 Developments of National Budget Processes in the 1990s

The 1990s saw important changes in the budget processes of several EU countries, though not all of them to strengthen fiscal discipline. Already in the 1980s, the Irish government took steps to improve its budget process (De Haan et al, 1999; von Hagen, 1998). One element in this was the introduction of specific medium-term fiscal targets. The coalition agreement of December 1994 made explicit reference to these targets and the commitment of the new government to lead Ireland into the monetary union. Starting in 1996, the Irish government introduced explicit multi-annual budgeting, whereby the consequences of budgeting decisions for the next two years t have be taken into account.

The budget process now starts with an annual "Estimates Circular" that calls upon the spending departments to make expenditure demands complying with these targets. The role of the finance minister then is to negotiate adjustments of the individual demands to assure consistency with the overall targets. Starting in 1996, the implementation phase of the budget was improved by introducing cash-limited programs, i.e., payments under entitlement programs are now conditional upon the availability of sufficient funds.

Sweden also undertook drastic measures to improve its budget process in the early 1990s. The reform came as part of broader effort to overhaul the Swedish system of government. As in Ireland, the move was towards centralisation under a contract approach (Molander, 2000). The reform of the budget process was cast in a budget and financial management act, giving it some visibility. The annual budget cycle was set on a calendar basis and now starts from a medium-term forecast of the economy and government revenues.

An important element of the new process is a two-day conference of all members of the executive early in the budget process, during which key parameters of the next year's budget are fixed. This includes an expenditure ceiling and the outline of the budget. The results of this conference are published in the "Economic Spring Bill," giving them stronger commitment power. The reform abolished open-ended appropriations and replaced them with "flexible" appropriations instead. Flexible appropriations allow spending departments to carry unused funds aver to the following year, and to borrow from the next year's appropriation. The parliamentary phase of the Swedish budget process now starts with a vote on the expenditure ceiling and other basic parameters of the budget, which locks these in for the rest of the parliamentary debate. Amendments to the budget proposal at later stages must be offsetting in the sense that a proposal for increasing public spending on a specific program must include a proposal for cutting expenditures elsewhere.

The implementation phase of the budget was strengthened by improving the finance ministry's monitoring abilities of the flow of funds during the year. All appropriations are monitored on a monthly basis, so that over-runs can be detected in time.

Austria changed its budget process significantly in 1996 in order to improve the chances of achieving the consolidation necessary for meeting the fiscal criteria of the Maastricht Treaty. The new budget process relates to two years, giving the government the opportunity to plan consolidation measures with a longer time horizon. The reform also gave aggregate budgetary targets greater importance for guiding the decisions during the budget process. These targets are negotiated among the members of the cabinet at the beginning of the budget process.

Belgium is another case of improving the budget process under a contract approach and in the context of a broader reform of the national government. Here, important steps were taken while turning Belgium into a federal state (Stienlet, 2000; see also Hallerberg, 2000, and De Haan et al., 1999). Regarding the budget process, a key element in these was the strengthening of the High Council of Finances (HCF)

The HCF had existed since 1936, but traditionally it played a minor role only as an advisory body to the Ministry of finance. Currently, the HCF has 30 members including representatives of the regions, the central government, the central bank, and outside experts. Most important in our context is the HCF's section on fiscal policy, which has 10 members, one from the Ministry of finance, six from the regions and three top officials from the central bank. This section can recommend at its own initiative to the Minister of Finance that the borrowing of any level of government ought to be reduced. The section also sets fiscal targets for each level of government.

In June 1992, the Belgian parliament gave the HCF the role of monitoring the compliance of all parts of government with Belgium's Convergence Program. The HCF subsequently decided how much each level of government had to contribute to the desired reduction in the debt-GDP ratio and the deficit. When the regions failed to comply with their deficit targets in the incipient recession of 1992, the HCF was asked to write a report every March on all levels of government stating whether or not they had reached their fiscal targets in the previous year. If not, the report was expected to lead to the offender to revise the current budget in a way that reduced his deficit in the current year. The HCF also required all levels of government to use the same accounting rules.

Thus, the HCF is an interesting example for institutional innovation. The council became the enforcing agent of a fiscal contract that involved not only the national government but the regional governments and the governments of the communities as well. The enforcement worked, because no party to the contract wanted to be accused of responsible for the country's exclusion from the first wave of entry to the monetary union.

Important reforms of the budget process also occurred in Italy, and, again, they came in the context of reforming fiscal relations between the national and sub-national governments. Italian public finances had been plagued with a notorious lack of fiscal discipline at the local and regional level since the late 1970s (Bourgignon, 2000). Following the reforms of local government in Italy during the 1970s, Italian public finances were plagued with a lack of fiscal discipline at the local level. Local governments were not allowed to borrow in their own responsibility, but had every incentive to waste public monies. Local governments regularly overspent their budgets and then turned to the national government demanding additional funds. Faced with the threat of a breakdown of local public services such as health and education, the national government saw no alternative to satisfying these demands. Once the practice had been established, large budget deficits at the local level covered ex-post by the national government became the norm.

Starting in 1992, Italian local public finances underwent a far-ranging reform (Bordignon, 2000). The main tenet of the reforms was to re-establish fiscal responsibility at the local level. For this purpose, local governments were assigned own tax revenues, reducing the high degree of vertical imbalance of the public finance system. The central government's responsibility in health services was reduced to financing nationally uniform standards, while the regions were made responsible for covering the cost of any services beyond that standard. In 1995, conditional and unconditional grants from the national government to regions were largely abolished; regions obtained a larger share of tax collections in return. A system of horizontal redistribution of tax revenues among local governments was introduced to reduce inequalities among the regions. Meanwhile, the national government reduced the level of managerial intervention at the local level, thus strengthening the responsibility and accountability of local administrations. Local election procedures were changed, too, to increase the accountability of local politicians to their constituencies.

Adding to the problems of weak fiscal discipline at the local level, the Italian budget process was also weak at the national level (von Hagen, 1992). Significantly, the budget process involved three different ministries, and executive's position as an agenda setter to the legislature was very weak. An important change in this context occurred when Italy changed its electoral law away from a pure system of proportional representation. Since the 1994 elections, three quarters of the seats in the Senate and one quarter of the seats in the Chamber of Deputies are determined according to plurality votes. The intended shift towards a more bi-polar party system, however, occurred only in the 1996 elections. Under the Prodi government, new legislation was passed that moved the budget process in the direction of centralisation under the delegation approach. The former budget ministry was incorporated in the Treasury, which now has a leading role in the budget process. The Treasury was also given the authority to block expenditures, thus reducing the power of the spending ministries during the implementation phase of the budget. Finally, the budget was reorganised recognising "functional targets" and "base units" (Hallerberg, 2000, De Haan et al, 1999). The streamlined budget makes it harder for committees and legislators to introduce additional spending into the executive budget proposal.

In Spain, reforms were introduced during the 1990s that moved the budget process towards a contracts approach to centralisation. The convergence criteria were written into coalition agreements, giving them additional political commitment power. Targets for the annual budget deficit are derived from macro economic forecasts and proposed by the finance minister to the cabinet, which makes a decision on these targets. The finance minister's role in the budget preparation became more important, as this minister checks the consistency of the spending ministries' bids with their numerical spending targets, which are set by the cabinet. Any remaining conflicts are solved in cabinet negotiations.

While the five cases considered so far all moved into the direction of improving the budget process, the German government under Chancellor Kohl and finance minister Waigel headed in the opposite direction. The years following German unification saw a gradual worsening of the German budget process, as the government failed to develop a consistent strategy for dealing with the economic problems of unification.[38]

German budgetary institutions were traditionally among the strongest in the EU (von Hagen, 1992). Important aspects of this were the comprehensiveness of the budget law, the strong position of the finance minister relative to others members of the cabinet, and the strict adherence to the budget law in the implementation. A significant aspect of German unification is that the federal government found ways to undermine and circumvent the traditional institutions. This is indicated, first, by the mushrooming of off-budget funds and entities immediately after unification. Thus, while the federal

[38] See Strauch and von Hagen (1999) and Sturm (1998) for details.

government's debt rose by a mere three percent of GDP from 1989 to 1997, the combined debt of off-budget entities amounted to 12 percent of GDP in 1997, half the size of federal government debt. These funds were not subject to the usual scrutiny of legislative control. A second indication is the increased use of tax expenditures to subsidise the East German economy. While they lead to reduced revenues, these tax expenditures do not appear as expenses in the budget law. A third indication is the loss of influence of the Finance Ministry over the financial decisions in the unification process. A task force in the Chancellor's office took most important decisions concerning the reconstruction of the East German Länder, with little or no influence of the Finance Ministry. Another indication is the emergence of a variety of informal decision making forums such as "round tables" in which representatives of the political parties, social groups and the Chancellor's office made agreements with financial implications that were later presented as unchangeable. A final indication is the increased use of supplementary budgets after 1990. German governments resorted to supplementary budgets only four times between 1952 and 1980; but the Kohl government presented seven supplementary budgets between 1990 and 1997.

Thus, Germany's budget process deteriorated significantly in the wake of unification, becoming much more fragmented than before. Clearly, this reflects the political weakness of a government that had faced little chances for re-election in 1989, and seized unification as an opportunity to boost its re-election chances (Strauch and von Hagen, 1999). After 1990, the weakness of the budgetary process reflects the lack of political will to deal with the financial consequences of unification in a consistent matter. Germany's difficulties to meet the fiscal criteria of the Maastricht process are, thus, explained in part at least by the weakening of her budgetary institutions.

In conclusion, we have four cases of significant improvement of the budget process and one case of deterioration during the 1990s. Ireland, Belgium, Sweden, and Italy all used the opportunity of the Maastricht process to implement better institutions at the national level. In Germany, the ailing of the Kohl government, the difficulties created by the way this government had handled German unification, and, perhaps also, the lack of enthusiasm for monetary union in the German public – which would have made maintaining a higher degree of fiscal discipline for the sake of the Maastricht criteria politically easier - caused a considerable slippage in the quality of its budget process. Judging from earlier experience, one should expect that the consolidations achieved by the first group will be more persistent than that achieved by Germany in the late 1990s.

4.2.2 The Excessive Deficit Procedure, Convergence Programs, and the Stability and Growth Pact

In the 1990s, the Excessive Deficit Procedure (EDP) together with the CPs in preparation of EMU constituted an important institutional change of the budget process for all EU member states. The emphasis on multi-annual targets and the regular review procedure required by the Treaty bear resemblance of a budget process under the contract approach. The main difference with a conventional contract-based budget process is that the EDP relies on the European Council and the Commission to enforce the fiscal targets. Thus, enforcement is the role of an agent external to domestic politics. Before the start of EMU, the ultimate penalty for violating the fiscal targets was the denial of membership in the monetary union. After the start of Stage III of EMU, the EDP as strengthened by the Stability and Growth Pact (SGP) continues this *external-enforcement* version of the contract approach, with financial fines as the ultimate penalty for violating the targets.

A proper working of these procedures in the 1990s would, of course, have implied a gradual reduction of the debt ratios of the EU countries. In fact, the opposite happened: The EU's average debt ratio was 60 percent in 1992, it climbed to 73 percent in 1996. Importantly, this increase was entirely driven by the debt expansions in five states: Germany (44% to 61%), France (40 % to 56%), Spain (48% to 70%), Italy (109% to 124%), and the UK (42% to 55%). In contrast, the debt ratios of the other states

were stabilised or fell after 1992.[39] The institutional change introduced with the CPs and the EDP apparently worked very effectively for some states, but failed for others.

Table 16: Budgeting Institutions and Government Debt in the 1990s

Change in Debt Ratio (percent)	All EU Countries	Delegation States	Contract States	Others
1992-96	13.2	15.0	2.9	16.5
1996-99	-3.5	-0.2	-8.0*	-7.1
	All EU Countries	Large States	Small States	Others
1992-96	13.2	15.5	4.0	3.8
1996-99	-3.5	-2.0	-10.2	-9.3

Note: *We treat Sweden and Spain as contract states after 1996.

Above, we argued that the contracts approach is not adequate for countries with single-party governments or coalition governments where, as in Germany, there is a large and a small partner and the latter has no feasible political option for an alternative coalition partner. As the EDP *cum* CPs resembles the contract approach, it is straightforward to ask whether the predictions made in Table 15 concerning the institutional choice between the delegation and the contract approach tell us something about the successes and failures of these attempts to promote fiscal discipline at the EU level.

Table 16 provides an answer. In this table, we report the weighted average increase in the debt-GDP ratios for the delegation states, the contract states, and the states with fragmented budget processes identified in Table 15. As indicated in Table 16, both the delegation states and the states with fragmented budget processes saw large increases in their debt ratios between 1992 and 1996; 15 percent in the case of the delegation states, 16.5 percent in the case of states with fragmented budget processes. In contrast, the contract states saw an average increase in their debt ratios of only 2.9 percent in the same time period. Between 1996 and 1999, the delegation states reduced their debt ratios by an average of 0.2 percent, the states with low centralisation by an average of 7.1 percent, while the contract states achieved an average reduction of eight percent. Clearly, the improvement in fiscal discipline was much greater among the states for which the contract approach is the adequate one. This is prima facie evidence for the proposition that the EDP combined with the Convergence Programs worked better in states where the budget process operates under a contract approach. For Stage III of EMU, this suggests that the Stability Programs and the Stability and Growth Pact will work more effectively in states where the domestic budget process is characterised by a significant degree of centralisation under the contract approach. In contrast, the evidence suggests that the combination of Stability Programs and the Stability and Growth Pact will be less effective in assuring fiscal discipline in delegation states or states with rather fragmented budget processes. [40]

An institutional arrangement relying on enforcement by an external agent such as the European commission presupposes that the external political agent enforcing the fiscal targets carries a large weight in the internal political process. A country's size is probably a first indicator of the importance of an external enforcement body: Small countries typically pay more attention to international

[39] Austria's and Finland's debt ratios increased after 1992, but these countries were not bound by CPs at the time.

[40] This proposition is confirmed by the fact that neither France nor Germany bothered much to announce their plans for tax reforms in the context of their stability programs in 2000.

organisations than large countries do, and they do more so, the more they receive transfers from these organisations (Katzenstein, 1991). This would suggest that the EDP combined with CP worked more effectively in the small states of the EU than in the large states. To assess this proposition, Table 16 reports the changes in the debt-GDP ratios for states whose GDP in 1996 was at least eight percent of EU GDP (large states), and those, whose GDP was less than two percent of EU GDP (small states). The table shows that the average debt ratio of the small states increased much less that that of the large states in the period from 1992 to 1996. Between 1996 and 1999, the small states achieved a much larger reduction in their debt ratios than the large states. States whose GDP is between two and eight percent of EU GDP behaved much like small states during this period. In sum, the evidence indicates that the fiscal framework of Stage III of EMU will work more effectively in the small European states than in the large states. Note, however, that there is some overlap in the groups of delegation states and large states, while all small states except Greece are contract states. Thus, it is impossible to separate the two arguments clearly.

For further insight into the role of the EDP and the CPs in achieving the Maastricht criteria, we conducted a survey among leading economics journalists in the eleven states of the monetary union. The questionnaire used for this purpose is printed in Appendix 8.3. All journalists except those from Germany and Luxembourg responded that the Maastricht criteria were important (Finland) or very important (all others) for economic policy during the 1990s. All journalists except those from Luxembourg and Germany thought that they had an impact of economic policy decisions during this period. Journalists from Belgium, the Netherlands, Italy, Spain and Portugal thought that the fiscal consolidations of the 1990s would not have happened without these criteria. Journalists from Austria, Finland, and Ireland thought that the consolidations of the 1990s would “perhaps” had happened without these criteria. In contrast, journalists from France and Luxembourg responded that the fiscal consolidations of the 1990s would “very likely” have happened even without the Maastricht criteria. Finally, journalists from France, Italy, Portugal, and Austria thought that the importance of the criteria for domestic policies derived from the external political pressures they put on the domestic governments. In contrast, journalists from the Netherlands and Finland saw the effectiveness of these criteria resulting from the role of the targets as guidelines for domestic economic policy. That is, they were helpful by providing a medium-term framework for fiscal policy. Journalists from Belgium. Ireland, Spain, and Luxembourg thought that the importance of the criteria came from both their role as guidelines of domestic economic policies and from creating external political pressures.

By pointing to the role of targets guiding decisions over time and the enforcement of these targets by an external agent, these answers confirm that the EDP and the CPs were regarded as a special version of the contracts approach to centralising the budget process. The answers also confirm that this approach was perceived as less effective in large countries and in delegation states (Germany, France).

4.2.3 Internal Stability Pacts

An important question arising in this context is, to what extent national governments can effectively commit their countries to compliance with the obligations of the EDP and the SGP. In countries, where the national government controls all or most of the public finances, the answer to this question depends largely on its budget process. But in countries where sub-national governments control a large part of the public finances, the answer is more difficult. Several countries have tried to implement “Internal Stability Pacts” between the central and sub-national governments to solve this problem. Apart from the three countries discussed in more detail below, these include Germany and Italy. So far, an agreement on this issue has not been reached between the federal and the state governments in Germany. In Italy, a rule has been introduced making subnational governments

responsible for a part of the central government deficit (Bordignon 2000), but the effectiveness of this rule has not been tested yet.

4.2.3.1 Austria

In light of the need to achieve a considerable improvement of the budget balance in a short period of time, the Austrian government tried early on to co-ordinate fiscal policy with other levels of governments in the federal system. A first agreement was reached on May 5, 1995. The *Übereinkommen des Bundes, der Länder und der Gemeinden zur Vermeidung öffentlicher Defizite* did not pin down specific deficit levels for the different layers of government, but it pointed out the willingness to consolidate the budget balance, primarily through expenditure reductions. Moreover, a "Maastricht-working group" was established, which should monitor the fiscal performance, clarify the statistical concept of the "Maastricht deficit" for the Austrian context and make proposals for organisational changes and the improvement of the information system. (CP May 1996, Hüttner 1999)

A further step was achieved during the negotiations for the federal transfer system (*Finanzausgleichsverhandlungen*) when governments agreed on the maximum deficit, which could be incurred by each level of government in 1997. Under this arrangement, the federal government was "accrued" a deficit of 2.7 percent of GDP and the lower levels of 0.3 percent of GDP. This distribution reflected the actual situation of public finances at the time. Due to the definition of the Maastricht deficit, sub-national levels of government actually often had a considerable surplus.[41] (CP 1996, Hüttner 1996)

Subsequently, this arrangement was replaced by the Austrian Stability Pact (*Vereinbarung zwischen dem Bund, den Ländern und den Gemeinden betreffend die Konsolidierung der Haushaltsführung von Bund, Ländern und Gemeinden*), approved by the Parliament in December 1998. The Stability Pact, first, distributes the deficit permissible to lower levels of government among the different entities. The distribution at the Länder level is largely guided by the share of the population living in the Land. In addition, it established different co-ordination committees: first, a national co-ordination committee comprising representatives of the federal government, the Länder governments and representations of municipalities and second, eight co-ordination committees at the Länder level. The national committee has the task to support or carry forward the co-ordination of fiscal policy, specifically regarding the re-negotiation of deficit shares, establishing guidelines for the medium-term orientation of public finances, monitoring of public finances and elaboration of information standards allowing the mutual surveillance of resource flows. The Länder co-ordination committees have the equivalent mission for the lower level of government. In addition, it specified the procedure if an excessive deficit would result in a sanction for the country. In principle, the contribution of the federal government and each Land to the sanction payments in case of an excessive deficit, is proportional to their share in the excessive deficit itself; e.g. the federal government has to resume three-fourth of the sanction payments if it is responsible for three-fourth of the deficit above the three percent limit. Local governments in one Land share collectively the responsibility for the deficit and their contribution to sanction payments is deducted from their share of joint revenues (*Ertragsanteil*). Länder and local governments are allowed to assign part of their permissible deficit to other entities. No formal procedure has been established if an entity does not comply with its deficit limit and no sanction according to the Maastricht Treaty are imposed. The deficit shares specified by the internal Stability Pact are set into forth until the system of intergovernmental transfers is re-negotiated and changed. The current law remains in forth until the End of 2000 and usually these arrangements are re-negotiated every four years.

[41] Forecasts indicated that sub-national governments would have an overall deficit of ATS 6.4 billion (Hüttner 1999:97)

4.2.3.2 Belgium

Given the task of fiscal adjustments, the federal government was considering a binding agreements with the regions on the fiscal performance from the very beginning of the Maastricht process (see Convergence Programme June 1996). Actually, a first agreement of co-operation between the federal and regional levels of government was passed in July 1994. Since local government finances are subject to the decisions and restrictions imposed by higher levels of government, this level had not to be included in the accord. Subsequently, other intergovernmental treaties followed in July 1996, for the period 1996 to 1999, and November 1999, for the period 1999-2002. (see Convergence Programmes Dec. 1998, Dec. 1999, Stienlet 2000). The agreements established permissible deficit levels for Entity I, i.e. the federal government and the social security system, and Entity II, i.e. the regions and local governments.[42] The figures set forth therein are generally based on the recommendations of the High Council of Finance which also was in charge of monitoring and reporting on the Convergence Process.

The High Council of Finance existed since 1936, but it was revived and strengthened in the context of the decentralisation of the Belgian government system enacted in 1989. The Special Finance Act of 1989 set forth the devolution of public finances over the period 1989-99. Since the regions immediately had unrestricted fiscal authority, but the revenue base was devolved only gradually, there existed the fear that the public deficits could get out control. Therefore, the High Council of Finance was modified so as to supervise and guide the transition process. The High Council is composed of representatives of the federal ministry of finance or and departments, regional representatives, members of the central bank, and economic experts. When the Belgian government set forth its intention to join third stage of EMU in 1999, the High Council, and particularly its permanent section on fiscal policy, was assigned the crucial role of monitoring the execution of the Convergence Plan by federal and regional institutions. The High Council publishes two reports in Spring and Summer each year, one reporting on the execution of the convergence programme in the previous year and one publishing its projections for a sustainable fiscal balance and its distribution among different levels of government.

Neither the co-operation agreement between the central and regional governments includes formal sanctioning procedures, nor is the High Council endowed with direct sanctioning instruments, when it detects a deviation from the permissible deficits. However, the Special Financing Act of 1989 authorises the federal government to restrict the borrowing capacity of the regions for a period of up to two years, following the advice of the High Council of Finance and after the regions involved have been consulted. In its recommendation, the High Council should consider three macro-economic criteria: the preservation of the Belgian economic and monetary union, The maintenance of external and internal monetary equilibrium and the prevention of a structural deterioration of the country's public finances (Stienlet 2000).[43] Until now, this mechanism has never been invoked.

4.2.3.3 Spain

Similar to the Belgian case, the Spanish government system underwent a process of significant decentralisation in the 1990s.[44] However, the government took a less formal mechanism of restraining the indebtedness of sub-national governments. Spanish regions are subject to general financing

[42] The agreement of 1996 actually did not establish a deficit limit for the federal government due to time restrictions (Stienlet 2000:228)

[43] In addition, some procedural restrictions exist: Incurring foreign currency debt or debt from abroad in Belgian Francs is subjected to the approval of the federal Minister of Finance. Similarly, the conditions and timing of debt issuance on domestic capital markets has to be approved by the Minister of Finance. The Minister of Finance has also to be notified of the issuance of other types of debt.

[44] The following is based on Gordo and Hernández de Cos (2000) if not indicated otherwise.

restraints defined in the law on regional financing or the general regulations applying to the public sector. The following are the most prominent restraints: First, short-term credit transactions of less than a year should only be used to cover transitory treasury requirements; second, debt financing should only be used for investment expenditures and the total annual amount of repayments and interests should not exceed one-fourth of the regional current revenue; third, the central government has to authorise credit transactions or issuance of government debt; third, regions should co-ordinate with each other and the central government their debt policy in the Fiscal and Financial Policy Council.[45]

As a consequence of these regulations, the regions are obliged to submit an annual debt schedule to the government. Once agreed on by both parties, this entails automatic authorisation by the central government of all the operations contained therein. As from 1992, following the release of the March 1992 CP for Spain, the so-called Budget Consolidation Scenarios were signed by the central government and each region, based on bilateral negotiations. These agreements specified the maximum deficit and debt permitted for each region. The ECP were revised in March 1995, following the revision of the CP in July 1994. Moreover, they were again modified in 1998 with the approval of the first Stability Program. The deficit and debt levels specified in the agreements are unknown to the public and no transparent sanctioning mechanism exists.

[45] The Council, composed of the Minister of Economy and Finance and of General Government as well as regional Ministers of Finance, was set up in 1980 to act as a consultative and discussion body for tasks relating to the co-ordination of the regions' financial activities. (Gordo & Hernándes de Cos 2000)

5. MACROECONOMIC ASPECTS OF THE 1990S FISCAL ADJUSTMENTS

In section 2, we have shown that the macroeconomic environment, both externally and at home, affects the likelihood that governments will undertake fiscal consolidations, and the choice between making fiscal adjustments that are primarily revenue based and making adjustments that are primarily expenditure based. While this is important to understand government choices over alternative fiscal policies, nothing in that analysis says that these choices were efficient, i.e., that the results could not have been obtained more easily, or that the governments could not have achieved better results in the 1990s than they did.

In this section, we return to the macroeconomic aspects of fiscal consolidations. Here, we are interested in the macroeconomic impact of the 1990s fiscal consolidations. Specifically, we wish to know whether there was any special "Maastricht effect" in this direction, i.e., a change in the effect of fiscal policy on real output. Such a "Maastricht effect" might be due to the fact that the fiscal consolidations were part of very visible programs pursued by the governments of the EMU member states to prepare for the Third Stage of EMU. It would be consistent with the arguments that fiscal contractions can have "non-Keynesian effects," i.e., their cost in terms of output lost can be reduced due to favourable expectations effects on private consumption and investment.

Furthermore, we study in more detail the effects of real output changes on fiscal policy, again with the question in mind whether we can detect any "Maastricht effect." Here, the special effect would be that, due to the commitment power of the Maastricht program, the fiscal adjustments of the 1990s were stronger than the macroeconomic environment would have otherwise suggested. In addition, we study the implications of the fiscal restraints implied by the Stability and Growth Pact on fiscal policy in the EMU member states.

The analysis we intend to carry out in this section requires a comparison of what happened in the 1990s with what might have happened under different policy choices and different circumstances. That is, it requires an empirical macroeconomic model describing the effect of policy on the economy, of the impact of changes in real output on policy choices, and of the interaction between monetary and fiscal policy. Constructing such a model is plagued with data problems. Fiscal data are available only on an annual basis, putting severe limits on the available degrees of freedom and, hence, on the number of variables one can use to explain the policy variables and real output growth. Furthermore, our analysis requires the choice of a standard of comparison, which is difficult given the relatively short time series available for fiscal data. Given these data limitations, the empirical analysis must strike a compromise between what is desirable for methodological reasons and what is necessary to find an answer to our questions. We find this compromise in estimating a simple, simultaneous equation model for a panel of OECD countries, using data from 1970 to 1998. This approach can only produce a rough picture of the interaction between fiscal policy, monetary policy, and the real side of the macro economy, and these limitations must be kept in mind when the results are interpreted.

5.1 A Macroeconomic Model of Monetary and Fiscal Policy Interaction

The interaction of fiscal policy and real output and the interaction with monetary conditions are analysed in a system consisting of three endogenous variables: fiscal policy, monetary policy and real GDP growth. Fiscal policy is described by the change in the cyclically adjusted primary deficit, monetary policy by the real monetary conditions index and real output by the annual real GDP growth rate. As a starting point, we assume that these variables are interdependent. The two policy variables are defined in exactly the same way as they were in sections 2 and 3 of this report.

We take a simple partial reduced form system to determine these three variables. A structural VAR system would have been the ideal specification, but is impossible to estimate given the data limitations which rule out the estimation of a model with sufficient lags for all variables. Instead we have to make do with a semi-reduced form obtained from a specification search on the variables. By way of compensation, we include a set of explanatory variables assumed as exogenous, and we employ a three-stage least-squares estimator in order to take into account any cross-correlation between the various residuals which may reflect some of the behaviour of the variables which had to be omitted from the panel estimation. Robust standard errors were estimated to account for heteroskedasticity and any remaining serial correlation. The exogenous variables are the debt-GDP lagged one period, a long-term interest rate lagged one period, and the change in the OECD output gap. Some dynamic effects are allowed for by including lags of the endogenous and exogenous variables. We identify the model by assuming that domestic monetary does not react to the OECD output gap nor to the domestic debt-GDP ratio, domestic fiscal policy does not react to the long-term interest rate, and domestic output does not react to the debt-GDP ratio.

We estimate this model for a panel of 20 OECD countries and the period from 1973 to 1998, for which the necessary data are available for most countries included. As we are dealing with an unbalanced panel, we allow for country fixed effects in the initial estimations. The GDP growth equation (Δy) is characterised by output being dependent only on lagged fiscal or monetary policies, lagged output growth, and the change in the OECD output gap (GAP). The monetary policy equation has the real monetary conditions index (M) depend on its own lag, the change in the domestic structural balance (ΔF) and its lag, output growth, and the lagged long term interest rate (i). Finally, the fiscal policy equation describes the change in the domestic structural balance as a function of its own lag, current monetary policy, current and lagged domestic output growth, the OECD output gap, and the debt-GDP ratio (d). The model can be summarised as follows:

$$\Delta F_t = f(\Delta F_{t-1}, M_{t-1}, \Delta Y_t, \Delta Y_{t-1}, \Delta GAP_t^{oecd}, d_t, dummies); \quad (4)$$

$$M_t = m(M_{t-1}, \Delta F_t, i_{t-1}, \Delta Y_t, \Delta F_{t-1}); \quad (5)$$

$$\Delta Y_t = y(\Delta Y_{t-1}, \Delta F_{t-1}, M_{t-1}, \Delta GAP_t^{oecd}). \quad (6)$$

The baseline estimation of this model uses data from the 20 countries in a sample period ending in 1989. This leaves us with enough data for comparison with a second sub-sample to check for possible "Maastricht effects." Our preferred specification of this model was obtained after applying a general-to-specific testing-down process to the model we started off with. Country dummies remain in the fiscal policy equation only. Table 17 has the results. For a better exposition, we do not report the country-dummies.

All three equations have significant explanatory power, although the pseudo R-squares are low, as usual in models for growth rates and for panel data estimates. Moreover, strictly speaking the R-squares do not have their ordinary meaning since we are using 3SLS estimates. Nevertheless, the t-ratios are quite high, indicating significant statistical power. In addition, the coefficients of the three equations a conform with conventional predictions. Output growth is positively related to its own lag and very strongly affected by the change in the cyclical conditions in the OECD area. Output growth falls in reaction to a tightening of both monetary and fiscal policy, with a reaction lag of one year in both cases.

Specifically, since current output does not react to a fiscal contraction, the result indicates that an increase in the fiscal surplus equal to one percent of GDP causes a drop in the GDP output growth rate by 0.1 percent in the following year. The long-run impact is a drop in the growth rate of 0.15 percent. But the effects do not stop here. The decline in domestic output caused by a fiscal contraction

has a negative effect on output growth in the other countries. This effect feeds back to the domestic economy and amplifies the impact effect of the fiscal contraction. An increase in the monetary conditions index produces similar effects on output growth.

Table 17: Baseline Estimates

1.	**Dependent variable: GDP growth rate**	**Coeff**	**t-ratio**
	GDP growth rate (-1)	0.234	4.50
	Monetary conditions (-1)	-0.168	2.01
	Δ output gap (OECD)	0.733	9.37
	Δ fiscal surplus ratio to GDP (-1)	-0.117	1.93
	Constant	1.967	9.16
R^2 = 0.321 Chi-sq = 120.6 df = 261			
2.	**Dependent variable: Δ fiscal surplus ratio to GDP**	**Coeff**	**t-ratio**
	Δ fiscal surplus ratio (-1)	-0.330	5.60
	GDP growth	0.179	1.96
	Monetary conditions (-1)	-0.284	3.08
	GDP growth (-1)	0.076	1.50
	Debt/GDP ratio (-1)	0.055	6.41
	Constant	-2.450	1.95
R^2 = 0.245, constant Chi-sq = 82.23 df = 240			
3.	**Dependent variable: Monetary conditions index**	**Coeff**	**t-ratio**
	Monetary conditions index (-1)	0.531	9.92
	GDP growth	-0.098	1.52
	Long interest rate (-1)	0.032	1.63
	Δ fiscal surplus ratio to GDP	0.281	3.06
	Δ fiscal surplus ratio (-1)	0.158	3.85
	Constant	-0.613	1.76
R^2 = 0.245 Chi-sq = 139.6 df = 260			

Note: R^2 denotes the corrected R^2 coefficient.

The fiscal policy variable reacts negatively to its own lag, and positively to current and lagged increases in output growth. This indicates that governments have used structural balances to some extent for anti-cyclical purposes, although the effect is not very strong.[46] Importantly, the fiscal surplus reacts positively to an increase in the debt ratio, which indicates that fiscal policies were, on average, dynamically sustainable. Finally, fiscal policy tends to relax when monetary conditions become tighter. This is consistent with the idea that monetary easing can induce governments to reduce budget deficits (Mélitz, 1998; Wyplosz, 1999).

Monetary policy depends positively on its own lag and on the long-term interest rate. The latter is consistent with monetary tightening as a reaction to rising inflation expectations. The effect of output growth on the monetary conditions index is negative and not statistically significant, meaning that active output stabilisation was not an important element of monetary policy, on average, for the countries and period considered. Finally, monetary conditions react positively to an increase in the fiscal surplus, i.e., monetary policy tends to tighten when fiscal policy tightens. Thus, the reaction of monetary policy to fiscal policy has the opposite sign from the reaction of fiscal policy to monetary

[46] This is consistent with the results reported by Sapir and Buti (1998). There, it is shown that structural balances in the EU countries tended to follow a pro-cyclical pattern in large recession, but a weakly anti-cyclical one in smaller recessions.

policy. The implication of this is, first, that the reaction of fiscal policy to a negative shock to monetary conditions (e.g., a monetary expansion undertaken by the central bank to induce an improvement in the deficit) is less in equilibrium than the fiscal policy reaction function itself indicates. Being uncoordinated, fiscal and monetary policy measures have partially offset each other. A second implication is that the output cost of fiscal consolidations consists partly of the growth effects of a tighter monetary policy stance. Those costs may, therefore, be larger than the changes in fiscal policy alone would indicate.

These estimates have been obtained using data from 20 OECD countries. Since, ultimately, we are interested in policy conclusions for the EMU member states, an important question is, to what these estimates are representative also to this subgroup of countries. To see this, we re-estimate our model, dropping all countries not belong to the EMU from the sample. Table 18 has the results.[47]

Table 18: The Model for the EMU member states only

First Sample 1972-89			
1.	**Dependent variable: real output growth rate**	**Coeff**	**t-ratio**
	Real output growth rate (-1)	0.262	3.96
	Monetary conditions index (-1)	-0.224	1.89
	Δ output gap (OECD)	0.679	7.07
	Δ fiscal surplus ratio (-1)	-0.099	1.40
	Constant	1.714	6.14
R^2 = 0.300, Chi-sq = 70.6, df = 160			
2.	**Dependent variable: Δ fiscal surplus ratio**	**Coeff**	**t-ratio**
	Δ fiscal surplus ratio (-1)	-0.398	5.52
	Real output growth	0.149	1.14
	Monetary conditions index (-1)	-0.247	1.74
	Real output growth (-1)	0.049	0.74
	Debt/GDP ratio (-1)	0.052	4.67
	Constant	-1.548	2.65
R^2 = 0.240, Chi-sq = 53.4, df = 139			
3.	**Dependent variable: Monetary conditions index**	**Coeff**	**t-ratio**
	Monetary conditions index (-1)	0.425	5.51
	Real output growth	-0.121	1.45
	Long-run interest rate (-1)	0.009	0.36
	Δ fiscal surplus ratio	0.361	2.96
	Δ fiscal surplus ratio (-1)	0.192	3.28
	Constant	-0.485	1.18
R^2 = 0.000, Chi-sq = 58.7, df = 159			

Note: R^2 denotes the corrected R^2 coefficient.

Dropping the non-EMU states from the sample leaves the coefficients qualitatively unchanged. Thus the picture described above remains broadly the same. However, in the smaller sample, the parameter estimates are less precise. We conclude that the baseline model describes the interaction of real output, fiscal, and monetary policy well. Thus, we continue to use the broader sample for our subsequent analysis.

[47] Note that, for our #SLS estimates, the low R^s do not mean much. The t-ratios still indicate significant statistical power.

5.2 Fiscal Adjustments in the 1990s

We now turn to the question, were the fiscal adjustments undertaken in the EU special compared to the baseline as described by the model developed in the previous section. We do this in two steps. First, we take a closer look at the country-specific dummies in the fiscal policy reaction equation. The model has dummies for all countries except Australia, which, hence, is the reference case.

Table 19 reports the country-specific effects for the EU countries in the two sample periods. During the 1970s and 1980s, fiscal surpluses in all EU member states were systematically lower than in the reference country. The country-specific effects were significant for Ireland, Italy, and Belgium, i.e., for the countries with the largest debt-GDP ratios at the end of the 1980s. The 1990s, however, brought a general shift in the country-specific effects which turn out to be positive for all EU countries except Germany, Belgium, and Ireland. Thus, relative to the reference country, fiscal policy was generally tighter during the 1990s. Note, also, that six of the country-specific effects gained statistical significance in the 1990s sample. In statistical terms, the country-specific effects have increased significantly in the high-debt countries, i.e., Italy, Ireland, and Belgium, as well as in Denmark, the Netherlands, and Portugal, which experienced large increases in the debt ratios in the first sub-sample. Table 19 supports the notion that, controlling for the effects of the business cycle, monetary policy, and debts burdens, fiscal policy in the EU countries has been characterised by larger surpluses on average over the 1990s than in the 1970s and 1980s. But the standard deviations of the country effects in Table 19 indicate that fiscal policy has shown a lower degree of conformity across EU member states in the 1990s compared to the 1970s and 1980s.

Table 19: Country Specific Effects

	1972-89 Sample:		1990-98 Sample:		Increase over[+]
	coeff	t-ratio	coeff	t-ratio	First sample
Austria	-1.42	1.37	2.66	1.41	4.08
Belgium	-3.69	2.56**	-1.47	2.60**	2.22
Germany	-0.78	0.98	-1.16	1.64	3.62
Denmark	-1.89	1.62	2.07	1.84*	4.06
Spain	-0.84	1.01	2.78	1.31	3.62
Finland	-0.11	0.60	3.98	0.01	4.09
France	-1.21	1.22	3.48	0.60	4.69
Britain	-0.67	0.78	2.89	1.23	3.56
Greece	-1.31	1.31	1.75	1.53	2.08
Ireland	-3.73	2.56**	-1.09	5.25**	2.64
Italy	-2.73	2.09**	0.11	2.04**	2.84
Netherlands	-2.18	1.79	1.79	1.99**	3.97
Portugal	-1.73	1.55	2.29	2.02**	4.02
Sweden	-0.56	0.82	2.81	1.08	3.37
St. Deviation	1.12		1.80		0.68

Note: * = significant at the 10% level, ** = significant at the 5% level, + = Difference between the second and the first sample coefficients

For a second look at what the "Maastricht effects" might contain, we re-examine the fiscal policy reaction function estimated for the EU countries in the 1990s. Table 20 has the results.

Table 20 indicates that there is indeed evidence for a structural break in the reaction function for the EU countries during the 1990s. First, the intercept is significantly positive now, compared to a

significantly negative intercept in the first sub-sample. Second, fiscal surpluses now show no reaction to past fiscal surpluses. Similarly, their reaction to output growth and to monetary policy, while maintaining its sign, became much weaker during this period. The only explanatory factor remaining significant with a similar coefficient is the debt-GDP ratio. Overall, the table supports the notion that, on average in the EMU member states, fiscal policy in the 1990s reacted less to cyclical fluctuations of output and changes in monetary policy than it had in earlier times, but was more influenced by an exogenous shift towards surpluses represented in the intercept term. In other words, fiscal policy in the 1990s was clearly lead by the discipline needed by the Maastricht criteria for entry into EMU – to the exclusion of concerns about output and employment stabilisation, or the attempt to mach fiscal moderation with monetary tightening (or vice versa) to balance the policy mix in Europe. Hence our concern that this fiscal discipline might be lost after EMU started and the Maastricht sanction was lifted. We return to this theme in sections 5.4 and 6 below. One ray of hope, however, is that the national policymakers seem to have focused on the debt ratio rather than the deficit ratio, in which case their fiscal consolidations may be longer lasting than the short-term backsliding on deficit reductions would otherwise imply. However, if this is true, the Stability Pact, designed as it was to protect the deficit ratio, may have been directed on the wrong target.

Table 20: The EU Fiscal Policy Reaction Function in the 1990s

	Dependent variable: Δ fiscal surplus to GDP ratio	**Coeff**	**t-ratio**
	Δ fiscal surplus ratio (-1)	0.003	0.03
	GDP growth	0.299	0.91
	monetary conditions index (-1)	-0.128	0.60
	GDP growth (-1)	0.130	0.90
	Debt/GDP ratio (-1)	0.064	2.82
	Constant	4.931	4.42
R^2 = 0.376, Chi-sq = 84.1, df = 94			
	Dependent variable: Monetary Conditions Index	**Coeff**	**t-ratio**
	Monetary Conditions Index (-1)	-0.04	0.33
	GDP growth	0.02	0.28
	Long Run Interest Rate	0.17	5.08
	Change in Fiscal Surplus Ratio	0.04	0.36
	Change in Fiscal Surplus Ratio (-1)	0.02	0.22
	Constant	-2.26	5.10
R^2 = 0.208, Chi-sq = 35.4, df = 114			

The lower half of Table 20 reports the monetary policy reaction function for the 1990s. Here, there is much less evidence for a structural break compared to the baseline Only the coefficient on the lagged monetary conditions index changes its sign. Most coefficients; lose their statistical significance, but retain the sign they have in the baseline estimates. The loss of statistical significance may be due simply to the fewer degrees of freedom in the shorter sample period. The estimated function shows that monetary conditions in the 1990s were controlled mainly by the long-term interest rate. In particular, the pre-1990s effect, in which a higher fiscal surplus signalled a monetary contraction, disappeared in the 1990s, leaving monetary policy less reactive to fiscal changes than before. This is a striking result, but it is consistent with what we should expect. With more independent central banks, fiscal policy is also bound to become more independent. This is just what the estimates suggest

together with the fact that fiscal policies were more constrained by outside factors such as the Stability Pact. The question is, will the Stability Pact remain effective, or will a return to the previous regime with fiscal policy being less concerned about consolidation and keeping the debt ratio low. Such a scenario could result in more conflict between monetary and fiscal policy.

5.3 An Overall Measure for the Impact of the "Maastricht Effect"

Finally, we use the three-equation model estimated on pre-1990 data and simulate it forward from 1990 to 1998. The simulations are based on known values of the predetermined right-hand-side variables. They may therefore be compared to the actual out-turns of the dependent variables in order to show the difference between what fiscal policy might have been like according to the reaction patterns of the 1980s, and what it was actually like.[48]

Figure 2 shows the fitting errors from the fiscal reaction function, i.e., the within-sample errors estimated from the 1970s and 1980s. They are clustered fairly evenly around zero on average, although , although there is some serial correlation and possible an increasing variance around that mean.[49] Figure 3 plots the errors obtained from our simulation exercise. The figure shows that there has been a shift in fiscal behaviour since 1990. The simulation errors are mostly negative. This indicates that governments have typically achieved *lower* surplus ratios in the 1990s than their pre-1990 behaviour combined with and the economic developments of the 1990s would have led us to expect. This is further evidence for a structural break in the fiscal policy reaction function. But it is to lower rather than higher surplus ratios; and to larger rather than smaller deficit ratios compared to what we might have expected.

These simulation results, therefore, seem to be in contradiction to the earlier results, which indicated a shift of fiscal policy towards lower deficits in the 1990s. On closer inspection, however, they can be reconciled. A first point to note is that the stance of monetary policy was rather easy throughout the EU after 1993 (see e.g. Commission 2000).[50] Our fiscal policy reaction function from the 1970s and 1980s suggests a tightening of fiscal policy in reaction to this. Yet, the estimates of Table 20 indicate that fiscal policy in the 1990s reacted less to monetary easing than before. Furthermore, the increase in debt ratios which continued until 1997 would have induced a further tightening of fiscal policies in the EMU member states according to the fiscal policy reaction function than what we observed during the 1990s.

From this, we conclude that there has been a noticeable change in the fiscal policy performance of the EMU member states during the 1990s. While the limits of our analysis obviously do not permit us to attribute this change unambiguously to EMU, it is nevertheless plausible to call this a "Maastricht effect." But the direction of this "Maastricht effect" depends on the perspective one takes looking at fiscal policy during the period. Based on earlier patterns of fiscal policy reactions, and given the accompanying conditions of the 1990s, one would have expected larger fiscal surpluses in the EU to prevail during the 1990s. Instead, fiscal policy became less responsive to economic and monetary policy circumstances, and thus may have been driven more strongly by efforts to achieve fiscal surpluses for other reasons, namely to fulfil the Maastricht criteria.

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[48] Since that comparison is made using one information set, it is independent of any errors which would otherwise have appeared in the information sets normally used to generate such predicted values.

[49] This is as expected. There may however be some scope to improve the specification of this equation to remove the systematic pattern in the residuals of this sub sample. But since the pattern is very weak that scope is small.

[50] The intercept of the monetary policy reaction function switches from (-0.65) in the 1970s and 1980s to (-2.0) in the 1990s. For the EU countries, the change is from (-0.65) to (-2.26). Controlling for fiscal policy and economic developments, this indicates that monetary policy was more expansionary on average during the 1990s.

Figure 1: 1972-1989-residuals, for model estimated up to 1990:

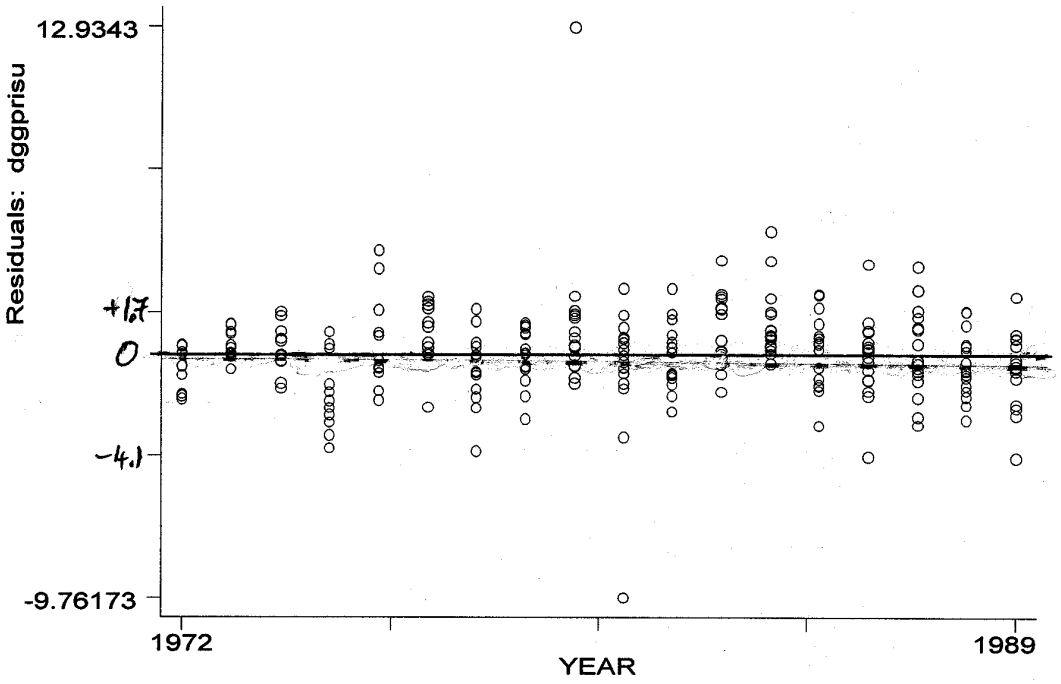
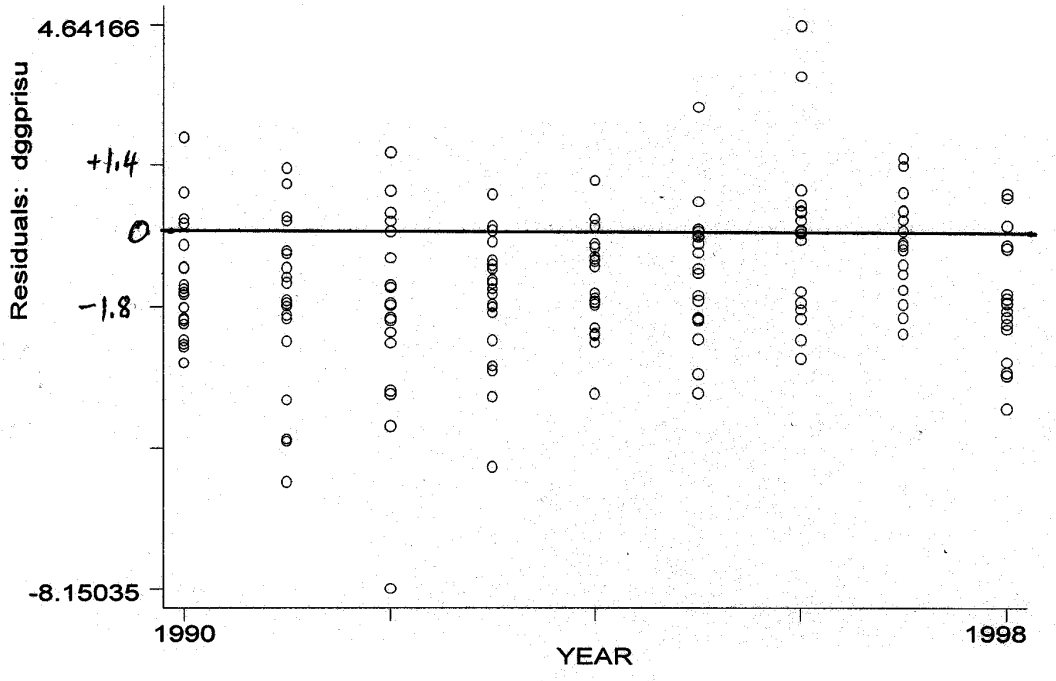


Figure 2: 1990-1998-residuals, for model estimated up to 1990:



Interpreting the results in this way suggests that the program for achieving fiscal discipline set out in the Maastricht Treaty was at least partially successful. On average, as reflected by our empirical model, member states' fiscal policies reacted to the incentives set by the combination of the convergence criteria and the time table for the beginning of the Third Stage of EMU. But the message does not end there. If fiscal policies were mainly driven by the efforts to qualify for the Third Stage of EMU and this dominated previous reaction patterns, the question remains how fiscal policy will

perform now that the pressure to qualify is no longer there. That is, the EMU now faces the challenge of establishing fiscal policy reactions that prevent countries from backsliding to their old habits of accumulating large public debts. Will the Stability Pact be strong enough?

5.4 Fiscal Policy in 1999: Was there a further consolidation?

Given that challenge, we need to look more closely at the fiscal performance of the EU member states during 1999, the first year of the Third Stage of EMU. 1999 was marked by two observations. The first is a recovery of the EU economies from the impact of the 1997-98 international financial crises. The second is a continued improvement in the member states' budget balances. This is illustrated by the fact that the average debt-GDP ratio for the EU fell from 68.9 percent to 68.1 percent. For the EMU member states, this decline was somewhat larger, from 73.4 percent to 72.2 percent. But, given the first, the latter could be merely a result of stronger economic growth instead of being the result of continued efforts to achieve budget balance.

In this section, we use a simple method of growth accounting to separate these two effects. Specifically, we wish to see how much of a given change in the fiscal surplus ratio of a country was due to a change in the numerator (changes in spending and revenues), and how much was due to changes in the numerator (economic growth). To do this requires us to estimate the change in the surplus ratio assuming a constant stance of fiscal policy and to compare this with the actual change in the surplus ratio. The former indicates the contribution of economic growth alone to the change in the surplus ratio, subtracting it from the latter yields the contribution of fiscal policy.

Let the surplus ratio, s, be

$$s = \frac{T - G}{Y} = (t - g), \tag{7}$$

where T denotes government revenues, G government spending, and Y GDP. The change in this ratio over time then is

$$\Delta s = \frac{\Delta T - \Delta G}{Y} - \frac{\Delta Y}{Y}(t - g), \tag{8}$$

We define a constant fiscal policy as one that keeps the average tax rate, t, and the volume of government spending, G, constant. With this definition, the contribution of economic growth to the change in the surplus ratio is given by

$$\Delta s^{g} = \frac{\Delta Y}{Y}(t - s). \tag{9}$$

Alternatively, we may define a constant fiscal policy stance as one that allows expenditures to grow in line with revenues. With this more lenient definition of constant fiscal stance, the growth effect on the surplus ratio would be

$$\Delta s^{l} = -s\frac{\Delta Y}{Y}. \tag{10}$$

Obviously, this is smaller than the contribution attributed to growth under the stricter definition of a constant fiscal policy. Still, the more lenient definition is of some interest for our discussion, because it corresponds to the notion that governments tend to spend any additional revenues caused by more favourable economic growth as soon as they come in.

In this development, G represents gross fiscal expenditures including interest payments on the stock of public debt. Thus, the equation above describes the effect of growth on surplus ratios as defined in the Stability and Growth Pact. However, this means that the effect of falling debt levels and reduced interest payments is attributed to the policies keeping government spending constant. A more useful definition of a constant policy stance would separate these effects from any remaining changes in government spending. Thus, let x = rB/Y = rb be the ratio of interest payments to GDP, where r is the average interest rate paid on government debt, B is the volume of government debt, and b is the debt-GDP ratio. Assuming that rb/Y is small, the change in the ratio to interest payments to GDP is approximately

$$\Delta x = (\Delta r)b + r(\Delta b). \qquad (11)$$

Note that interest rates have been fairly stable during 1999, but they fell sharply for some EMU member states during 1998. Thus, the first term in the equation above represents the fiscal gain from enhanced credibility due to the monetary union being formed. The second term represents the effect of falling debt on the interest component of the deficit.

The following table reports our estimates of these growth effects together with the observed changes in deficit ratios in 1999. The latter are reported in the first column of this table. The second column presents the effects of economic growth on the primary deficit ratio during 1999 assuming a constant fiscal policy as defined in equation (9).

Table 21: 1999 Growth Effects and Changes in Deficits

	1999 Change in Deficit Ratio				Memory Items	
	Observed	Due to economic growth, Δs^g	Due to falling debt ratio: $r_{99}\,\Delta b_{98}$	Due to fiscal policy	Credibility Gain From EMU $\Delta r_{98}\,b_{98}$	Change in deficit ratio with g = t Δs^l
Belgium	-0.1	-0.93	-0.12	0.95	-0.70	-0.02
Germany	-0.5	-0.72	0.01	0.21	-0.36	-0.03
Spain	-1.5	-1.61	-0.07	0.18	-1.10	-0.10
France	-0.9	-1.39	-0.03	0.52	-0.36	-0.07
Ireland	0.1	-2.42	-0.19	2.71	-1.61	-0.16
Italy	-0.9	-0.57	-0.08	-0.25	-0.49	-0.03
Netherlands	-1.3	-1.46	-0.11	0.27	-0.34	-0.02
Austria	-0.5	-1.16	0.04	0.70	-0.45	-0.05
Portugal	-0.1	-1.39	0.02	1.27	-1.13	-0.07
Finland	-1.0	-1.98	-0.07	1.05	-0.25	0.05
Denmark	-2.8	-0.81	-0.12	-1.87	0.11	0.03
Greece	-0.9	-1.49	-0.19	0.78	-10.96	-0.09
Sweden	0.0	-2.17	-0.33	2.50	-0.51	0.07
UK	-0.9	-0.70	-0.02	-0.18	-0.73	0.01

The table shows that the resurgence of growth in the EU had very favourable effects on the deficit ratios during this period. The third column shows the effect of the declining debt ratios on the deficit. This also worked towards a reduction of deficit ratios in all EU countries except Germany. Adding the second and third column and subtracting the result from the observed changes in the deficit ratios in the first column gives the fourth column: the impact of the 1999 changes in fiscal policy on the deficit ratios in 1999. This difference is positive if the deficit ratio would have fallen by more than it did with no change in fiscal policy between 1998 and 1999. That is, a positive number in the fourth column indicates a relaxation of the fiscal stance in 1999, a negative number indicates tightening.

Table 21 indicates that Italy was the only country among the countries in Stage III of EMU that tightened fiscal policy during 1999. With the exception of Ireland, all member states of the monetary union did achieve a reduction in their deficit ratios. But, apart from Italy, they were only able to do so through the effect of economic growth. Thus, fiscal policy in all monetary union states except Italy eased during 1999, and it did so substantially in Ireland, Portugal, Finland, and Belgium. Given that these countries also showed a strong cyclical position during 1999, fiscal policy was clearly pro-cyclical in these countries.[51] Fiscal policy in the large countries, Germany and France, also lost discipline in 1999, although to smaller degree than in the former four states.

Outside the monetary union, the results are more mixed. Denmark tightened fiscal policy substantially in 1999, while the UK did so only slightly. In contrast, Sweden and Greece show an easing of fiscal policy. This is noteworthy particularly for Greece, as this country has now been declared as having qualified for joining the monetary union.

The final column of Table 21 shows the reductions in the deficit ratios that would have occurred if countries had kept their budget balances constant, i.e., if all new revenues had been spent. This is the opposite end of the range of fiscal policy scenarios. These data indicate that there was some fiscal tightening in absolute terms in the sense that the observed reductions in deficit ratios are generally larger than those implied by constant budget balances; the exception being Ireland. But these figures also show how important the relative loosening has been. If the numbers in the first column are closer to those in the last column than to the sum of second and third columns, then the loosening has been significant in the sense that most of the new revenues were spent in 1999. This was the case in Belgium, Ireland, Austria, Portugal, and Finland among the member states of Stage III of EMU, and in Sweden outside the monetary union.

The results of this section, therefore, lead to the conclusion that 1999 has witnessed a significant degree of backsliding in fiscal discipline in the EU. This is important, because 1999 was the first year that fiscal policies in the member states of Stage III of EMU were no longer under the threat of failing to qualify for the common currency. Furthermore, it is important because the loosening of fiscal discipline occurred during a cyclical upswing in the EU, indicating that fiscal policy may tend to remain rather procyclical.

5.5 The Cost of Fiscal Consolidation in the 1990s: Were There non-Keynesian Effects?

Conventional macro economics holds that fiscal retrenchment can only be achieved at the cost of reduced output and employment. Tight fiscal policy reduces aggregate demand for goods and services. With rigid prices, the decline in nominal demand results in a fall in real output. If a fiscal consolidation relies primarily on increased taxes, additional supply-side effects may kick in due to the increased cost of labour resulting from higher tax rates.

This conventional view was challenged in the early 1980s by the so-called “German view” (Hellwig and Neumann, 1987) According to this view, the private sector realises that a budgetary consolidation implies less taxes in the future, as the government will face a lower debt service in future years. Assuming that consumption depends on permanent income and investment demand is forward-looking, consumption and investment will rise relative to the levels that would have prevailed without the fiscal consolidation. Note that this assumes that the pre-consolidation stance of fiscal policy is non-sustainable in the sense that is does indeed require higher taxes in the future to serve the public debt. In essence, then, budgetary consolidations can have expectation effects which have a positive impact on output and employment. In the extreme case, consolidations have positive pay-offs rather than a cost.

[51] A similar finding is reported in Commission (2000).

The German view gained considerable academic interest following the paper by Giavazzi and Pagano (1990), which argued that the fiscal consolidations in Denmark and Ireland caused an increase in private sector demand. Giavazzi and Pagano (1995, 1999) provide further evidence suggesting positive output effects of fiscal consolidations.

In this section, we consider the output cost of the fiscal consolidations in the EU during the 1990s. We note, first, that our model estimated with data from the 1970s and 1980s suggests that the consolidations had a significant, though small output cost. This is indicated by the coefficients on the fiscal variable in the output equation reported in Table 20. Recall that the total output cost of a fiscal consolidation in a country is given by the impact effect on output growth in this country, indicated by this parameter, and the feedback effects which arise from the fact that a declining output gap in this country due to a fiscal contraction results in a smaller output gap in the OECD, which in turn has a negative growth effect in the first country. In addition, tighter fiscal policy will not trigger looser monetary policy (as it did in the 1980s; see section 5.1), adding to the output costs.

Using the estimates reported in Table 20 as our baseline, we re-estimate the output equation for the EU countries using data from the 1990s alone. Table 22 has the results.

Table 22: The Output Equation for EU Countries in the 1990s

Sample 1990-98			
	Dependent Variable: Growth rate in GDP	Coeff	t-ratio
	Explanatory Variable, growth rate (-1)	0.581	7.88
	monetary conditions (-1)	-0.404	2.74
	Change in OECD output gap	0.834	3.45
	Change in fiscal surplus ratio (-1)	-0.050	0.47
	Constant	1.016	3.90
R^2 = 0.455, Chi-sq = 103.0, df = 115			

The interesting observation from this estimate is that the coefficient on the fiscal policy variable is now very close to zero and statistically not significant. Comparing this with the estimates using data from the earlier sample period suggests that the output cost of fiscal contractions has declined in the 1990s. There is neither a traditional Keynesian, nor a "non-Keynesian" effect in the aggregate. To make sure that this result is not due only to the smaller number of degrees of freedom in the second sample, we also estimated the output equation for the entire OECD group using data only for the 1990s. In this estimate, the coefficient on the fiscal policy variable also becomes statistically insignificant.

As a further robustness check on our results, we estimate the model using cyclically unadjusted fiscal surplus figures rather than their cyclically unadjusted counterparts. This change makes virtually no difference to the results, with the exception that the impact of fiscal consolidations on output growth is now a bit stronger - as one might expect. The coefficient on the fiscal variable rises from a statistically significant value of (-0.13) pre-1990 to an insignificant (-0.07) post-1990. Also as one might expect, the impact of growth on the surplus/deficit ratio also rises (from 0.18 to 0.32 in the short term). Otherwise everything else remains almost identical, including significance levels. Thus, the output cost of fiscal consolidations may be somewhat larger than those estimated before. However, the evidence suggests that the cost of fiscal consolidations was smaller in the 1990s than in earlier periods.[52]

[52] Another possibility is that these costs may be asymmetrically distributed across countries. We have here only the estimates of the costs, Keynesian or otherwise, in terms of aggregate European performance.

In sum, our results indicate a structural break in the output equation, implying a reduced cost of fiscal consolidations in the 1990s. This result is, indeed, consistent with the notion of non-Keynesian effects, but not strong enough to imply that the fiscal contractions were actually expansionary.[53] Specifically, the negative output effects from the fiscal consolidations of the 1990s that were to be expected given the experience of OECD countries in the 1970s and 1980s may have been balanced by positive demand effects due to improved private sector expectations of future fiscal policies. This interpretation assumes that the public perceived the debt and deficit developments of the EU countries during the 1970s and 1980s to be non-sustainable. The assumption is plausible given the emphasis the Maastricht Treaty and the public debate surrounding it put on the need for fiscal adjustments in the future member states of the monetary union. One implication of this interpretation is that fiscal consolidations may again have significant output effects in the future, when the high visibility of the adjustment efforts due to the Maastricht process no longer prevails.

[53] This result is consistent with the theoretical analysis of Barry and Devereux (1995) or Bradley, Whelan and Wright (1993), and suggests that the Giavazzi-Pagano (1990) results showing expansions were overdone. For a discussion of why, see Hughes-Hallett and McAdam (1998).

6. LESSONS FOR FUTURE BUDGETARY POLICIES IN THE EMU

In this report, we have reviewed the experience with fiscal consolidations in the EU member states during the 1990s. In section 2, we have analysed the importance of the quality of fiscal adjustments and of the economic environment in which consolidations take place for the start, the success and the duration of budgetary consolidations. We confirmed the importance of good-quality adjustments for the success of consolidations. Consolidations are more likely to be successful, if governments achieve them by way of reducing expenditures rather than raising additional revenues, and if governments tackle politically sensitive issues such as transfers, subsidies, and government wages. Furthermore, we found that the likelihood of governments undertaking fiscal adjustments is higher in a good domestic economic environment and under pressures from high levels of public debt. The likelihood of successful consolidations, in contrast, rises when the domestic economy and the international economy are weak, and when fiscal policy is tight in the OECD. We have shown that the solution to this apparent puzzle is that governments are more likely to choose an expenditure-based consolidation strategy when the domestic and international economy are weak and when fiscal policy in the OECD is tight than during good economic times and when OECD fiscal policy is expansionary. Finally, we do not find any evidence suggesting that the stance of monetary policy has a significant effect on the likelihood of governments starting or successfully continuing consolidations.

In section 3, we have used the models developed in the preceding section as a yardstick for evaluating the fiscal performance of the EU member states during the 1990s. We conclude that there was a "Maastricht effect" in the sense that governments engaged in consolidations under circumstances that did not make it likely for them to do so. However, this "Maastricht effect" operated mainly in the first half of the 1990s and it also created a bias for revenue-based consolidations. The consolidations of later 1990s were more in line with the accompanying economic circumstances, in particular with the high debt levels, which made consolidations more likely. An implication is that the "Maastricht effect" has contributed to the increase in tax burdens in the EU countries. At the same time, the observation that several countries turned to expenditure-based consolidations in the second half of the 1990s suggests that these consolidations will be longer lasting.

In section 4, we have reviewed the importance of budgetary institutions for achieving and maintaining sustainable public finances. Several member states improved their institutional framework for public budgeting in the 1990s, moving to more centralised processes. This should enable them to maintain a higher degree of fiscal discipline in the future. Germany, in contrast, experienced a worsening of her institutional framework.

The introduction of the Excessive Deficit Procedure and the Stability and Growth Pact represents an important institutional change for EMU. Both, however, follow a contracts approach to centralising the budget process. While this is the proper approach for most EMU member states, it is not the adequate one for Germany and France (and the U.K. and Greece.)

In section 5, we have used a simple empirical model to analyse the macroeconomic aspects of the consolidations during the 1990s. Again, we found a "Maastricht effect". Here, this means that the fiscal policy reaction function changed in the 1990s. Fiscal policy in the EU member states became more isolated from output and monetary policy developments than the earlier reaction function indicated. This suggests that fiscal policy was more focused on achieving the Maastricht criteria. Another "Maastricht effect" suggested by our results is that the cost of consolidations in terms of reduced output growth was lower in the 1990s than in earlier years. This is consistent with the notion of some "non-Keynesian effects" (the idea that fiscal corrections of non-sustainable policies have

positive expectation effects on aggregate demand), but not as far as implying that the fiscal consolidations were actually expansionary.

These results have several implications for the operation of fiscal policy under EMU. Our empirical results suggest that the 1990s were "special" in several ways. Fiscal discipline was promoted by the goal to achieve monetary union under rules of the Maastricht Treaty, and they were less costly than otherwise expected. Now that Stage III of EMU has begun, it is likely that the behaviour of fiscal policy and its effects on the economy will become more "normal" again. Thus, it is important to assure that governments will not backslide and allow deficits to emerge again, as they did in the 1970s and 1980s. One should also expect that the cost of fiscal consolidations be higher again in the future, as the signalling and commitment power of the Maastricht criteria is no longer existent.

Our results also suggest that should not rely too much on the expectation that governments use "good times" – periods of strong economic growth – to solve problems of fiscal policy. Consolidations started in good times typically do not last long and do not achieve much. Significantly, they tend to lead to an increase in the tax burden on the economy and, therefore, may reduce the potential for satisfactory growth and high employment in the longer run. In contrast, consolidations started in difficult times are more likely to be successful, if only because the commitment to consolidation is higher. An implication is that successful consolidations are a significant element of the procyclical behaviour of fiscal policy observed in the EU member states in the past (Commission, 2000).

For the conduct of fiscal policy under EMU, this means that governments are quite likely to comply with the three-percent limit on deficits in times of recessions. From this perspective, the exemptions stipulated in the Excessive Deficit Procedure and the Stability and Growth Pact may prove to be quite unnecessary, as governments tend to make stronger efforts to reduce deficits precisely under those circumstances covered by the exemptions. But if this turns out to be true, it also means that fiscal policy would not do much for macroeconomic stabilisation. Under EMU, this would increase the burden on monetary policy in times of recessions affecting all member states at the same time. Furthermore, it suggests that fiscal policy would not do much to counteract negative asymmetric shocks to individual EMU economies. This is in contrast to the common argument that, in the absence of a national monetary policy, fiscal policy is called upon to stabilise asymmetric shocks.

These considerations suggest that fiscal policy under EMU needs more guidance in good times and when deficits are small, to prevent deficit problems from building up and to reduce the need for procyclical consolidations in bad times. This would require a shift in focus away from the deficit alone and towards other budget aggregates. Closer monitoring of public spending and individual spending items could provide better guidance for fiscal policy. This seems particularly relevant for those countries facing the biggest problems with ageing populations and the associated problems with their pension systems. Since these trends cannot be reversed quickly, governments should be asked to present consistent fiscal programs for dealing with them in time, before they are allowed to cause problems with excessive deficits.

The observation that monetary policy seems to have no effect on the likelihood of consolidations and their success clearly dismisses the popular argument that the monetary authorities can induce governments to deliver consolidations by easing monetary policy. From this perspective, there is little to gain from co-ordinating monetary and fiscal policy between the ECB and the national governments. Obviously, this does not imply that co-ordination between monetary and fiscal policy would not be desirable for achieving a proper policy mix. The point here is that monetary policy has no reason to relax its focus on price stability for the purpose of contributing to sustainable public finances.

There is, however, another co-ordination problem looming behind our results. On the one hand, this is the observation that fiscal tightening in other countries contributes to the likelihood of governments to start consolidations and to choose successful strategies for doing so. On the other hand, it is the

observation that economic growth can contribute strongly to solving deficit problems, provided that governments do not spend the revenues generated immediately.

The implication is that the policy mix in the euro economy is particularly important after all for maintaining low deficits. A large part of the 1990s was characterised by a combination of fiscal retrenchment and monetary expansion (Commission, 2000). Co-ordinated efforts to reduce deficits are more likely to be successful than uncoordinated efforts by individual countries, and the EU-wide fiscal restriction seems to have helped governments to conduct tighter fiscal policies. Thus, co-ordinating fiscal policies among the EMU member states can contribute positively to maintaining sustainable public finances.

Ex post, however, it also seems that this was not a policy mix favouring economic growth. Achieving and maintaining a more growth-friendly policy mix would be desirable for the EMU. This would allow governments to achieve targets for the deficit-GDP ratio more easily than with low growth rates. To do this, the EMU needs a framework for evaluating the current policy mix and for co-ordinating the fiscal policies of the member states. One way to achieve this would be to develop the broad economic guidelines further, and to use them in particular as a framework for analytical and strategic assessment. Specific institutional arrangements to facilitate co-ordination in the sense of getting the general strategic stance and mix of policies right would be helpful. Co-ordinating national fiscal policies and monetary policy for a more growth-friendly policy mix and price stability would also require provisions against the tendency to spend the extra revenues from higher economic growth. More emphasis on multi-annual targets for government spending and strict monitoring of such targets could be an important back-up of policy co-ordination for a better policy mix.

Turning to the institutional aspects, it is likely that the enforcement power of the Excessive Deficit Procedure together with the Stability and Growth Pact will be weaker in the future, as the threat of missing membership in the monetary union no longer holds. One can already observe that the deficit reductions achieved in 1999 were mainly due to the revival of economic growth rather than continued efforts to cut spending. In the absence of a strong external enforcement mechanism, it will be even more important to anchor the fiscal targets that countries present in their Stability Programs in their national budgetary processes. At the same time, however, the possibility to enforce deficit targets in coalition agreements will be reduced in the future, as the goal of making it into the monetary union was a shared commitment of all coalition partners and this goal has now been reached. Stated somewhat differently, the critical decisions regarding the existence excessive deficits and the need to take corrective actions in individual member states are taken by ECOFIN. Now that the commitment to joining EMU is no longer relevant, it is not entirely clear to what extent finance ministers representing coalition governments will be able to commit their coalition partners to deliver the necessary actions.

These considerations point to several conclusions. First, to ensure the continued effectiveness of the institutional apparatus created by the Excessive Deficit Procedure and the Stability and Growth Pact, steps could be taken to link the procedures under the EDP and the SGP more closely to the national budgetary procedures. One such step would be to set both processes on the same calendar, i.e., Stability Programs should be prepared together with the national budgets. If governments present the Stability Program to the EU at the same time that they present the budget draft to parliament, the debate at the European level could raise their agenda setting power in the legislature and increase the likelihood of passing budgets consistent with the Stability Programs. Improving the linkage between the national budget process and the Stability Programs would also imply that the multi-annual commitments the governments make at the European level play a greater role in shaping decisions about the annual budget at the national level. This would increase the effectiveness of the Stability Programs for ensuring sustainable public finances.

Second, the scope of the Stability Programs should be broadened to include targets for government spending and revenues, as deficits have little commitment value in times of budget surpluses or balance. Where fiscal adjustments become necessary to reduce emerging deficits, the Stability Programs should explain the quality of the adjustments chosen by the governments, and the Commission and the European Council should make the quality of the adjustments an explicit criterion of their evaluations. This could be combined with requiring countries to present multi-annual programs for critical issues such as retirement benefits. The European Commission could then take the opportunity to evaluate the quality of a country's long-term planning and forecasting framework and assess the consistency of current policies with long-term requirements. As a minimum, this would contribute to the public debate about the long-run exigencies of sustainable public finances. Of course, this would require making such assessments public. While one might object to this as too much interference of the Commission in the internal affairs of the member states, the Union has a right to consider the consistency of member states' fiscal policies with long-run sustainability, if it takes the latter seriously.

Third, there is still ample scope for improving the national budget processes of the EMU member states, particularly with regard to improving their ability to cope with unforeseen spending and revenue developments. While the institutional framework at the EU level has so far focused on the governments' intentions to reduce deficits and keep them low, more attention could be paid in the future to rules and mechanisms for dealing with expenditure and revenue shocks.

The role internal stability pacts can play in this context is much harder to assess, as it depends very clearly on constitutional principles, which are special to each country. Where sub-national governments are financially dominated by and heavily dependent on the central government, such pacts may be easy to conclude, but ultimately, they may also be of small relevance, as the central government is the main player in public finances, anyway. Where sub-national governments are more independent, as in Germany, the key constitutional issue is the extent to which sub-national governments can be forced to bear the financial consequences of obligations from an agreement made between the central government and other states. In such a setting, an internal stability pact, if concluded at all, may turn out to be ineffective, leaving the central government with the obligation to take all actions necessary to meet the criteria of the Stability and Growth Pact and the EDP. In view of the constitutional differences among the EU member states, it is hard to come to any general assessment in this regard.

In conclusion, the experience of the fiscal consolidations of the 1990s was in several ways special and is unlikely to be repeated in the future. The implication is that the EMU needs a framework for preventing fiscal policies from backsliding. The current revival of economic growth in the area provides an opportunity to introduce such a framework before hard measures are necessary again to maintain sustainable public finances.

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8. APPENDICES

8.1 Estimates of Probabilities of Consolidation

This appendix presents the models used to estimate the probability of consolidation starts and successes and the duration models used in section 3 of the report. The model is similar to those reported in section 2; but here, we develop a preferred specification to use degrees of freedom efficiently. The estimates for our sample including the Canada, Japan, the USA and the EU countries, with the exception of Luxembourg from 1960 to 1999, are as follows:

Table 8.1.1: Probit Estimates for the Start of Fiscal Consolidations in OECD Countries (1960-1999)

Variable	Coefficient	S.E.
Cons.	-0.73	0.13***
Debt (lag)	0.0065	0.002***
Output Gap	-0.009	0.033
Change of MCI (real)	0.01	0.05
Output Gap OECD	-0.17	0.05***
Change in OECD Budget Balance	0.43	0.10***
Log Likelihood = - 252.15	Pseudo R_square=0.07	Wald Chi_square=60.88***

Note: The number of observations is Nobs=400. Standard errors are adjusted for clustering on countries. Asterisks indicate significance below the 10 (*), 5 (**) and one (***) percent level.

Next, we estimate a model for the likelihood of expenditure-based consolidations to start. A consolidation is deemed expenditure-based, if the average contribution of primary cyclically adjusted expenditures to the improvement of the budget balance over the consolidation episode was more than 50 percent. Estimating the model yields the following results:

Table 8.1.2: Probit Estimates for the Expenditure-Based Fiscal Consolidations in OECD Countries (1960-1999)

Variable	Coefficient	S.E.
Cons.	-1.57	0.30***
Debt (lag)	0.018	0.005***
Output Gap	-0.13	0.08*
Change of MCI (real)	0.01	0.14
Output Gap OECD	-0.02	0.13
Change in OECD Budget Balance	1.63	0.54***
Log-Likelihood= -38.62	Pseudo R_square=0.24	Wald Chi_square=18.93***

Note: The number of observations is Nobs=75. Standard errors are adjusted for clustering on countries. Asterisks indicate significance below the 10 (*), 5 (**) and one (***) percent level.

The hazard rate model was estimated using the Weibull specification presented in section 2. We include only those variables which show a significant or close to significant effect in the estimates, i.e., the lagged debt level, the change of the output gap and the change of the OECD budget surplus. To avoid endogeneity problems we instrumentalize the output gap with lagged values. Moreover, we augment the model by fixed country effects controlling for unobserved variables. Since the fixed effects are significant for some countries this procedure should yield more precise estimates than a model excluding country dummies. This biases the results against finding any significant effect of the fiscal strategy on the residuals between predicted values and actual persistence. The estimates for the fixed effects are not reported.

Table 8.1.3: Hazard Rate Estimates for the Fiscal Consolidations in OECD Countries (1960-1999)

Variable	Coefficient	S.E.
Cons.	-3.79	0.70***
Debt (lag)	-0.04	0.008***
Change of Output Gap	-0.15	0.12
Change of OECD Surplus	-0.27	0.20
	Rho = 3.20***	Wald Chi_square=76.86***

Note: The number of observations is 75. Asterisks indicate significance below the 10 (*), 5 (**) and one (***) percent level.

8.2 Fiscal Consolidations in the Member States in the 1990s

8.2.1 Austria

The first convergence programme presented in May 1995 expresses the government's firm determination to join EMU in the first round and to comply with the fiscal reference values as soon as possible. Since Austrian public finances were marked by a deterioration of the budget balance shortly before the country joined the European Union in January 1995, the government was in the unfavourable position of having to improve the budget balance from -5 percent in 1994 to -3 percent in 1997 and to bring the debt level, which stood at 65.4 percent of GDP in 1994, on a declining path. The major contribution for the necessary improvement of the budget balance should come from expenditure cuts. The programme proposes a series of measures, such as expenditure ceilings, overhauling the public administration, structural reforms of the social security system and alternative means of financing public infrastructure. Some more concrete measures concerning unemployment insurance, old-age pension schemes, subsidies and an energy tax had already been taken. (Convergence Programme May 1995). The updated convergence programme presented a year later by the new government reconfirms the above objectives. Moreover, it specifies that two thirds of the necessary budget consolidation should be achieved through expenditure cuts and enumerates a series of measures in almost all expenditure and revenue categories which had already been enacted to achieve this target. The updated convergence programme, presented in October 1997, follows this vein and emphasises government's willingness to pursue structural fiscal reforms designed to promote growth and employment, particularly in the area of education and training, public pensions and unemployment benefits. (see Convergence Programme Nov. 1997)

A series of retrenchment measures were approved in the 1995 budget to consolidate the budget balance. Among others public expenditures were contained by a reduction of personnel and cuts in overtime pay and "extra" benefits. Pensions to federal civil servants and federal contributions to pensions paid by the states dropped substantially. Child allowances were cut and the co-payments for transport of pupils and students increased. (OECD Economic Survey 1997:43) The consolidation package agreed upon by the new government included a broad range of measures. The major elements of expenditure restraint were the following: First, wage compensation for the public administration at the federal level and in national bureaucracies, such as the social insurance system, railways etc. had to be stabilised. This involved modest collective bargaining agreements, a reduction of public employment and cuts in overtime pay as well as discouraging early retirement by paying full pensions only from the age of 60 onwards. Second, family allowances were curbed through the abolition of lump-sum payments for new-borns and restrictions on maternity leave, the elimination of free public transportation for children above 19 years and the elimination of allowances for non-resident children of foreigners, linking family allowances for students to performance and cutting support for school material. Third, other welfare transfer payments were reduced or frozen in nominal terms, such as payments for nursing. Fourth, the unemployment insurance system was relieved by extending the eligibility period for receiving benefits by two months and the reference period by six months, making the amount of unemployment assistance dependent on the time of previous employment, freezing funds for active labour market policy, abolishing financial benefits for long-term unemployed prior to early retirement and fostering the employment of elderly people. Fifth, the costs of the pension system were reduced through restrictions on early retirement. Sixth, subsidies to the business sector were frozen at the 1995 level and, seventh, outlays for purchases and inter-governmental transfers were stabilised, in particular regarding central government transfers to the railway and housing subsidies.[54] (OECD Economic Survey 1997:48-50) In addition a reform of the health care sector was launched, which included measures to increase revenues of the health fund and to reduce costs, e.g. through a centralisation and rationalisation of hospital financing scheme. (OECD Economic Survey 1998:46, 1999:47-9)[55]

On the revenue side, the measures of the package aimed primarily at enforcing tax pre-payments, closing tax-loopholes and eliminating tax concessions or tax subsidies and enlarging indirect tax revenues. Among those measures were, first, the abolition of tax concessions in the wage, income and corporation-tax spheres. The investment allowance was cut to nine percent and for incomes subject to the top marginal rate of 50 percent, the deductibility of some personal expenses such as life insurance was abolished. In addition, the general income tax credit was made income-dependent. The formation of tax-free reserves was further reduced, including reserves available for apartment owners subject to rent control. Second, the rate of final taxation on interest income increased from 22% to 25%. Third, the energy tax on mineral oil and liquid gas was extended on electricity and natural gas and taxation of vehicles related to gasoline usage as well as tobacco tax and other small taxes rose. Moreover, additional revenues should be generated through telecommunication licensing. (Convergence Programme 1997:15, OECD Economic Survey 1997:50, 1998:70)

In 1998, the government again took a somewhat more expansionary stance to improve training and labour market conditions as part of the National Action Plan for Employment (see OECD Economic Survey 1999:61-62). This included an augmentation of means for training and active labour market policies. Most importantly, however, the government passed a pension reform at the end of 1997, the effects of which were already felt in 1998. The most important elements of the pension reform are the

[54] However, the package also included some stimulatory measures mainly directed towards construction. The purpose of these measures was to stabilize employment and avoid early retirement. (OECD Economic Survey 1997:48-50)

[55] The reform lead to higher expenditures in the short run. The government had to appropriate an additional ATS 3 bill in 1996, but by 1997 and 1998 the program seemed to have contributed to containing expenditures in that sector according to the OECD assessment (OECD Economic Survey 1998:46-7)

following: First, the gross earnings ceiling for calculating social security contributions rose more than usually. Second, all types of earnings derived from dependent employment or self-employment were included in the social security contribution base. Third, a bonus is paid for up to two years to employees willing to reduce their working time which is filled by hiring an unemployed. Fourth, elderly employees obtained a legal claim to work part-time and insurance period regulations were relaxed. Fourth, training measures as well as the hiring of an unemployed to replace the trainee for a period of absence were supported. Fifth, the Labour Office should launch a programme creating job opportunities for elderly eligible for early retirement who become unemployed. (OECD Economic Survey 1999: 92)

Table 8.2.1: Austria in the 1990s

Year	**1987 (1)**	**1992 (2)**	**1994 (3)**	**1997 (4)**	**1999 (5)**	**Dif. (2)-(1)**	**Dif. (3)-(2)**	**Dif. (4)-(3)**	**Dif. (5)-(4)**
Debt	58.2	58.0	65.4	64.3	63.3	-0.22	7.41	-1.13	-1.03
Surplus	-4.4	-1.9	-5.0	-1.9	-2.2	2.56	-3.08	3.08	-0.36
Primary Surplus	**-0.9**	**1.3**	**-1.2**	**1.9**	**1.2**	**2.19**	**-2.46**	**3.04**	**-0.62**
Curr. Revenues	**47.7**	**48.1**	**47.9**	**48.2**	**47.4**	**0.38**	**-0.19**	**0.28**	**-0.74**
Direct Taxes	13.8	14.3	13.5	15.5	15.4	0.51	-0.81	1.95	-0.03
Indirect Taxes	16.5	15.8	16.0	15.2	15.2	-0.78	0.27	-0.85	0.03
Soc. Security Contr.	15.0	15.3	16.0	15.6	15.3	0.22	0.69	-0.34	-0.33
Primary Expenditures	**48.6**	**46.8**	**49.1**	**46.3**	**46.2**	**-1.81**	**2.27**	**-2.76**	**-0.12**
Transfers and Subsidies	25.3	24.5	25.8	24.8	24.5	-0.75	1.23	-0.94	-0.34
Wage Payments	12.8	12.4	12.8	11.7	11.5	-0.39	0.42	-1.17	-0.15
Purchases	6.0	5.8	6.2	6.9	6.8	-0.15	0.38	0.67	-0.08
Investment	3.4	3.3	3.2	2.0	2.0	-0.10	-0.07	-1.25	0.01

The deterioration of the budget balance immediately preceding the consolidation from the mid-1990s onwards, was caused by the impact of the economic downturn on the budget as well as discretionary measures as the cyclically adjusted figures indicate. The cyclically adjusted primary balance as share of GDP deteriorated from 1.3 percent in 1992 to -1.2 percent in 1994 and the actual primary deficit from 1.5 percent to -1.5 percent during this period. The initial consolidation package implemented in 1995 stopped the fiscal expansion, though it did not strongly reverse it. The reduction of primary cyclically adjusted expenditures, which already started in 1994, explains the 0.1 percentage point improvement of the primary cyclically adjusted budget balance in 1995. The effect was small, in particular, because the measures targeting welfare benefits did not lead to a reduction of transfer payments in the short-run. Transfers as share of GDP rose 0.2 percentage points from 1994 to 1995.

The adjustment effort became more pronounced with the consolidation package implemented in 1996 and 1997. The primary cyclically adjusted budget balance improved from -1.1. percent of GDP in 1995 to 1.9 percent of GDP in 1997. At the same time, primary cyclically adjusted expenditures and actual expenditures were reduced from 49 percent of GDP to 46.3 percent of GDP, to which transfers contributed 1.2 percentage points, wage compensation 1.1 percentage points and investment one percentage points. Purchases actually increased 0.8 percentage points. At the same time, revenue

measures lead direct taxes to rise 1.3 percentage points and indirect taxes 0.5 percentage points. Social security contributions, in contrast, fell by 0.5 percentage points of GDP. Due to changes in other revenue sources, the overall cyclically adjusted revenue level increased 0.3 percentage points during this period. Overall, the consolidation process was primarily expenditure driven, 30 percent of the reduction primary deficit reduction over the entire coming from transfers and about 40 percent from wage compensation as well as investment. I.e. purchases and other primary expenditures produced a negative contribution.

The expenditure reducing effect of policy measures where halted in 1998/9, when the level of primary cyclically adjusted expenditures remained virtually stable at 46.2 percent of GDP. Transfers only experienced a moderate further reduction of 0.4 percentage points due to the measures taken in previous years. Cyclically adjusted revenues fell by 0.7 percentage points of GDP from 1997 to 1999 due to changes in the social security legislation and a reduction of capital revenues led to a fall of. The actual effect was somewhat cushioned by the cyclical upswing, reducing the revenue losses by 0.3 percentage points. Both developments caused a deterioration of the cyclically adjusted primary balance ending the previous consolidation. Since interest payments remained fairly stable as a share of GDP, even the actual balance deteriorated slightly by 0.3 percentage points of GDP from 1997 to 1998.

8.2.2 Belgium

When the Belgian government presented its first convergence programme in June 1992, the deficit of the public sector as close to 7 percent and public debt close to 130 percent. Thus the need to vigorously reverse previous developments and set the country on a sustainable fiscal policy track was clearly recognised in the convergence programme. The target was to achieve the three percent reference value by 1996 and, at the same time, bring the debt level on a downward trajectory. To comply with these goals, the government set forth three budget norms: First, tax revenue should increase at the same rate as GNP. Second, the growth in the total primary expenditures of the federal government should be limited to the rate of inflation. Third, a norm of annual financial balance was fixed for social security, coupled with the requirement that subsidies from the federal government should be stabilised in nominal terms. (Convergence Programme June 1992)[56] In addition, the programme explicitly considers the positive interest rate effect of the consolidation and spells out the damaging impact of a credibility loss due to a consolidation failure at the during the initial years of the programme (ibid: 3-5)

The second convergence programme, submitted in 1996, supplements the targets of the first one. Budget projections were based on the rule that the central governments maintains the level of primary surplus - 6 percent of GDP - over the course of the Programme. When the primary balance falls below 5.3 percent of GDP corrective discretionary action should be taken. Obviously, this budget rule allows the government to further reduce the debt level and ease the interest burden. The stability programme, passed in December 1998, largely confirms this rule. (see Convergence Programmes Dec. 1996 and Dec. 1998)

During the initial years of the convergence process, most policy action was taken on the revenue side of the budget to avoid a slippage of the budget balance despite the cyclical downturn of the country. In 1992, the government tightened corporate taxation by suspending deductions for investment, imposing taxes on withdrawals from certain reserves and the limiting the rate of degressive depreciation. Personal income tax rose because payments on withholding tax for the fourth quarter

[56] In contrast to the previous "double norm" related to central government taxes and primary expenditures, which failed among others due to the limited willingness of the central government to obey the rule and lack of co-ordination with the regions (OECD Economic Survey 1992:32, Convergence Programme 1992:5) this programme was more comprehensive by including social security funds and lower levels of government.

were brought forward and the government approved measures designed to make the change-over to a company less attractive. Moreover, a tax on pension and life insurance payments was established. (Banque National de Belgique Annual Report 1992) [57] In 1993, the automatic indexation of tax scales was suspended for at least two years and for at most four years. Only income of low income households remained index linked. In addition a complementary crisis contribution on personal and corporate income tax of three percent was installed and the deductibility at the marginal rate of premiums for life insurance and pension insurance policies, pensions savings and shares issued by employers was replaced by the average rate (Banque National de Belgique Annual Report 1993:71-2).

The government also raised the personal contributions to health care scheme by one percentage point for employees and self-employed and pensioners receiving benefits above a certain threshold. It abolished the retentions on family allowances and single persons or childless families, increased of employers' contribution to social security and introduced of a new contribution on companies (Banque National de Belgique Annual Report 1992). Regarding indirect taxes, excise duties on motor vehicle fuels were raised and a tax on cars as well as life insurance and pension payments established. The VAT was revised to harmonise it with EU directives through the introduction of three rates (19.5, 6 and 12 percent). (ibidem) In 1993 the government introduced a control levy on heating oil and energy consumption and extended the vehicle tax on second-hand cars (Banque National de Belgique Annual Report 1993:73)

From 1994 onwards, tax policy became somewhat more systematic and, according to the *Global Plan for Employment, Competitiveness and Social Security*, geared toward the long- term creation of employment. The *Global Plan* envisaged a substantial reduction of employers' contribution to the social security system to increase competitiveness. The corresponding shortfall of revenues should be financed through indirect taxes (Banque National de Belgique Annual Report 1994:47-8). As part of the plan, the tax on immovable property was increased through a flat-rate increase of 25 percent in the land register, a tax on income from second homes and from dwellings rented to persons using them for private purposes and the abolition of the imputation of withholding tax on income from immovable property against personal income tax, with the exception of the main dwelling (Banque National de Belgique Annual Report 1994:50) Moreover, the VAT rate was raised from 19.5 to 20.5 percent and excise duties on certain products were increased. (Banque National de Belgique Annual Report 1993:69). In 1996, the VAT was raised by another 0.5 percentage point to 21 percent (Banque National de Belgique Annual Report 1996:58). Smaller indirect taxes increased in various years: excise duties on petrol rose in 1995, an excise compensation tax was imposed on vehicles in 1996, duties on petrol and alcoholic beverages increased again in 1997. Moreover, levies imposed on pharmaceutical and electricity producers were extended from 1997 to 1998 (Banque National de Belgique 1995:54, 1996:58, 1997:57, 1998:46)

As stated in the Plan, employers' contribution to the social security system were reduced selectively, above all contributions for employees in the lowest wage category, young job seekers and sectors most exposed to international competition (Banque National de Belgique Annual Report 1994:48-9). As a financing measure, employees' and self-employed contribution rates to social security system were increased and it was decided to introduce a progressive contribution on all pension incomes from 1995 onwards (Banque National de Belgique Annual Report 1994:49-50). The reduction of employers' contribution was revised in 1995. Now it applied to unemployed persons who have been entitled to benefits for twelve months, irrespective of their age. Previously it referred to persons up to 26 years receiving benefits for at least 6 months (Banque National de Belgique Annual Report 1995:52).

[57] The withholding tax on dividends paid by subidiaries to their parent companies was abolished as a measure to convert European legislation into Belgian law. (Banque National de Belgique Annual Report 1992)

On the expenditure side of the budget, several short term and long term measures contributed to the consolidation. In 1992, a short term tightening was based on a reduction of defence expenditures, i.e. reflected most in government operating expenditures. Yet the overall effect in this spending category was restricted by the growth of wage payments due to the ongoing revision of the pay scale approved earlier (Banque National de Belgique 1993: 76). A more lasting initiative was taken concerning health care expenditures in 1992. A new system of intervention applied, changes were made to the system of price fixing for medicaments and technical services became better controlled. (Banque National de Belgique 1992). Despite these measure, however, health expenditures remained a driving force of expenditure growth during the next years. Further more, the temporary unemployment scheme and part-time unemployment programme were made financially less attractive, both for employers and employees. The benefit levels were reduced for people interrupting their career or and certain periods of unemployment were subjected to stricter regulation. The minimum age for early retirement was increased from 55 to 56. (OECD Economic Survey 1997:72)

A new impetus for expenditure reduction emerged with the introduction of a *General Plan* in 1994. First, the government established the rule that health care expenditures should not grow more 1.5 percent in real terms from 1995 onwards (Banque National de Belgique 1995:51). In 1995 and 1996/7 several measures were taken to curb health care expenditures:[58] among others certain fees and scales were frozen, others were reduced by 3 percent and refunding of certain pharmaceutical and hospitalisation costs was limited (Banque National de Belgique 1997:57).[59] These measures did not always lead to the result stipulated by the expenditure rule, but helped to contain growth. Second, the unemployment insurance system was reformed. The system of wage indexation was changed by removing tobacco, alcohol, petrol and diesel fuel from the price index used to calculate wages and social benefits. This new 'health index' helped to contain unemployment related spending and lowered the replacement rate during the following years. In addition it was applied to public sector wages and, in combination with the phasing out of the pay scale revision in 1996, also reduced growth of wage compensation. Third, unemployment benefits were further tightened, e.g. for young people entering the labour market.

The primary cyclically adjusted budget balance reflects the rather steady orientation toward fiscal sustainability characterising the fiscal policy of Belgian governments from the early 1990s onwards. With the exception of 1995, the cyclically adjusted primary balance improved continuously from 2.1 percent of GDP in 1991 to 6.8 percent of GDP in 1998. However, the two consolidation episodes before and after 1995 are characterised by a completely different structure. The numerous tax measures introduced in the early 1990s produced an increase of revenues by 3.2 percentage points of GDP from 1991 to 1994. Much of this additional tax effort was lost by the economic downturn, since the actual revenue level changed only 1.4 percentage points of GDP between 1991 and 1994. Over the period, direct revenues contributed most to this enlargement of public resources.

The short-term fiscal expansion in 1995 was above all the consequence of a deterioration of indirect taxes and social security contributions by 0.6 respectively 0.4 percentage points of GDP. This decrease reflects the changes to social security legislation enacted in 1994 as well as, potentially, a change in consumption behaviour reacting to an increase in the VAT rate.[60] Since expenditures did not fall at the same rate, the primary cyclically adjusted budget surplus decreased, although the actual primary deficit worsened only slightly by 0.1 percentage point of GDP due to the economic recovery

[58] The measures taken at the end of 1996 and in the budget of 1997 were worth BEF 30 bill. (Banque National de Belgique 1997:57)

[59] See OECD Economic Survey (1999:chapt. IV) for an analysis of the health care sector and a more detailed description of the policy measures.

[60] According to the National Bank of Belgium (Annual Report 1995) indirect revenues fell particularly due to a reduction in the sale of cars, which is the most important category of product to which the new 20.5 percent rate was applied.

of the country. The overall deficit even improved since interest payments as percentage share of GDP declined from 9.3 in 1994 to 8.3 in 1995.

Table 8.2.2.: Belgium in the 1990s

Year	1990 (1)	1991 (2)	1994 (3)	1995 (4)	1999 (5)	Dif. (2)-(1)	Dif. (3)-(2)	Dif. (4)-(3)	Dif. (5)-(4)
Debt	125.2	126.9	132.8	129.8	114.5	1.7	5.9	-3.0	-15.7
Surplus	**-5.4**	**-6.2**	**-4.8**	**-3.9**	**-1.03**	**-0.8**	**1.4**	**0.9**	**2.9**
Primary Surplus	**3.0**	**2.1**	**6.0**	**5.4**	**6.76**	**-0.9**	**3.8**	**-0.5**	**1.3**
Curr. Revenues	**47.0**	**47.5**	**50.7**	**50.0**	**50.48**	**0.5**	**3.2**	**-0.8**	**0.5**
Direct Taxes	16.3	16.0	18.0	18.2	18.76	-0.3	2.0	0.2	0.5
Indirect Taxes	12.0	11.9	13.0	12.4	13.13	0.0	1.0	-0.6	0.8
Soc. Security Contr.	14.7	15.2	15.9	15.5	14.84	0.6	0.6	-0.4	-0.7
Primary Expenditures	**44.0**	**45.4**	**44.8**	**44.5**	**43.18**	**1.4**	**-0.6**	**-0.2**	**-1.3**
Transfers and Subsidies	28.6	29.7	28.6	28.4	27.97	1.1	-1.0	-0.2	-0.5
Wage Payments	11.2	11.5	12.1	12.1	11.76	0.3	0.6	0.0	-0.3
Purchases	2.7	2.8	2.5	2.4	2.46	0.1	-0.2	-0.1	0.0
Investment	1.7	1.7	2.0	1.8	1.89	0.1	0.3	-0.2	0.1

The tax measures taken between 1996 and 1998 somewhat increased the cyclically adjusted revenue level. Beyond this, the measures taken to lower the social security burden and to increase indirect taxes actually cancelled out the fiscal impact of each other. They reduced social security contributions as share of GDP by 0.7 percentage points between 1995 and 1999 and increased indirect tax revenue by 0.8 percentage point. Thus, the 0.5 percentage point increase of the direct tax receipts largely explains the overall increase of the tax level. Actual tax receipts did not significantly deviate from this figure. On the expenditure side of the budget, the overall spending level, measured in terms of primary cyclically adjusted resource flows, fell by 1.3 percentage points from 44.5 percent of GDP in 1995 to 43.2 percent of GDP in 1999. This was primarily the result of the continuous changes to the social security system, particularly the change in indexation, also affecting public wages. Concomitantly, social security contributions were reduced by 0.5 percentage points of GDP and wage payments by 0.3 percentage points of GDP from 1995 to 1999. Sine the output gap of Belgium remained negative, the actual level of primary spending remained higher and the adjustment effect was less pronounced. While the cyclically adjusted primary surplus was 6.8 percent of GDP in 1999, the actual surplus was 6.0 percent of GDP. However, this improvement and the remarkable reduction of interest payments did suffice to reduce the deficit level from 3.9 percent of GDP in 1995 to one percent of GDP in 1999. Interest payments contributed 1.3 percentage points of GDP to this development.

8.2.3 Denmark

The first Danish convergence programme issued in February 1994 sets forth a temporary relaxation of fiscal policy for 1994, equivalent to 1.3 percent of GDP, as short-term anti-cyclical fiscal stimulus for the economy. The fiscal expansion should be distributed evenly between tax reductions and

expenditure increases. These measures and other structural reforms, according to the Danish government, should revive the economy such that the government would be able to consolidate the budget based on strong expenditure restraint thereafter. Later convergence programmes largely set forth the goal of fiscal restraint. Compliance with the three percent reference value was not considered sufficient to ensure the desired long-term development of public debt. Rather, consolidation should allow to create on average a surplus over the course of a business cycle. (see e.g. Convergence Programme February 1994, March 1996). This goal is tightened in the convergence programme submitted in November 1998. Here, the government envisages a budget surplus of around three percent of GDP as an average through the years 1998-2005 (p. 10). The budget balance should entail savings to meet the pressure on expenditure coming from the ageing population.

As announced in the convergence programme, the government set forth some expansionary spending measures in 1993 becoming effective and 1994. Among others, it allowed withdrawals of accumulated assets in social security funds (OECD Economic Survey 1993:105) and started housing policy initiatives, notably increasing support for repairs and renovation, and industrial policy initiatives encouraging activities of small and medium-sized enterprises. Moreover, it supported shipbuilding and fisheries and launched education and labour market policy initiatives (OECD Economic Survey 1993:105). Finally it eased the borrowing restrictions on local authorities to encourage investment in infrastructure (OECD Economic Survey 1993:105).

In 1994 a labour market reform came into force only partly reflecting the intention to contain public spending in the future. The reform introduced a paid leave schemes for child rearing, education and sabbatical purposes, limited the maximum duration of unemployment insurance benefits to seven years and increased training and job-creation measures for the unemployed and created more places in the education system (OECD Economic Survey 1994:120) Moreover, the government extended the transitional early retirement benefits (OECD Economic Survey 2000:78)

In the course of the following years, the government implemented a number of measures to reduce structural unemployment, increase the participation ratio and, thereby, lower social security expenditures. Among others, the replacement ratio was reduced for unskilled labourers below 25 years during the time they participate in active labour market policy programmes. It tightened eligibility requirements and availability. Moreover it reduced the duration of voluntary education for the unemployed. The government also tightened the active labour market policies, although the effect of these measures was not necessarily a reduction of expenditures since it brought a large number of people into the unemployment insurance system. More specifically, it prescribed a compulsory full-time activation after 12 month of unemployment. Unskilled youth is subject to educational activation after six months. (OECD Economic Survey 2000:70-6)

In addition, the government reformed the transitional early retirement system in 1995 removing the previous expansionary measures (OECD Economic Survey 2000:79-80). An early retirement benefit reform was adopted in 1999. The reform set forth larger reductions of the benefit level of income from private pension schemes for entry before 62 years, a tax discount to wage earners who stay in work beyond 62 of age up to a maximum of DKR 100000. The annual employee-paid contributions to the system have been approximately doubled, while the qualifying period has been raised to 25 years within the last 30 years. (OECD Economic Survey 2000:80)

Finally, the annual agreement between central government and local government on public finances has been extended in 1998 with the first of such agreements covering 1999-2002. Local government expenditures had repeatedly been a source of budget overruns in the past. Local income taxes are to remain unchanged and block transfers are adapted to an expenditure growth in public consumption of one percent. Any further increases in service levels are contingent upon productivity increases. (OECD Economic Survey 1999:148)

On the revenue side of the budget, Danish governments primarily introduced two tax reforms, the first one 1993 being implemented until 1998, and the second one in 1998. The first one was thought to ease the tax burden on income. It comprised a gradual reduction in marginal tax rates on personal incomes for all income groups over the 1994-8 period by eight to 14 percentage points. The aim was to encourage work and to reduce the implicit subsidy to credit-financed spending arising from interest deductibility. The reform introduced a payroll tax to finance labour-market policy measures. The contribution rate of employees' contribution should increase from 5% in 1994 to 8% in 1997, while the employers' contribution was to be introduced in 1997 at a rate of 0.3 % and increase to 0.6 percent in 1998. (OECD Economic Survey 1994:42). Taxation of investment income and outlays was subjected to special rules under the new system. Interest income should be taxed like earned income with the exception of the top tax rate, which was subjected to an additional capital-income allowance of DKr 2000. To mitigate the impact of lower tax-deductibility of interest on the cost of housing finance, the imputed income from owner occupation was to be lowered from 2.5 to 2 % of the housing value up to a certain limit. (OECD Economic Survey 1994:43). In addition, the reform was marked by a significant increase in 'green' taxes. Excise duties on electricity use and fossil fuels were increased sharply and charges on water and waste water introduced (OECD Economic Survey 1994:42).

The so-called Withsun package approved in 1998 had the primary goal of restricting private consumption to prevent the over-heating of the economy. It contained a tax reform to be introduced gradually from 1998 to 2002. The main elements of the reform are the following: a reduction in the tax value of interest payment deductions from between 40 and 46 percent to an uniform 32 percent; a reduction in marginal effective tax rates for low-income wage earners, with marginal tax rates on labour income being reduced by as much as 7 % and the withdrawal rate of subsidies to day-care of children being lowered. The obligatory pension contribution of 1% of wages was turned into a permanent tax and the income taxation of imputed rent was replaced by an equivalent local government property tax. A proportional tax rate of 26 % applying to the return of assets in pension funds and life insurance companies should replace from 2000 onwards the 'real interest rat' tax, which taxes the returns above 3.5 percent real rate. In addition, 'green' taxes on gasoline, fuel, electricity and natural gas were introduced. (OECD Economic Survey 1999:149)

Denmark entered the 1990s with an extended period of fiscal expansion which. But the primary balance remained rather high so that the debt level initially declined. It started to rise again at the end of the episode, when the cyclically adjusted primary surplus reached 5.3 percent of GDP and the total deficit mounted to one percent of GDP. The consolidation following this expansionary episode in 1993 was rather moderate and short-lived. In 1994 fiscal policy again became more expansionary. Moreover, the effect of the short consolidation effort, improving the ratio of the primary cyclically adjusted balance to GDP by 0.7 percentage points, was undone by the weak economic performance of Denmark during the early 1990s. During both periods, the total fiscal balance remained below the three percent reference value. Since the debt level was above 60 percent and jumped from 70.6 percent of GDP to 83.8 percent of GDP, which was partly the result of a major stock-flow adjustment,[61] Denmark was declared to have an excessive deficit in 1994. But this status was removed in 1996 because the large primary surplus and strong economic performance considerably lowered the debt level. The final consolidation episode, starting after 1995, again was significant in terms of its discretionary effort, although this time, economic growth and a reduction of interest payments helped in addition to convert the total deficit of 2.3 percent of GDP in 1995 to a overall surplus of 2.9 percent of GDP in 1999. The debt level dropped below the Maastricht reference value in 1998 and is projected to fall further.

[61] According to calculations of the European Cmmission, the stock-flow adjustment was 9.8 percent of GDP.

Table 1: Denmark in the 1990s

Year	1988 (1)	1992 (2)	1993 (3)	1995 (4)	1999 (5)	Dif. (2)-(1)	Dif. (3)-(2)	Dif. (4)-(3)	Dif. (5)-(4)
Debt	66.7	70.6	83.8	73.9	55.4	3.9	13.1	-9.9	-18.5
Surplus	1.5	-2.2	-2.9	-2.3	2.9	-3.7	-0.6	0.6	**5.2**
Primary Surplus	**6.9**	**4.2**	**4.9**	**0.9**	**4.9**	**-2.7**	**0.7**	**-4.0**	**4.0**
Curr. Revenues	**58.7**	**57.6**	**60.2**	**56.8**	57.4	**-1.1**	**2.6**	**-3.4**	**0.6**
Direct Taxes	30.6	29.8	31.2	30.4	30.3	-0.8	1.4	-0.8	-0.1
Indirect Taxes	18.7	17.3	17.9	17.0	17.9	-1.4	0.6	-1.0	1.0
Soc. Security Contr.	1.3	1.5	1.6	1.5	2.2	0.2	0.1	-0.1	0.7
Primary Expenditures	**51.9**	**53.5**	**55.4**	**55.9**	52.5	**1.6**	**1.9**	**0.6**	**-3.4**
Transfers and Subsidies	23.9	25.8	26.8	28.4	25.2	1.9	1.0	1.6	-3.2
Wage Payments	18.2	17.8	18.1	17.3	17.6	-0.4	0.3	-0.8	0.3
Purchases	8.1	8.0	8.7	8.5	8.2	0.0	0.6	-0.2	-0.3
Investment	2.1	1.7	1.8	1.8	1.6	-0.4	0.1	0.0	-0.2

The two expansionary and contractionary fiscal episodes are of rather different natures. The initial widening of the primary cyclically adjusted deficit was primarily the result of a strong increase in public spending. The primary expenditures to GDP ratio rose 1.6 percentage points while revenues deteriorated only 1.1 percentage points.[62] Transfer payments were the primary source of spending growth, since wage payments and investment declined. The expansion of transfers and subsidies was produced by successive measures to stimulate economic activity, as mentioned above. Yet, the subsequent consolidation was entirely based on revenue increases. Expenditure growth even accelerated. Transfer payments rose by 1.9 percentage points of GDP, measured as cyclically adjusted resource flows. This pattern persisted into the subsequent episode, characterised by a widening primary cyclically adjusted deficit.

During the fiscal expansion in the mid-1990s, revenues were the main source of deterioration; direct and indirect taxes declined by almost equal amounts whereas social security contributions stabilised. The tax reform approved in 1993 was initially under-financed. The reduction in marginal tax rates was front-loaded with the offsetting measures being gradually phased in from 1994 onwards. Yet, these tax measures did not set-off the initial reduction because cyclically adjusted revenues were 1.1 percentage points of GDP lower in 1998 than in 1995, the decline being entirely attributable to direct taxes. Hence, the contractionary strategy from 1995 onwards was based on expenditure reductions. Total cyclically adjusted primary expenditures as share of GDP fell 3.4 percentage points between 1995 and 1999, which can almost entirely be explained by the reduction in cyclically adjusted transfers.

8.2.4 Finland

When the new Finnish government came into power in 1995 it promised to continue the austere fiscal policy strategy which its predecessor pursued after the economic crisis propelled by the breakdown of

[62] Unfortunately OECD data do not allow to consider the entire expansionary episode due to missing data. Data of the European Commission indicate that they the expansion already started in 1987 and was more heavily biased towards expenditure growth.

trade with the former Soviet Union and the banking crisis of the early 1990s. This orientation is clearly reflected in the first convergence programme which the government submitted in 1995 after joining the Union at the beginning of the year. The convergence programme envisaged an improvement of the primary surplus from -5.3 percent of GDP in 1995 to 2.3 percent of GDP in 1999. A small surplus of 0.5 percent of GDP was forecasted for 1997. Correspondingly the debt level should be brought on a declining trajectory towards the end of the programme. The expenditure reducing consolidation effort should focus on intergovernmental transfers, unemployment insurance expenditures and subsidies. At the same time, the structure of taxation should be reformed to encourage employment and working (Convergence Programme Sept. 1995). Due to the overall successful implementation of the consolidation strategy and economic growth, the convergence programme of 1997 already mentions that the government has achieved the policy space to focus on some new areas (such as development aid) without jeopardising the overall goal of fiscal sustainability. The later stability programmes submitted in 1998 and September 1999, finally, indicate a continuation of the previous expenditure based strategy oriented toward a reduction of the debt burden and the creation of a suitable position to cope with the ageing problem, which Finland will face in the future. (Convergence Programmes September 1997, September 1998, September 1999)

In line with the strategy proposed in the convergence report, the government took several measures to reduce spending. In 1996 the system of municipal financing was revised and transfers of the central government to the local level were reduced (OECD Economic Survey 1997: 99) Moreover, the government changed existing policies to lower social transfers, which are among the highest in European comparison. In 1996, a major pension reform package was set forth. First, the accrual factors for early-retired and disabled workers were reduced from 1.5 to 1.2 percent for those aged between 50 and 60 years and from 1.5 to 0.8 percent for the remaining five years until regular retirement at 65. Second, the pensionable wage was changed. Before the reform, the pensionable wage was based on the average earnings during the last four years of every employment contract. This was changed to the last 10 years. Third, the method of indexation of post-retirement benefits was changed. From 1996 onwards, the annual adjustment of post-retirement benefits of people older than 65 was based on 80 and 20 percent weights of the CPI respectively the earnings index. Pension benefits had been fixed at 1.5 percentage points, below the inflation rate, and benefits were cut by 4.5 percentage point reflecting the higher burden of social security contributions on wages. Finally, the government decided to gradually abolish the flat-rate component of the national pensions by the end of the decade. (OECD Economic Survey 1996:136, 1997:79-80)

Regarding unemployment benefits, several new programmes were launched to promote vocational training, but at the same time tightening measures were taken. Since 1996 participant in voluntary vocational training received an allowance. But persons at the age of 17 were not any more entitled to labour market support unless they participate in active labour market programmes. The right to support was lost by 18 and 19 year-old persons who refused a job offer or training. (OECD Economic Survey 1997:99) Since 1997, the period of prior employment in subsidised or temporary work for entitlement to the earnings-related unemployment benefit has been extended from 6 to 10 months. Since most subsidised work programmes lasted only six month, this forced unemployed to find additional work to re-qualify for benefits. Moreover, pay forming the basis for earnings-related daily allowances had to be calculated from the date when the employment requirement is fulfilled for those who requalified after the ten months spell.[63] (see OECD Economic Survey 1997:49-54) The period of unemployment benefit for the long-term unemployed over 53 years of age was shortened by two years. The index freeze for unemployment benefits continued from 1997 to 1999. Persons between 20

[63] Since benefits were not any more based on the pre-unemployment salary, the loss of benefits was restricted to a maximum of 20 percent; i.e. the new allowances had to be at least 80 % of the previous one. (see OECD Economic Survey 1997:49-54)

and 24 refusing a job offer without acceptable reason were not entitled any more to labour market support for vocational training or studying (OECD Economic Survey 1998:121). In 1998, the government took an important step to reduce the burden of unemployment transfers in the long run by scaling down the indexation of unemployment related benefits as well as child cash benefits from wage indexation to consumer price indexation. However, the basic daily unemployment assistance benefit was raised by FIM 2 . (OECD Economic Survey 1998:126)

Initially the government was less willing to curtail subsidies. In 1995 the government installed a new scheme for income support to farmers to compensate for the reduction of agricultural prices due to the accession to the EU (OECD Economic Survey 1996:28) As part of a job creation scheme launched in 1997, interest subsidy loans were introduced for housing corporations and the state grants guarantees for private housing loans. Moreover, a public building renovation scheme was implemented and subsidies for shipyards and environmentally-oriented projects were introduced (OECD Economic Survey 1996: 141). Apart from these sector specific subsidies, the government policy in general has shifted away from subsidisation of tangible investment and specific sectors since 1993. In 1998, a new law came into force stating that support should be targeted on research product development, training or other forms of corporate development and the long-term enhancement of the competitiveness of small and medium-sized enterprises (OECD Economic Survey 1998:69-70)

Table 8.2.4: Finland in the 1990s

Year	**1992 (1)**	**1994 (2)**	**1995 (3)**	**1999 (4)**	**Dif. (2)-(1)**	**Dif. (3)-(2)**	**Dif. (4)-(3)**
Debt	41.5	59.6	58.1	44.9	18.0	-1.4	-13.2
Surplus	-5.5	-5.8	-4.4	3.0	-0.3	1.5	7.4
Primary Surplus	-1.3	0.7	0.2	4.2	2.0	-0.6	4.1
Curr. Revenues	56.4	55.6	53.2	49.9	-0.8	-2.4	-3.4
Direct Taxes	18.5	18.8	18.5	18.8	0.4	-0.3	0.3
Indirect Taxes	16.2	15.4	13.7	14.2	-0.8	-1.7	0.5
Soc. Security Contr.	16.0	17.2	15.8	12.9	1.2	-1.4	-2.9
Primary Expenditures	57.6	54.9	53.1	45.6	-2.8	-1.8	-7.4
Transfers and Subsidies	30.7	30.4	29.5	24.1	-0.4	-0.8	-5.5
Wage Payments	18.0	15.9	15.4	14.0	-2.1	-0.5	-1.4
Purchases	7.3	7.4	7.4	7.2	0.1	0.0	-0.3
Investment	3.5	2.9	2.8	2.7	-0.6	-0.1	0.0

In addition, the government supported small and medium-sized firms through special arrangements in social security contributions and at the same time lowered the tax burden on labour to set work incentives. From 1995 onwards, employers' unemployment insurance contribution was differentiated with a fixed rate at 2 percent for "small and medium sized firms", i.e. the payroll below FIM 5 millions, and 6.1 percent for the remainder. Moreover, entrepreneurs became entitled to unemployment benefits (OECD Economic Survey 1996:136) In 1997, the rate of the employers' unemployment insurance contribution became one percent for the first FIM 5 millions. of the payroll and 4 percent for the remainder. The rate of the employees' unemployment insurance contribution changed to 1.5 percent of wages. (OECD Economic Survey 1998:120-1) The employers' unemployment insurance contributions were further adjusted downwards, when they were set at 0.9

for the first Mk 5 millions of the payroll and 3.9 percent for sums exceeding that limit in 1998. The unemployment insurance contribution of the employed was reduced 1.4 percent of wages. (ibid: 125)

Certain tax measures were directed towards the same goal. In 1998 the depreciation schedule of small and medium-sized enterprises was raised to 50 percent on the basis of capital assets acquired in 1998 and applied to the year of acquisition and the following two tax years. The relief applied to basically all new machinery and replacement investments (OECD Economic Survey 1998:126) Other measures, as mentioned above, were intended to lower the direct tax burden on labour and find offsetting financing. The personal income tax burden was lowered in 1997 due to a four percent upward revision of scales, which was above the inflation rate, and a one percentage point lowering of the tax scale. Also, household employment was made tax deductible (OECD Economic Survey 1998:123). By contrast, the tax rate on corporate and capital income increased from 25 to 28 percent in 1996 and excise duties on petrol were raised in 1996 and 1998 (OECD Economic Survey 1996:140, 1998:126) Other changes in indirect taxation, particularly the value-added tax, were geared toward the harmonisation with EU legislation. Among others, the VAT was modified so that only two reduced rates apply from 1998 onwards (OECD Economic Survey 1998:126).[64]

The measures affecting social security contributions and the impact of the EU entry on indirect taxes caused the short deterioration of the public balance in 1995. From 1994 to 1995, cyclically adjusted receipts of direct taxes decreased 1.7 percentage points of GDP and social security contributions 1.4 percentage points. The total effect on government revenues was a decline of 2.4 percentage points of GDP. Since expenditures decreased only by 1.8 percentage point of GDP, this reduction of public receipts caused a short-term interruption of the consolidation starting in the early 1990s. Due to the large negative output gap existing in these years, the actual primary deficit changed less than the cyclically adjusted figures. This made the fiscal setback less severe for the achievement of the fiscal Maastricht criteria.

During the subsequent consolidation episode from 1996 to 1999, the cyclically adjusted primary balance improved from 0.2 percent of GDP to 4.2 percent of GDP. The consolidation was entirely expenditure based. Current revenues decreased by 3.4 percentage points of GDP, most of which resulted form a reduction of social security contributions by almost three percentage points due to the support and preferential rates given to employment and small firms. At the same time, cyclically adjusted public spending dropped from 53.1 percent of GDP in 1995 to 45.6 percent of GDP in 1999. By far the largest share of the reduction of primary expenditures came from transfers and subsidies as a result of various welfare reforms and changes in public subsidisation, as mentioned above. Cyclically adjusted transfers and subsidies declined from 29.5 to 24.1 percent of GDP. This development was enforced by the general economic situation. Finland's above average performance in the late 1990s allowed to improve the actual primary budget balance from -3.4 percent of GDP in 1995 to 4.5 percent of GDP in 1999. Actual transfers decreased from 30.6 percent of GDP to 24 percent of GDP in 1999. The strong improvement of the primary balance, in turn, was the principal source of the strong consolidation of the total budget balance, because interest payments underwent only minor changes.

[64] Other changes to tax legislation pursued more specific goals, such as the treatment of foreign experts, life insurance in foreign companies and energy consumption (see OECD Economic Surveys 1995-1999)

8.2.5 France

Starting in 1989, the French deficit increased slowly one percentage point to 2.2 percent of GDP in 1991 and debt mounted to 40 percent of GDP, well below the reference value. This implied that France was one of the few European countries that complied with both reference values immediately prior to the convergence process. Then, however, the deficit quickly deteriorated to 4.2 percent in 1992 and six percent in 1993. The first convergence programme recognises the need to consolidate the budget balance to avoid a "snowball effect" of public debt, to re-gain room for manoeuvre through a reduction of interest payments and to prepare a sound basis to confront the ageing problem in the future. More specifically, the government proposed to reduce the deficit to less than 2.5 percent of GDP in 1997, which would suffice to stabilise the debt level by the end of the programme. The government planed to reduce the deficit, at the same time stabilising or even lowering the existing tax burden. (Convergence Programme 1993:6)

The second convergence programme, presented in 1997, by and large reiterates this fiscal strategy, although objectives are put into a somewhat different context. The second programme contends that the "efforts made by France form part of a strategy of structural reform which has a single objective: employment" (Convergence Programme 1997:2). Thus, more emphasis is put on the structural reform of the labour market and the social security system and the lowering of the tax burden. This tendency is pushed further in the first stability programme presented in December 1998. Although the programme maintains the objective to fiscal consolidation, real expenditure growth, which should stay below three percent until 2002 becomes the major policy target. The strongest restriction applied to central government expenditures which should remain below one percent.[65]

When the government presented the first convergence programme, it had completed or was in the process of planning and approving several reforms affecting public finances. Regarding health care, spending caps on ambulatory care expenditures were in force since 1992 and a set of measures was approved to curb hospital expenditures as well. These measures included an increase in direct payments by patients, the introduction of medial files and guidelines and savings on public and private hospitals (OECD Economic Survey 1994:131, 1995:39) Moreover, a pension reform was approved in 1993 coming into effect in 1994. The new legislation raised the threshold for full pension rights from 37.5 to 40 years and based them on the average worker's 25 best-paid years, instead of the last ten years (Banque de France Bulletin Digest 2/94, OECD Economic Survey 1994:132). The rules governing unemployment compensation were similarly tightened with the introduction of a steeper degressive benefit scale and more restrictive entitlement criteria (OECD Economic Survey 1999:55-56).

The effect of these restrictive measures were partly offset by other expansionary initiatives. In 1992 several labour market measures were announced and implemented; and in 1993, the government launched programmes to subsidised agriculture, small and medium-sized enterprises and the construction industry. In addition, capital was increased for state-owned enterprises (OECD Economic Survey 1994:46).

On the revenue side of the budget, policy measures similarly were directed toward the improvement of financing, on the one hand, and business or unemployment related targets, on the other hand. The government cut corporate tax and the top VAT rate in 1992 (OECD Economic Survey 1994:44) and employers' contributions to the family allowances scheme were reduced for low-income earners in

[65] Over the same period, the deficit should be reduced to 1.2 percent of GDP. This projection is based on the conservative scenario. The "best-case" scenario implies a deficit of 0.8 percent of GDP (Convergence Programme December 1998)

1993 (OECD Economic Survey 1994:46). In 1993, the contributory income tax surcharge (CSG) was raised from 1.1% to 2.4% (OECD Economic Survey 1994:46, BF 1993:29) to improve the revenue base of the social security system and higher contribution rates for unemployment insurance were enacted (Banque de France Annual Report 1993:29).

The budget of 1994 was part of a multi-annual fiscal plan which, in line with the convergence programme, aimed at stronger expenditure restraint. But during this and the subsequent years a number of restrictive as well as expansionary initiatives, particularly enlarging subsidies and transfers to households in 1994 and 1995, were taken. The government's willingness to slow down expenditure growth is, among others, manifested in the Prime Minister's repeated decision to freeze appropriated funds, usually taken early in the budget year until 1997.[66] Moreover, public wage payments were contained through freezes in the public wage scale or moderate increases,[67] stabilisation of public employment, or in 1997, even the a planned reduction of 5600 positions. (OECD Economic Survey 1995: 34, 1997: 47, 50) Purchases of public entities were also subjected to budgetary restrictions, either selectively as in the case of military spending in 1996, or across the board, as most evidently in 1997. (Banque de France Annual Report 1996:42, OECD Economic Survey 1997:50).

Regarding social security benefits, several general and more specific initiatives were taken from 1995 onwards. Firstly, a change of the constitution ratified in 1996 authorised the parliament to vote each year on a ceiling on spending of the overall social security system on the basis of a government report. Previously the benefit policies of the social security system had been set mainly by the social partners. Secondly, a special fund to amortise a substantial portion of accumulated debt of the social security system was installed. The more specific measures implemented during those years include the following: In 1996 and 1997, back-to-school benefits paid to low-income families were reduced and new benefit for elderly people requiring attendance introduced, replacing the compensation allowance granted to third parties (Banque de France Bulletin Digest 8/96, 12/96, 1/97). A pension fund bill was passed in 1997 setting up a pension savings schemes (Banque de France Bulletin Digest 1/97, 3/97). As part of a health care reform package, initialised in 1995, mechanisms to enforce spending objectives were installed until 1997 (OECD Economic Survey 1997:48-9): the adjustment of physicians' rates of remuneration has been linked to the expenditure targets; insurance funds can impose sanctions on physicians who prescribe unnecessary treatment, the management of hospitals was transferred from local to regional authorities. (IMF Country Study 1997:19) In addition, the daily contribution paid by hospital patients was raised from FRF 55 to FRF 70 (Banque de France Bulletin Digest 2/96)

While the last measures intended to reduce spending, also a number of expansionary policies were initiated. The initiatives approved in 1994 include bonuses for employers hiring young people,[68] the quadrupling of the school-start allowance, additional social spending and labour market measures (OECD Economic Survey 1995:32). In 1995 a sick pay for independent craftsmen was implemented (Banque de France Bulletin Digest 5/95) and a supplementary budget including support measures for housing and reduction in unemployment was passed (Banque de France Bulletin Digest 7/95). Additionally, an agreement on new subsidies for housing organisations was signed (Banque de France Bulletin Digest 2/95) and support approved for housing of homeless and emergency housing as well as additional subsidies for the first time home-buyers loans (Banque de France Annual Report

[66] This did not necessarily imply that these funds were not spend, but provided the means to reshuffle spending initiatives without increasing the budget, as would have been the case otherwise.

[67] The government announced a unilateral increase in civil servants pay of 0.5% with effect from March 1 and further 0.5 % rise on October 1 (Banque deFrance Bulletin Digest 3/97)

[68] Companies hiring young unemployed people for a minimum of 18 months received a monthly subsidy of FRF 100 for the first nine months (Banque de France Annual Report 1994:42, Banque de France Bulletin Digest 4/94). Later on it was decided that the programme introduced for nine months should be to be continued for five years (OECD Economic Survey 1995:144)

1995:41). Also new subsidies for independent fishermen were approved (Banque de France Bulletin Digest 3/95). Finally, a new employment scheme (CIE) was installed which reduced substantially the cost of hiring the long-term unemployed through a FRF 2000 subsidy per month for two years and the exoneration from employers' payroll contributions (Banque de France Annual Report 1995:41). In 1997 unemployment benefits were enlarged because the minimum benefit level was raised,[69] the period of full-rate entitlement for jobless persons aged at least 49 with a record of 14 months' work during the previous 24 months was extended from seven to nine months and the 15 percent benefit deduction for unemployed having worked four out of the past eight months was abolished (OECD Economic Survey 1999:56).

In 1998, a specific benefit for unemployed less than sixty years old having paid old age pension contributions for forty years was introduced (Banque de France Bulletin Digest 5/98) and a number of measures to help unemployed were launched (Banque de France Bulletin Digest 2/98). Among others, unemployment benefits recipients can continue to receive benefits while earning income form part time work (OECD Economic Survey 1999:56)

Regarding public revenues, the governments' strategy continued to be characterised the search for additional resources and tax support to promote employment and growth. In 1994 a income tax reform was launched, leading to an initial reduction of 3% in the personal tax bills (Banque de France Annual Report 1994:42). Although all households benefit from the reform, tax reductions are higher for low and middle-income earners and rise more than proportionally with the number of children. Furthermore, the tax system became simpler since some tax rebates were eliminated and the number of tax brackets is reduced from 13 to seven (OECD Economic Survey 1994:47). In addition, a decree was set forth allowing professionals to deduct their contributions to a supplementary pension scheme from their income taxes (Banque de France Bulletin Digest 10/94).

In 1995, tax measures supporting small and medium sized firms were taken by increasing the amount of capital investment that can be deducted from tax and extending the deduction for certain categories of investment income (Banque de France Annual Report 1995:41). Moreover, a temporary increase in wealth and corporate taxes was imposed. More specifically, a ten percent surcharge was raised on corporation taxes and the FRF 42 flat rate rebate on the income tax surcharge eliminated (Banque de France Annual Report 1995:42; Banque de France Bulletin Digest 7/95). In addition, excise duties on tobacco and gasoline were raised (Banque de France Bulletin Digest 2/95, OECD Economic Survey 1995:33) and the VAT rate rose by 2-percentage points (18.6% to 20.6%) from August 1995 onwards to finance the additional transfer payments approved during the budget year (Banque de France Annual Report 1995:42, Banque de France Bulletin Digest 7/95). Regarding social security contributions, employers social contributions were raised 3.8 points in order to balance the accounts of the local authorities' pension funds (Banque de France Bulletin Digest 2/95) and a degressive deduction of ten percent of employers' payroll contributions on wages between one and 1.2 times the statutory minimum wages was approved (Banque de France Annual Report 1995:41, see also Banque de France Bulletin Digest 8/95).

In light of the deficit in the social security system, the government imposed a social security debt repayment levy (CRDS) in 1996, which amounts to 0.5% on almost all income forms including investment income already subject to the social security surcharge and income from savings (Banque de France 1996:43; Banque de France Bulletin Digest 2/96). In addition, the share of income subject to social security contributions was raised by 3.1% (Banque de France Bulletin Digest 2/96) and tax incentives to invest in various financial market products were reduced or eliminated (OECD

[69] Here we have not included a detailed account of the annual adjustment of social security benefits occurring at the beginning of each year. These adjustments in general ranged between one and two percent.

Economic Survey 1997:47). Finally, more revenues were raised through a petrol tax hike (OECD Economic Survey 1997:47)

As emergency measures to comply with the three-percent reference value for the public deficit specified in the Maastricht Treaty, a five percent increase (from 36.6 to 41.6%) in corporate tax levied on companies with a turnover above FRF 50 mill was imposed in 1997 for two years. This tax hike also implied a base broadening, because it affected also certain long-term capital gains which were included in the tax base and, therefore, were subjected to a tax increase from a reduced rate of 19% to 41.6% (Banque de France 1997:44, Banque de France Bulletin Digest 8/97). Furthermore, the domestic tax on oil products increased (Banque de France Bulletin Digest 1/97) and a one percentage point rise in the social security surcharge (CSG) was approved to offset the 1.3 percent cut in employees' health contributions (Banque de France Bulletin Digest 11/96, OECD Economic Survey 1997:51).

The budget of 1997 was thought to initiate a tax reform project, leading to an overall reduction of the tax burden, which should be carried forward over the following years. However, this plan was already abandoned in 1998 (OECD Economic Survey 1999:43). Instead, the taxation on savings income was raised substantially to a rate of ten percent (except for the so called "popular savings") and various tax niches, such as overseas tax exemptions, were abolished (OECD Economic Survey 1999:43). More importantly, the social security surcharge levied on virtually all types of income was raised by 4.1% taking it from 3.4% to 7.5%, this extra surcharge being income tax deductible, while employees' healthcare contributions was lowered 4.75 percentage points, i.e. virtually eliminated, in return (Banque de France Bulletin Digest 11/97, Banque de France 1998:43).

The fiscal expansion at the turn of the decade was propelled by loose spending policies. The non-cyclical component of primary expenditures increased 2.6 percentage points to GDP, whereas revenues only lowered 0.6 percent. The major expenditure expansion actually occurred from 1991 to 1993, where the spending level rose from 47.5 percent of GDP to 50.6 percent of GDP. Beyond these aggregates, the spending growth was based on higher purchases and transfer payments, both rising 1.2 percentage points of GDP between 1991 and 1993. By comparison, wage payments only rose 0.7 percentage points and investment actually decreased 0.2 percentage points.

During the subsequent consolidation episode, spending growth was halted, but due to the numerous expansionary initiatives only moderately reversed until 1996. The overall level of primary cyclically adjusted expenditures lowered from 50.6 percent of GDP in 1993 to 50.1 percent of GDP in 1996. Since the economy remained well below trend growth over theses years, the business cycle did not affect the rate of change. During those years, the consolidation was mostly driven by the enlargement of revenues form 48.6 percent of GDP to 50.5 percent of GDP. The primary sources of revenue growth were direct taxes increasing 0.7 percentage points of GDP from 1993 to 1996 and indirect taxes rising 1.3 percentage points of GDP due to the financing measures imposed during those years. The budget of 1997 and the measures implemented to comply with the deficit reference value, eventually, led to a short-term reduction of public expenditures by 1.1 percentage point of GDP. The cyclical position of the country even enforced the effect by reducing actual primary spending by 1.2 percent of GDP. However, as the figures of spending categories show, current spending explains only 0.5 percentage point of the reduction. Thus the numerous policy measures taken during that time period had only a very limited effect on transfer and wage payments. After 1997 even this effect vanished due to higher transfers and subsidies as percentage share of GDP, which were partly offset by savings in purchases. The "weaker" fiscal policy stance did not show up in primary or total expenditures since automatic stabilisers allowed transfers and subsidies to decrease by 0.3 percentage points between 1997 and 1999. However, since public revenues remained fairly stable in 1997/8 and even increased in 1999, the primary cyclically adjusted deficit still meets our definition of a

consolidation. Due to falling interest payments, measured as share of GDP, in recent years, the total budget balance even improved from -3 percent in 1997 to -2.2 percent of GDP in 1999.

Table 8.2.5: France in the 1990s

Year	**1987 (1)**	**1993 (2)**	**1998 (3)**	**Dif. (2)-(1)**	**Dif. (3)-(2)**
Debt	40.1	51.6	65.2	11.5	13.6
Surplus	-1.9	-6.0	-2.2	-4.1	3.8
Primary Surplus	**1.2**	**-2.0**	**1.1**	**-3.3**	**3.1**
Curr. Revenues	**49.3**	**48.6**	**50.4**	**-0.6**	**1.8**
Direct Taxes	8.8	8.4	11.9	**-0.4**	**3.5**
Indirect Taxes	15.8	15.0	16.2	-0.9	1.2
Soc. Security Contr.	20.7	21.1	18.5	0.3	-2.5
Primary Expenditures	**48.0**	**50.6**	**49.4**	**2.6**	**-1.3**
Transfers and Subsidies	21.0	22.0	22.0	1.1	-0.1
Wage Payments	13.3	13.5	13.7	0.2	0.2
Purchases	9.8	10.9	9.9	1.2	-1.0
Investment	3.2	3.5	3.0	0.3	-0.5

8.2.6 Germany

The first German convergence programme, released in October 1991, refers to the re-unification process as a major break in German public finances. Despite the financing requirements related to the transition process, however, the convergence programme envisages a fiscal consolidation, which would reduce the deficit from five percent in 1991 to 2.5 percent of GNP in 1995. This fiscal adjustment should be based on restrained expenditure growth, especially at the federal level.[70] Apart from a more general constraint on public employment and wage spending, savings should be made in policy areas related to the separation of Germany - such as special transfers to Berlin - and defence spending.

The updated convergence programme, presented in October 1993, already recognises that the economic transition of the new Länder would be more difficult and protracted than initially planned. Moreover, it argues that the international economic downturn is responsible for the deviation from the envisaged consolidation path. Yet it reiterates the governments willingness to engage in a fiscal consolidation, based on revenue and expenditure measures, and lists several initiatives already taken or close to being approved. In addition, it points out the need to take some action improving the conditions for economic growth and mentions several initiatives taken into that direction. The revised convergence programme submitted in December 1996[71] puts a stronger emphasis on the later aspect. Expenditures respectively the reduction of the tax burden and fiscal consolidation become equally important elements of a twofold strategy. The first stability programme reconfirms this approach and

[70] The programme states that the average rate of nominal expenditure growth should be 2.3 percent at the federal level and around three percent for general government. Since nominal GNP growth was expected to be close to seven percent, this should lead to a reduction of the overall spending level (Convergence Programme 1991:7)

[71] Since the revised programme did not include the most recent developments and forecasts, an update was presented in February 1997.

specifics that pubic expenditures on average should not grow more than two percent between 1998 and 2002.

In line with the convergence programme, the government took some steps to improve the fiscal balance on the revenue side of the budget. Most importantly, the solidarity surcharge on personal and corporate income was introduced in 1991. The surcharge of 7.5 percent of the tax liability was implemented as a temporary measure until June 1992. Moreover, the tax rate on mineral oil and other excise duties increased (Convergence Programme October 1991) and social security contribution rates rose. The total rate rose from 35.65 percent in 1990 to 36.1 percent in 1991 and to 36.7 percent in 1992. Above all unemployment contribution rates increased from 4.3 percent in 1990 to 6.8 percent in 1991. At the same time, the rate of pension and health care contributions were reduced, but this development was reversed in 1992 leading to the overall increase. But also revenue reducing measures were taken to promote investment in former Eastern Germany. In 1992 the government ruled that the investment allowances scheme for investments in the new Länder should be extended and remain in effect until the end of 1996.[72]

Then financing efforts became more pronounced with the *Federal Consolidation Programme* and the *Savings, Consolidation and Growth Programme* approved in 1993 and implemented until 1995. The first programme set an end to the financing arrangements installed for the transition of the Eastern Länder and integrated them fully into the federal transfer system from 1995 onwards. In 1994 the mineral oil tax was increased and tax concessions granted to owner-occupied old buildings are reduced. (OECD Economic Survey 1995:158) In 1995 the solidarity surcharge was re-introduced at a rate of 7.5 percent, the insurance tax was aligned with the VAT tax rate, i.e. it increased from 12 to 15 percent, the wealth tax doubled from 0.5 to one percent for many assets and, at the same time, the wealth tax allowance was increased from DEM 70000 to 120000 (Convergence Programme October 1993, OECD Economic Survey 1996:181) To improve business conditions, the *Investment Location Law* envisaged a reduction of corporate taxes on retained profits from 50 percent to 45 percent and on dividends from 36 percent to 30 percent, becoming effective from 1994 onwards. In addition, the top rate of taxes on business income was reduced from 53 to 47 percent. These reductions were to be financed through the replacement of the declining-balance depreciation by the linear depreciation on company buildings and the closure of several tax loopholes and tax simplifications reducing evasion (Convergence Programme October 1993, OECD Economic Survey 1995:158)

In 1996 the tax law implemented two rulings of the Constitutional Court. First, the minimum subsistence income being tax exempted was raised to 12095 DEM respectively 24191 DEM for couples. Moreover, child allowances and the alternative tax allowances for children were raised. Second the special levy for the subsidisation of coal mining (*Kohlepfennig*) was abolished (Convergence Programme December 1996, OECD Economic Survey 1997:155) In addition, the tax depreciation allowance for the construction of rented housing was cut and the allowances for the promotion of owner occupied housing were restructured. (OECD Economic Survey 1997:155). The major provisions of the 1997 tax law, again, were more directed towards the improvement of investment conditions. In particular, the wealth tax was abolished and the inheritance and gift taxes were restructured. The personal exemption level increased and tax brackets were reduced from four to three. (Convergence Programme December 1996). Employment in private households was promoted by special tax allowances and extended depreciation allowances are introduced for newly founded enterprises. Finally, the real estate purchase tax increased. (OECD Economic Survey 1998:158)

Over the entire time period, social security contributions were almost continuously extended to finance the persistent deficits of the social security system in the Eastern Länder. (see Table 8.2.6a) The only exception was the reduction of pension contributions from 19.2 percent in 1994 to 18.6

[72] see OECD Economic Survey (1993:127) for details.

percent in 1995. But this decision was immediately reversed in 1996. Moreover, the government introduced a new Social Care Insurance Scheme (*Pflegeversicherung*) in 1995, which contributed further to the fiscal burden.

Table 8.2.6a: Social Insurance Contribution Rates

Year	Total	Pension	Unemployment	Sickness	Social Care
1970	26.5	17.0	1.3	8.2	
1980	32.4	18.0	3.0	11.4	
1990	35.6	18.7	4.3	12.6	
1991	36.7	17.1	6.8	12.2	
1992	36.7	17.7	6.3	12.7	
1993	37.4	17.5	6.5	13.4	
1994	38.9	19.2	6.5	13.2	
1995	39.3	18.6	6.5	13.2	1.0
1996	40.9	19.2	6.5	13.5	1.7
1997	42.0	20.3	6.5	13.5	1.7

Source: SVR (1996), Deutsche Bundesbank

In 1998 the outgoing government finally reduced the solidarity tax surcharge by two percentage points to 5.5 percent in 1998, abolished the business capital tax and increased the basic income tax allowance. Moreover, the VAT rate rose by one percentage point to 16 percent in April 1998 to cover the increasing government transfers to the pension system (OECD Economic Survey 1999:150). In 1999, the tax reform law, which updated the valuation of company pension reserves, and the tax relief law comes into force. The latter lowered statutory income tax rates and reduced the tax burden for households. The corresponding revenue shortfall was to be compensated by broadening the tax base for income from business activities. (OECD Economic Survey 1999:176) The government, later on, enacted legislation extending the obligation to pay social security contributions to casual employment and to "apparently self-employed" who are considered as dependent employees. Moreover taxes on energy were introduced, the proceeds of which was utilised to lower pension contribution rates by 0.8 percentage points (see IMF Staff Country Report November 1999)

On the expenditure side of the budget, the government initially maintained its expansionary fiscal stance. This is not immediately evident from budget figures, because the post unification period was marked by the creation of several special funds and semi-governmental entities. Table 8.2.6a reports the debt level for these funds from 1990 to 1997. While the federal government's debt rose by 3 percent of GDP in the wake of unification, the combined debt of the German Unity Fund, the ERP fund and the *Erblastentilgungsfonds* rose quickly to 12 percent of GDP. The *Treuhand*, the East German privatisation agency, alone incurred an impressive debt of over 6 percent of GDP. But the major part of this debt stock was not related to liabilities inherited from old East German enterprises. A large part of the debt was accumulated due to the privatisation related expenditures, which were equivalent to 46 percent of the federal transfers to the East in the last two years of the Treuhand's existence. In short, large parts of the financial support given to East Germany, simply were not included in government spending until finally the stock of liabilities was ascribed to the federal government, which caused the reported debt level to jump 10 percentage points in 1995.[73]

[73] For a more detailed account see von Hagen & Strauch (1999).

Table 8.2.6b: Public Debt in the 1990s (as percentage share of GDP)

	Federal Govern-ment	Local Govern-ments (West)	Local Govern-ments (East)	ERP-Fund	German Unity Fund	Kreditab-wicklungs-fonds	Erblasten-tilgungs-fonds	Treu-hand
1989	22.1	21.6	-	0.3	-	-	-	-
1990	22.3	20.3	-	0.4	0.8	1.1	-	0.6
1991	20.6	18.1	0.6	0.6	1.8	1.0	-	1.4
1992	19.8	17.8	1.4	0.8	2.4	3.0	-	3.5
1993	21.7	18.4	2.4	0.9	2.8	3.2	-	5.3
1994	21.4	18.3	3.3	0.8	2.7	3.1	-	6.1
1995	22.0	18.4	4.0	1.0	2.5	-	9.6	-
1996	23.8	18.3	4.3	1.0	2.4	-	9.4	-
1997	25.0	17.7	4.4	0.9	2.2	-	8.9	-

Source: Deutsche Bundesbank

Apart from this complication, only a few initiatives were taken to reduce pubic transfers, which had been the most important source of public spending growth after unification. The enactment of the Federal Consolidation Programme went one step into this direction by lowering the replacement rate for unemployed. Until 1994, the rate was 68% for an unemployed person with at least one child and 63% for a childless unemployed. In the Consolidation Act these rates were lowered to 67% respectively 60 percent. The duration of unemployment insurance payments varies from one year for people up to the age of 45 to 32 months for workers above 57. When the insurance payments expire, they are replaced by unemployment aid. Unemployment aid is paid indefinitely until the age of 65, although beneficiaries have to apply again after one year. The replacement rate of unemployment aid was also lowered in 1994 from 58 percent to 56 percent for unemployed with children and from 57 percent to 53 percent for childless persons. (BMA 1998, Steffen 1995).

In 1996, conditions for early retirement were tightened, when a law was enacted rising the standard early retirement age from 60 to 63. At the same time, the labour office introduced a program compensating wage losses for elder workers switching to a part-time position if they are replaced by previously unemployed or newly graduated apprentices. Moreover, growth of social assistance expenditures was restrained by a modest increase of the standard rates and a reduction of at least 25 percent if a recipient rejected acceptable work. Social assistance providers could instead support employment by granting wage subsidies (OECD Economic Survey 1997:157)

In 1997, the government approved a pension reform law for the year 1999. These measures were actually revoked by the new government shortly when they became effective. However, other measures were implemented. The *Law for the Promotion of Growth and Employment* curbed the increase of unemployment benefits in 1997 and reduced the generosity to pension payments. In particular, the accrual of pension rights which were not based on contributions was restricted, the level of pensions for immigrants was curbed and increased co-payments for spaws introduced. In addition, health care benefits were restricted and co-payments increased. Finally, the government tightened unemployment benefits further when the employment promotion law as enacted. Wage subsidies were reduced and job search controls for recipients of unemployment benefits strengthened. Since these measures did not suffice to achieve the three percent reference value for the general government deficit, the Minister of Finance introduced in addition several spending controls for spending. (OECD Economic Survey 1998:158-159)

The new government taking office in late 1998, reversed several initiatives which the previous government had taken. Job search controls were eased again by removing the reporting obligation of recipients and redundancy payments would no longer be credited against unemployment benefits, which had been the case since 1997. Moreover, a benefit ceiling for repeatedly unemployed was dropped with the intention to increase the incentives for unemployed to accept lower-paid jobs. The government also revoked parts of the health care reform previously introduced. In particular, it removed or reduced co-payments for medicines and other services and the possibility for health funds to provide rebates or reimburse patients, rather than paying the health provider directly . Payments to the new Länder health funds out of the risk equalisation fund, temporarily established in 1998, were extended indefinitely. (OECD Economic Survey 1999:73). A system introducing a global budget to curb health expenditure growth should come into force in 2000.

Table 8.2.6c: Germany in the 1990s

Year	**1989 (1)**	**1991 (2)**	**1994 (3)**	**1999 (4)**	**Dif. (2)-(1)**	**Dif. (4)-(2)**	**Dif. (4)-(3)**
Debt	39.9	40.1	49.2	62.6	0.2	22.5	13.4
Surplus	0.1	-2.9	-2.5	-1.6	-3.0	1.3	0.8
Primary Surplus	**2.7**	**-1.9**	**0.4**	**2.2**	**-4.6**	**4.1**	**1.9**
Revenues	**44.1**	**42.2**	**45.5**	**46.7**	**-1.9**	**4.4**	**1.2**
Direct Taxes	12.8	11.0	10.9	12.0	-1.8	1.0	1.1
Indirect Taxes	12.1	10.9	11.9	12.1	-1.2	1.3	0.2
Soc. Security Contr.	16.6	16.9	18.7	19.3	0.2	2.4	0.6
Primary Expenditures	**41.4**	**44.2**	**45.1**	**44.4**	**2.7**	**0.3**	**-0.7**
Transfers and Subsidies	20.5	20.6	21.9	22.7	0.2	2.1	0.8
Wage Payments	9.7	9.0	9.0	8.4	-0.7	-0.6	-0.7
Purchases	8.8	10.2	10.7	10.6	1.4	0.4	0.0
Investment	2.3	2.6	2.6	1.8	0.3	-0.8	-0.8

Cyclically adjusted budget figures indicate that the consolidation achieved form the early 1990s onwards was clearly revenue based. The strongly rising level of social security contributions provided the major financing source. From 1992 to 1999 social security contributions increased 2.4 percentage points of GDP, reaching a peak of close to 20 percent of GDP in 1997 and declining slightly afterwards. The changing economic circumstances somewhat lowered this difference for actual social security contributions, so that they did not have the same impact on the actual deficit. By comparison, cyclically adjusted direct tax receipts rose only one percentage point of GDP due to the counter-veiling initiatives mentioned above. Overall the cyclically adjusted revenue level rose from 42.4 percent of GDP in 1991 to 46.7 percent of GDP in 1999. The change of 4.4 percentage points even exceeds the improvement of the primary adjusted budget balance.

At the same time, the initiatives to cut public spending, as envisaged by the convergence programmes proofed relatively ineffective. Because of the special fund arrangements, it is hard to judge the expenditure development before 1994/5, when the activities of the Treuhand phased out and the new Länder where integrated into the federal financing system. Looking at the evolution of public spending from 1994 onwards shows that the policy measures addressing transfers and subsidies did not reduced the spending level. Expenditures in this spending category only modestly declined relative to GDP in 1997/8, but over the entire period increased by 0.8 percentage points. Looking at

actual transfer payments leads to a similar conclusion. The contribution of expenditures to fiscal consolidation after 1994 is primarily related to restraints in wage payments and investment. Revenues and short-term measures targeting public investment remain the primary source of consolidation even if we look exclusively at the second half of the 1990s.

8.2.7 Greece

When the Greek government launched its first convergence programme in February 1993, pubic finances were in disorder although fiscal policy measures had lowered the primary deficit considerably during the preceding years. Yet, the pubic deficit stood at 12.8 percent of GDP and public debt mounted to 97.5 percent of GDP. The first convergence programme states that no new measures should be taken to improve the fiscal position, rather the implementation of reforms approved in 1992 would suffice to achieve the necessary consolidation. This assessment proved to be severely over-optimistic. In the 1994 report, the government recognises that the fiscal position was the most important field where policy action had to be taken to achieve convergence. The up-date indicates that fiscal restraint and high levels of public investment, mostly financed by the European Community should bring the country on a higher growth-path during the first phase until 1996. Then, complete fiscal consolidation should be achieved and the debt level redressed during the second phase. Fiscal consolidation should be achieved through revenue increases as well as expenditure reductions. (Convergence Programme 1994)

The Greek government considered its strategy a complete success when the subsequent revision of the convergence programme was submitted in 1997. Economic growth had been stronger than expected and the country had, in fact, entered a “virtuous circle” of high primary surplus, lower interest rates and payments and falling debt levels. As projected by the previous revision, the public balance was smaller then the three percent reference value in 1998. Correspondingly, the 1998-update of the convergence programme by and large reconfirms the previous targets. But it puts more emphasis on expenditure reduction as the predominant adjustment strategy in comparison to previous documents

The primary focus of the consolidation efforts undertaken during the early 1990s was the enlargement of public revenues. The tax reform of 1992 included tightening measures but also tax reductions aiming at a higher growth potential. The personal income tax rates was lowered, with the top marginal rate falling from 50 to 40 percent and corporation tax rates were unified and lowered from 42-50 percent to 35 percent. By contrast, measures including strong penalties were introduced to fight tax evasion (OECD Economic Survey 1993:96) and the minister of finance increased the property tax valuation for real estate in the Greater Athens (European Economy Supplement A 4/92). Later on a package was approved to compensate for unexpected revenue shortfalls and to prepare for the EU VAT harmonisation (OECD Economic Survey 1993:50). Among those measures was an increase of nearly 100 percent in the special tax on automotive fuels and of almost 50 percent on heating oil. Excise taxes on alcoholic drinks and tobacco were raised significantly as well as withholding tax on investment receipts from bank deposits, which rose from 10 to 15 percent. The 36 % VAT rate was abolished and the products transferred to the 8 % VAT, while many products were transferred from the 8 to the 18 percent group. Finally the special taxes on cars and motor-cycles also increased. (OECD Economic Survey 1993:50)

In 1993 tax policy, again, tightened considerably, partly in response to the deficit overrun. For that purpose, the Minister of Economic Affairs announced that VAT returns will be scrutinised and efforts to raise revenues form tax arrears will be intensified (European Economy Supplement A 8/9.93) Moreover, the government announced a tax amnesty for those individuals and enterprises making a

renewed tax declaration until mid-March (European Economy Supplement A 3.93).[74] Finally, contribution rates of civil servants increased and pensioners started paying social security contributions as from 1993 (OECD Economic Survey 1993:56). Contribution rates were also increased in the subsequent years up to the level of the largest social security fund (OECD Economic Survey 1995:20).

In 1994 several measures were passed to redress tax evasion. A minimum tax schedule based on activity rather than income was installed. In addition, the obligation to declare revenue related to farming activity was imposed and objective criteria for the estimation of farmers' income introduced. Apart from farmers, every individual above 25 became obliged to file a tax return and list fixed assets. The government also lifted bank secrecy in the event of tax evasion and increased penalties, simplified and extended the tax arrears collection system, introduced a general framework for closing tax cases of past fiscal years and provided a payments scheme for tax arrears (OECD Economic Survey 1995:23, 84). Regarding direct taxes, the top marginal personal income tax rate was raised from 40 to 45 percent and a 15 percent tax rate was imposed on income from mutual funds and Repos (OECD Economic Survey 1995:20).Tax brackets were not adjusted for inflation as in previous and subsequent years (OECD Economic Survey 19996:27)[75] Regarding indirect taxes, the government announced a 20 percent increase of the tobacco tax of 20 % and a 100 percent rise of car license palate's duties (OECD Economic Survey 1995:84). Finally a withholding tax up to 8 percent was introduced on purchases of the public sector from the private sector (OECD Economic Survey 1995:84)

The tightening continued into the following years. On top of previous measures, a revaluation of the criteria used for the determination of income taxes was decided. Following the presentation of the 1997 Budget numerous changes to existing income tax legislation were introduced abolishing or limiting tax deductions and exemptions.[76] Moreover, the tax rate on profits of banks was raised from 35 to 40 percent in 1996 and a new tax was imposed on 'large' real estate property in Greece (Bank of Greece Annual Report 1996:172-3) Several changes have been made to the imputation rules for income taxes becoming effective in 1997 and 1998. The criteria for the imputation of the taxable income for self-employed were extended and income relevant rates, such as the 'objective' leasing value of real property, were raised. With effect of January 1998, on the one hand, income tax brackets were adjusted for inflation and tax credits based on the number of children increased. On the other hand, the loss of revenues associated with these measures was financed through higher tax withholdings from income and pensions as well as a smaller deduction given for the timely payment of taxes and a speeding-up of the collection process. (Bank of Greece Annual Report 1997:196-7)

Indirect tax revenues were enlarged by rising tax rates on alcohol, energy and tobacco. (OECD Economic Survey 1996:33) In 1997 a number of tax exemptions from VAT and other excise duties were abolished (Bank of Greece Annual Report 1996:173) Moreover, some registration fees and non-tax revenues rose and progress could be made in the fight against tax evasion. (OECD Economic Survey 1998:49). Later on in 1998 and 1999, abolition or reduction of special taxes on energy and reduced VAT rates for car and oil products somewhat reversed the trend. (Bank of Greece Annual Report 1998:197-8)

While successive governments were quite active in consolidating the budget balance through higher revenues, relatively little was one on the expenditure side of the budget. Governments pursued a relatively strict stance concerning public employment and wages and tried to keep pubic purchases under control. But the public employment policy was somewhat weakened from 1996 onwards. In

[74] As a tax alleviating measure, the government announced a revised schedule of rates for the special consumption tax applying to private cars (European Economy Supp A 11/12.93)

[75] By contrast, the tax on bank turnover decreased from 8 to 4 percent (OECD Economic Survey 1995:84).

[76] See Bank of Greece Annual Report 1996, pp. 171-2

pubic sector hiring grew considerably, reaching 1.5 percent in 1997. Moreover, payments increased due to court decisions, which retroactively granted salary benefits to civil servants and judges, and real wage increases. Wages rose by 7.5 percent in real terms in 1997 leading to a two year cumulative increase of 13.5 percent in real terms. (OECD Economic Survey 1996:30, 1998:50)

A pension reform introduced in the early 1990s brought considerable savings during the subsequent years. Nonetheless, transfer payments increased, among others, due to various expansionary initiatives. In 1993, the government announced an increase of agricultural pensions by 40 percent from 1994 onwards and an extension of pensions to all mothers of large families as well as an extension of a special monthly supplement to the social security services (European Economy Supplement A 8/9.93). In 1994, the government set forth a rise of unemployment benefits by 30 percent and an adjustment of the minimum level of benefits to DRS 60000 (European Economy Supplement A 2.94). The budget of 1996 reflected the governments social priorities and contained increases in various benefits, including family benefits, resources for the reinstatement of pension to members of the national resistance, increased subsidies to agriculture and to the areas affected by the 1994 earthquake (OECD Economic Survey 1996:27). Farmers' pensions were increased in the latter part of the year (OECD Economic Survey 1996:30). Moreover, the government has awarded a complementary allowance to low income old-age pensions from mid-1996 onwards (OECD Economic Survey 1996:34). In 1997, child benefits increased for families with more than three children (Bank of Greece Annual Report 1996:173).

Looking at primary deficit figures, Greece shows a very strong record of fiscal stabilisation from the turn of the decade onwards. With a short but significant interruption in 1995, the cyclically adjusted primary balance rose continuously from 1989 to 1998. Two qualifying remarks have to be made concerning this track record. First, Greece started with a very high deficit and debt level in comparison to other European states at the turn of the decade. In 1989, the deficit peaked with 16.1 percent of GDP. The total deficit fell below ten percent of GDP in 1996 reached 1.6 percent of GDP in 1999, among others due to a remarkable reduction of interest payments. As a consequence, the debt increased 45.6 percentage points between 1989 and 1996, when it mounted to 111 percent of GDP. Thereafter it fell to 104 percent in 1999.

Table 2: Greece in the 1990s

Year	**1989**	**1994**	**1995**	**1999**	**Dif. (2)-(1)**	**Dif. (3)-(2)**	**Dif. (4)-(3)**
Debt	65.7	107.9	108.7	103.8	42.2	0.8	-4.9
Surplus	-14.4	-10.0	-10.2	-1.6	4.4	-0.2	8.6
Primary Surplus	**-7.8**	**4.9**	**3.6**	**7.3**	**12.7**	**-1.3**	**3.7**
Curr. Revenues	**31.0**	**43.6**	**45.5**	**48.0**	**12.6**	**1.9**	**2.5**
Direct Taxes	4.4	7.3	7.8	8.5	2.8	0.5	0.7
Indirect Taxes	11.3	14.0	13.8	14.8	2.6	-0.1	0.9
Soc. Security Contr.	11.0	12.7	13.0	13.2	1.6	0.3	0.2
Primary Expenditures	**38.8**	**38.7**	**41.9**	**40.7**	**-0.1**	**3.2**	**-1.2**
Transfers and Subsidies	19.3	21.8	23.3	24.1	2.5	1.5	0.8
Wage Payments	12.1	10.6	11.3	11.1	-1.5	0.7	-0.2
Purchases	2.8	3.1	4.0	3.3	0.3	0.9	-0.7
Investment	2.9	3.0	3.2	3.8	0.1	0.2	0.6

Second, the consolidation until 1994 is based on a sharp rise of public revenues. Current revenues increased by 10.7 percentage points of GDP between 1989 and 1994. This difference is already somewhat cushioned by the effect of the cycle, because cyclically adjusted revenues rose 12.5 percentage points. At the same time, primary expenditures remained virtually stable. This changed during the short fiscal expansion in 1995, where expenditure growth exceeded the growth rate of revenues. During the subsequent consolidation episode from 1995 to 1999, Greek government implemented a mixed strategy. Expenditures were redressed by 1.2 percentage points of GDP, while revenues continued to rise by 2.5 percentage points of GDP. Thus over the decade, the current revenue to GDP ratio expanded from 31.9 percent of GDP to 48 percent of GDP. In comparison, the growth of primary expenditures was rather moderate, starting with 36.3 percent in 1989 and reaching 40.7 percent in 1999. This difference is even reduced to 1.9 percentage points of GDP for cyclically adjusted figures.

The slowdown in the pace of revenue expansion is partly related to a reduction of several non-tax items. During the initial consolidation episode, direct and indirect taxes as well as social security contribution jointly account only for 57 percent of the total increase in cyclically adjusted current revenues. Direct and indirect taxes grew somewhat more than 2.5 percentage points each and social security contributions 1.6 percentage points of GDP. By contrast, taxes and social security contributions contributed 72 percent to the revenue increase during the second consolidation episode. This can partly be explained by lower EU transfers for social programmes (OECD Economic Survey 1997:40).

On the expenditure side, the development of primary expenditures is similarly related to capital expenditures. The stabilisation of cyclically adjusted primary expenditures during the initial consolidation was the product of a reduction in wage payments relative to GDP and capital expenditures. Social transfers and subsidies actually rose 2.5 percentage points of GDP over the period. This expansionary tendency continued into the second consolidation period. Here, only government purchases declined, accounting for about 50 percent of the entire expenditure reduction. Given the growth of transfer payments and public investment, the lion's share of expenditure reduction rests on capital expenditures. The reduction was achieved through equity acquisitions in lieu with capital transfers to public enterprises, thus effectively moving public investment off budget. (OECD Economic Survey 1998:48).

8.2.8 Ireland

When Ireland joint the Maastricht convergence process, it was in the favourable position that its deficit had been above the three percent reference value for some years. The need for adjustment, thus, emerged primarily from the high debt level which had been accumulated during the 1970s and 1980s. Correspondingly, the first convergence programme, submitted in October 1991, stated as its main objective is to maintain a deficit below the reference value and to reduce the debt level to 100 percent of GNP by the end of 1993.[77] However, the convergence programme, much like the second Programme submitted in 1994, did not treat the compliance with the reference values as goal on its own, although any policy option was understood as being conditional on them. Rather "they are means to an end. The underlying goal has always been to secure the conditions for the maximum sustainable rate of increase in employment." (Convergence Programme 1994:6-7) Correspondingly, fiscal policies specified in the convergence programmes were geared toward an improvement of the supply of and demand for labour, especially at lower income levels. (ibid: 8). Importantly, the convergence programme was backed by social partners and measures specified therein to a large extent the outcome of a multi-annual agreement with unions and employer associations.

[77] Public debt, as defined by the Irish authorities, differs from the later Maastricht concept (Convergence Programme 1994:1)

The same policy orientation also guided the later convergence programme of 1997.[78] The programme set the objective to maintain a downward trajectory of the debt to GDP ratio, which should fall below 60 per cent early after 2000. To this end a general government deficit should be no more than 1.5 percent of GDP. The fiscal policy mix until 1999, the time horizon of the programme, should be designed to achieve fiscal discipline and to improve the conditions for growth, in particular through a set of personal tax reductions (Convergence Programme May 1997). As previously, the programme was underpinned by a three year national programme, entitled *Programme for Competitiveness and Work*, agreed upon with employers, trade unions and farmers' organisations.

The initial period of the convergence process was dominated by changes in the tax system and social security contributions. These measures partially added to the tax reform which had been implemented from 1988 onwards, resulting in a major reshuffling of corporate income taxation. In particular, the abolition of accelerated depreciation allowances in 1990 has substantially reduced the previous bias in favour of capital. Moreover, the corporate tax base has been broadened, with the abolition or curtailment of a series of allowances, exemptions and reliefs, most importantly the Export Sales Relief. The gap between the standard and the preferential tax rates has been lowered, with the standard rate being reduced from 50 percent in 1987 to 40 percent in 1992. Moreover, steps have been undertaken to broaden the tax base of personal income tax, in turn, providing the scope of a reduction of tax rates. The standard rate was reduced from 35 percent to 27 percent. (OECD Economic Survey 1993:50, 65). Indirect taxes, above all the VAT, were harmonised with EU legislation during the initial years. In 1993 the government rationalised the VAT rates to meet the harmonisation requirements and to sustain receipts by creating two basic rate bands after it had previously reduced the standard rate. More specifically, products formerly liable at ten percent and labour-intensive services taxed at 16 percent, were included in the 12.5 percent rate category. Other products formerly taxed at 16 percent were subjected to the standard rate of 21 percent (OECD Economic Survey 1993:44) Additionally an advanced VAT payment system was set up to compensate the ending of VAT imports from the EU (OECD Economic Survey 1997:153).

From 1993 onwards, direct tax and social security contribution measures were strongly directed toward increasing employment incentives, on the one hand, and maintaining the level of public receipts through offsetting changes in direct and indirect taxation, on the other hand. In 1993 a temporary one percent levy on income above IEP 9000 was installed, but at the same time a general income tax relief and mortgage interest relief was set forth (OECD Economic Survey 1993:44) In 1994, measures were taken to broaden the income tax base and lower the personal tax burden on low-income earners (OECD Economic Survey 1995:36). The revenue shortfalls due to these measures were in part paid for by reducing the value of tax exemptions, particularly on house mortgage interest and medical insurance premiums, as mentioned before, and taxing unemployment benefits.[79] In addition, the tax base was broadened by lowering the valuation and income threshold for the payment of the residential property tax (OECD Economic Survey 1995:46-7, Convergence Programme 1994:21). The budget of 1995 further broadened the tax base through limiting the tax deductibility of certain income transfers, mainly to children in higher education (OECD Economic Survey 1995:37). On the other hand, the tax base was narrowed by allowing local government service charges and house rents to be paid from pre-tax income and increasing the tax deductibility of investment in certain new businesses (OECD Economic Survey 1995:38). In 1996, the government widened the lower rate tax band and raised personal allowances by more than the increase in average earnings (OECD Economic Survey 1997:50). Later on, the standard corporation tax rate was lowered from 38

[78] An update of the convergence programme from May 1997 was published as appendix to the budget for 1998 because the macro-economic development was much more favourable than forecasted in the earlier version.

[79] The changes of tax exemptions were planed to be introduced gradually over four respectively two years (OECD Economic Survey 1995:46)

to 36 percent and the rate for the first IEP 50000 for companies not liable to the 10 percent rate was lowered from the standard rate of 30 percent to 28 percent (OECD Economic Survey 1997:51, 1999:162) Regarding personal income, the threshold for the 48 percent marginal tax rate was raised by about 6 percent while the standard rates for income tax and the employee's *Pay Related Social Insurance* were both cut by one percentage point to 26 respectively 4.5 percent (OECD Economic Survey 1997:109). These last mentioned measures focused already less on low income earners. This tendency was pushed forward by the tax reform of 1998, which more generally tried to improve the investment climate and growth potential. The reform reduced the top and standard personal income tax rates from 48 to 46 percent respectively from 26 to 24 percent. Moreover, it increased personal allowance, widened the standard rate band and increased the weekly *Pay Related Social Insurance* (PRSI) free allowance for full-rate employee contributions. It also set forth a reduction of corporate tax rate from 1999 onwards, whereby the standard rate is lowered from 36 to 32 percent, and the lower rate for the first IEP 50 000 declines from 28 to 25 percent. (OECD Economic Survey 1999:89)

Regarding social security contributions, in 1994 the government installed a social security exemption scheme which offered employers exemption from social insurance contributions in respect of additional employees for the two tax years (OECD Economic Survey 1993:120, Convergence Programme 1994:21). In 1994, the government raised the threshold for the lower rate of employers social security contributions. (OECD Economic Survey 1995:37) In 1996 the lower limit at which social security contributions and health and training levies are imposed was raised (OECD Economic Survey 1997:50) and employers' social security contribution rates on low-paid employees were lowered from 9 to 8.5 percent. Also the standard rate of employers' contribution was lowered by 0.2 percentage points to 12 percent and the threshold for this rate was increased by eight percent to IEP 250 per week (OECD Economic Survey 1997:51). In 1997, an employee's first IEP 80 of weekly earnings were exempted from the PRSI and earnings above that threshold were taxed at a 5.5. per cent rate. A lower PRSI rate also applied to employer contributions on wages up to a level close to the average manufacturing wage (OECD Economic Survey 1997:78).

On the expenditure side of the budget, social welfare benefits, particularly unemployment assistance, were increased and benefits paid to long-term unemployed were raised by more than the inflation rate (OECD Economic Survey 1995:36, 44; 1997:81), while the earnings-related supplement to unemployment benefits, which are payable for one year, was abolished (OECD 1995:43). In 1995, universal child benefits were raised, whereas other unemployment related benefits remained unchanged to make work more attractive (OECD Economic Survey 1995:37) Additionally, steps were taken to implement the court ruling to equalise certain past welfare benefits paid to men and women, which had created a liability of 0.7 percent of GDP for the government (OECD Economic Survey 1995:38, 1997:46) In 1996, the child dependent allowances paid to unemployed were frozen for the second consecutive year while the universal child benefits were raised by seven percent. It was also ruled that child dependent allowances of long-term unemployed could be retained for three months following employment, by which time the *Family Income Supplement* (FIS) should be payable. To improve incentives to work, the income limits for the FIS were raised and the increase of unemployment benefits was kept below average earnings. In addition, unemployed were now allowed to keep their free medical care for three years after becoming employed rather than for only two years (OECD 1997:51, 108-9). In 1997 the budget somewhat reversed some of the previous changes because social benefits rose twice the rate of inflation (OECD Economic Survey 1997:109). Eligibility for the FIS was now based on income net of social security contributions and it was planned that the FIS would be calculated on a net income tax basis as well from 1999 onwards (OECD Economic Survey 1997:10).

Irish governments from the late 1980s onwards have clearly broken with the fiscal stance of their predecessors. Starting with an average deficit close to 10 percent of GDP in the 1980s and an average

public debt higher than its GDP, Ireland turned into a country which never breached the three percent deficit limit in the 1990s and ended up with a remarkable surplus. Moreover, the stock of public debt decreased almost continuously during the decade reaching a level below the 60 percent reference value in 1999.[80]

Table 8.2.8: Ireland in the 1990s

Year	1990 (1)	1994 (2)	1995 (3)	1999 (4)	Dif. (2)-(1)	Dif. (3)-(2)	Dif. (4)-(3)
Debt	92.6	88.1	80.8	43.9	-4.5	-7.3	-36.9
Surplus	-2.8	-2.0	-2.5	3.4	**0.8**	**-0.5**	**5.9**
Primary Surplus	**1.7**	**4.2**	**2.2**	**3.5**	**2.5**	**-2.0**	**1.3**
Curr. Revenues	**33.9**	**38.1**	**34.3**	**32.2**	**4.2**	**-3.8**	**-2.1**
Direct Taxes	12.5	15.9	13.8	13.5	3.3	-2.1	-0.3
Indirect Taxes	14.1	14.3	13.6	13.2	0.2	-0.7	-0.4
Soc. Security Contr.	4.8	5.3	4.8	3.7	0.5	-0.5	-1.1
Primary Expenditures	**32.1**	**33.9**	**32.1**	**28.7**	**1.7**	**-1.8**	**-3.4**
Transfers and Subsidies	17.0	17.1	16.6	14.5	0.1	-0.5	-2.1
Wage Payments	10.4	11.0	10.3	8.7	0.6	-0.8	-1.6
Purchases	5.7	6.0	5.6	5.1	0.3	-0.4	-0.5
Investment	2.1	2.3	2.3	2.8	0.2	0.0	0.5

The different episodes of consolidation and expansion largely reflect changes in tax efforts. Judged by its cyclically adjusted balance, Ireland continued its well known consolidation efforts in the late 1980s into the early 1990s, interrupted only by a short relaxation in 1990. Consolidation was achieved through revenue increases, particularly in direct taxes due to policies becoming effective in 1993. This stable episode was followed by three short-term changes in fiscal policy. The primary surplus decreased from 4.2 percent of GDP in 1994 to 2.2 percent of GDP in 1995 and increased afterwards to 3.2 percent in 1996. From 1996 onwards it remained fairly stable close to 3 percent.

This somewhat erratic pattern has to be ascribed to changes in revenues and net capital spending, because cyclically adjusted primary expenditures started to decline steadily after 1992. The cyclically adjusted primary expenditure ratio decreased by 5.4 percentage points of GDP from 1992 to 1999. The most important contribution to the reduction of spending was made in wage compensation of public employees and transfers. From 1993 to 1999, wage compensation decreased by 2.7 percentage points, among others, because the wage moderation agreed upon in the successive national pacts also included public sector unions. Transfer payments also decreased 2.7 percentage points in of GDP in cyclically adjusted figures. Government non-wage consumption was only moderately reduced by 0.8 percentage points of GDP, while public investment increased 0.5 percentage points.

Revenues dropped by 3.8 percentage points from 1994 to 1995, then remained stable until 1996 and fell by 2.3 percentage points until 1998. During the fiscal expansion in the mid-1990s, cyclically adjusted direct taxes shrank 2.1 percentage points of GDP and indirect taxes fell by 0.7 percentage points of GDP. This impact of tax measures was only partly offset by an improvement of the business

[80] The increase of the debt level from 90 percent of GDP to 94 percent of GDP was a valuation effect caused by the large foreign component of debt and the devaluation of the Irish pound in 1993.

cycle. Actual direct tax revenues still fell by 1.6 percentage points and indirect tax revenues by 0.5 percentage points of GDP. Since this was by far more than the reduction of primary spending, the budget balance deteriorated two percentage points from 1994 to 1995. Due to the impact of the economic cycle and falling interest payments, measured as share of GDP, the actual total surplus diminished only 0.5 percentage points of GDP. During the subsequent consolidation, revenues fell much less dramatically. The overall reduction amounted to 2.1 percentage points of GDP from 1996 to 1999, half of which was based the result of lower social security contributions.

8.2.9 Italy

When the Maastricht Treaty was approved and Italy submitted its first convergence programme in October 1991, it was among the countries provoking the biggest worries to those policy-makers who were concerned about the stability and sustainability of fiscal policy as a pre-requisite of a European monetary union. Its debt level above GDP and the fiscal deficit at 10 percent of GDP, tremendous consolidation efforts seemed necessary for Italy to meet the Maastricht reference values. The first convergence programme, which was based on a multi-annual economic programme previously published by the government (*Documento di Programmazione Economico-Finanziaria*, May 1991), in fact foresees an improvement of the fiscal balance by 4.5 percentage points until 1994. The programme indicated a series of public policy fields, where the government intends to promote reforms, such as public sector pay, pensions and privatisation. But no concrete time schedule was indicated for those reforms and only the measures included in the 1991 and 1992 budget spelled out in more detail. Therefore, the evolution of public spending and revenues in the convergence programme is only forecasted until 1992. The underlying economic and financial programme, however, indicates that the adjustment should be based on expenditure restraint, reducing current expenditures from 28.8 percent of GDP in 1991 to 28.3 percent of GDP in 1994, and higher revenues. Current revenues were planed to increase roughly 1.2 percentage points. Later on, the deficit targets set in the first programme had to be revised and the adjustment was somewhat back-loaded in the version of the programme presented with the Loan Programme submitted to the Commission in September 1992.

The second convergence programme presented in 1997, similarly based on a multi-annual economic programme, foresees a continuous reduction of the deficit from 3 percent in 1997 to 1.8 percent in the year 2000. According to the programme discretionary measures should lead to a small increase of revenues above their trend development, i.e. without any policy change, and a further reduction of public spending. However, the overall consolidation would be based on expenditure restraint, since revenues were projected to decline from 48.2 percent of GDP in 1997 to 46.7 percent in 2000, while public spending decreases from 51.2 percent to 48.5 percent of GDP over this time period. The corrective measures spelled out for 1998 include structural reform of the welfare system and a restructuring of the public administration, and tax legislation broadening the tax base and closing tax loopholes. The expenditure based path of fiscal consolidation was subsequently re-confirmed in the first stability programme submitted at the end of 1998.

In the early 1990s, the Italian government more vigorously started to adjust the budget balance. Initiatives to improve the budget balance were taken on the expenditure and the revenue side, but were certainly more pronounced regarding public receipts. Many of those measures were temporary and lasted for three years or less. Since they were often enacted through supplementary or "emergency" budgets, when the actual budget deviated strongly from the forecasts, they were designed as short-term fixes. On this score, the government wanted to raise revenues from a special payments from tax evaders in return for a tax amnesty in 1991 (OECD Economic Survey 1992:38), it promoted advance tax payments on imputed capital gains and rose withholding tax on saving deposits and certificates of deposit with a maturity of less than twelve months (OECD Economic Survey

1992:39, 122). Higher indirect taxes, e.g. on methane, and social security contributions were also imposed. (OECD Economic Survey 1992:38, Banca d'Italia Economic Bulletin 1992:39)

In 1992, the government enacted a compulsory revaluation of corporate property, a tax amnesty and one-off taxes on real estate and bank deposits (OECD Economic Survey 1992:45). More importantly, the personal tax rate on all income brackets except the first and second one increased on percentage point (Banca d'Italia Economic Bulletin 1992:39). In addition, further hikes occurred in indirect taxes and charges (tobacco, mail, motorway, etc.) (OECD Economic Survey 1992:44-5). In 1993 direct taxes were again targeted by various revenue raising initiatives. The personal income tax was revised again and the income tax brackets of 1989 reintroduced (Banca d'Italia Economic Bulletin 1994:37) and a limitation was imposed on the compensation for fiscal drag (OECD Economic Survey Economic Survey 1993:46). Moreover, the government set forth tighter rules on income from self-employed and the non-deductibility of local income taxes. Finally, a special tax on companies' assets was released and a new municipal tax on buildings was introduced to provide local authorities with more fiscal autonomy and to reduce transfers to the lower level (OECD Economic Survey 1993:46) Regarding indirect taxation, excise duties on tobacco and oil products were raised and the VAT rates were harmonised with EC rules. (OECD Economic Survey 1993:46, Banca d'Italia Economic Bulletin 1993:45, 1994:37). Social security contributions were also raised, partly to provide local health care institutions with more resources and to reduce intergovernmental transfers. In 1992, the minimum contribution rose and social security contributions increased 0.6 percentage point for employees, one point for self-employed and one point for artisans and shopkeepers (Banca d'Italia Economic Bulletin 1993:37) In 1993, again, contribution rates of employees rose 0.3 percentage points and 0.5 percentage points for self employed (Banca d'Italia Economic Bulletin 1994:37).

Measures to restrain public spending focused, among others, on public sector pay (OECD Economic Survey 1992:38,45)[81] and a reduction of transfers to sub-national levels of government. The initiatives to restrain public sector pay were partly undermined through the fragmentation of the wage bargaining system. Therefore, the government reformed collective bargaining institutions in 1993 and established a new central agency (ARAN) responsible for wage negotiations within the guidelines set by the government.[82] But social security benefits were also affected. In 1992 some deficiencies of the pension system were tackled.[83] First, the compulsory retirement age should gradually rise to 65 years for men and to 60 years for women. Second, the reference period for the calculation of pensions was lengthened (OECD Economic Survey 1992:46)

The 1994 budget presented a break with the policy orientation of the previous years. The government largely avoided a renewal of temporary taxes, which were phasing out or loosing their effect such as the revaluation of company property (OECD Economic Survey 1995:39). As an effort to revive economic activity, the government approved lower advances of income tax payments, reduced taxation of imputed rents and enhanced compensation for fiscal drag (OECD Economic Survey 1995:39). Moreover, a tax exemption for reinvested corporate profits was introduced (Banca d'Italia Economic Bulletin 1995:38). On the expenditure side of the budget, further spending restraint was imposed on transfers to local governments, public agencies and firms as well as public sector pay, which was subjected to a hiring stop. (OECD Economic Survey 1995:39). In addition, the

[81] For example, wage increases under wage agreements were postponed and restrictions were imposed on hiring staff in 1992. (Banca d'Italia Economic Bulletin 1992:41) In 1993, only a small cost of living allowance of ITL 20 000 per month became effective from January onwards,. but otherwise expenditures were virtually frozen (OECD Economic Survey 1993:47)

[82] See OECD Economic Survey (1997) for more details

[83] As a short-term measure, the cost of living adjustment was suspended in 1992 (Banca d'Italia Economic Bulletin 1992:41).

government cut health spending through a reclassification of drugs[84] and reduced state pension payments. More specifically, seniority pensions for public employees having less than 35 years of service were cut, the automatic adjustment for disability pensions suspended and the commencement date for new pensions under the general scheme for the private sector postponed (OECD Economic Survey 1995:38).

This effort to constrain public spending growth was continued during the subsequent years. In 1995, spending restraint concerning government consumption[85] and intergovernmental transfers was enforced by an across-the-board cut as an emergency measure to avoid larger overruns (OECD Economic Survey 1996:44). A host of short-term adjustments were taken, particularly in 1997 when the government wanted to meet the three percent deficit limit. In addition, several changes to social security legislation partly aimed at more lasting effects. In its 1995 budget the government proposed several changes to pension legislation[86] and a reduction of health care expenditures due to cuts in procurement and contracts, reduction in the availability of free prescriptions and medical treatment and the closure of small hospitals (OECD Economic Survey 1995:47). Later on in 1995, an encompassing pension reform was enacted.[87] In response to the fact that pension expenditures rose more than expected, in 1997 the Prodi Agreement accelerated the increase in the early retirement age, brought forward the harmonisation of public and private pension regimes and increased pension contributions paid by the self employed. Moreover, temporary measures were introduced to postpone access to early retirement benefits and to suspend inflation adjustment for high pensions (OECD Economic Survey 1999:61)

Regarding health care, a reorganisation and strong reduction of local health care units was supposed to enforce a long run rationalisation and savings effects. In the short-run, caps on purchases of goods and services of the National Health service, reduction in pharmaceutical prices paid to producers and retailers and more stringent criteria for eligibility to exemption from pharmaceutical expenses, a reclassification of pharmaceutical products and higher contributions from autonomous regions to health spending, all enacted in 1995 and 1996, set incentives or regulations restricting expenditures in this area. (OECD Economic Survey 1997:77) The budget of 1997, moreover, set forth measures to reduce over-capacity in hospital care, further diminish the profit margin of pharmacists and to provide guidelines for diagnostic and ambulatory standards (OECD Economic Survey 1997:63)

After the break in 1994, the government started again to resume to short term revenue raising measures in search for additional financing. This became particularly pronounced in 1997, when most of the "extraordinary" adjustment to comply with the reference value was actually made on the revenue side of the budget. In 1995, the government approved an amnesty for building violations and new tax assessment procedures for 1989-93 incomes, removed tax deductions (OECD Economic

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84 Drugs were reclassified into three classes where the intermediate class required a co-payment of 50 % and the residual class a full payment of the patient (OECD Economic Survey 1995:39)

85 The government declared a hiring freeze for the first half of the year (OECD Economic Survey 1995:47)

86 These included the blocking of early retirement on state pensions in 1995 and cuts in benefits for 1996, the reduction in the rate of accumulation of pensions and cost -of-living adjustments base on target inflation and the lengthening of the time for eligibility at full benefits and a suspension of indexation payments in 1995 (OECD Economic Survey 1995:47).

87 The main elements of the pension reform are the following: First, a shift from the system of linking old-age pensions to earnings to one where benefits are linked to contributions paid over a life-time period and capitalised based on nominal GDP growth; second, pension benefits in the new system are a function of residual life expectancy at pensionable age and of the long-run growth of the economy; third, transition period from the old to the new system of old-age pensions until 2035, workers with a contribution period of more than 18 years can opt out of the new system, whereas the pensions of the remainders are be determined as a weighted average; fourth, a harmonization of pension provisions across different categories of income earners; fifth, the possibility of retiring after 35 years of service regardless of age will be eliminated in 2013 and provisions for seniority pensions or early retirement will converge to this standard. (see OECD 1996:52) A more detailed presentation provides Banca d'Italia Economic Bulletin (1995).

Survey 1996:43) and imposed higher property taxes (OECD Economic Survey 1995:47). Moreover, the settlement of tax and social security claims was speeded up and (OECD Economic Survey 1995:47) a one percentage point increase in the corporate income tax enacted (OECD Economic Survey 1996:44). Finally, the VAT tax rate raised form 9 to 10 respectively from 13 to 16 percent (Banca d'Italia Economic Bulletin 1995:38) and higher social security contributions increased (OECD Economic Survey 1996:44)

In 1996, fiscal policies enlarging the tax base, reducing tax evasion and developing instruments to simplify the assessment of taxable income for self-employed and firms (i.e. sectoral studies) were initiated (OECD Economic Survey 1996:47). The government also reformed real estate and withholding taxes on government bonds and enlarged the autonomy of municipalities in the area of real estate taxation (OECD Economic Survey 1996:47). The extraordinary tax on firm assets was extended and (OECD Economic Survey 1997:59) higher taxes on some bank deposits and issues of insurance contracts imposed (OECD 1997:60). Regarding indirect taxes, higher excise duties on gasoline and lotteries should lead to more revenues (OECD Economic Survey 1997:60). In 1997, revenues were boosted by the special "Euro" tax, a one year progressive income tax. The tax rate ranged form 1.5 percent for employees with a minimum annual salary of ITL 23.4 mill to 3.5 percent on incomes over ITL 100 Mill (OECD Economic Survey 1997:65) Moreover, measures to curb tax avoidance were taken, tax deductions for employees' fringe benefits removed and indirect taxes on lotteries, drugs and tobacco increased (OECD Economic Survey 1997:63). Again, tax collection on direct as well as excise and consumption taxes was fastened (OECD Economic Survey 1997:64).

Table 8.2.9: Italy in the 1990s

Year	**1990 (1)**	**1993 (2)**	**1994 (3)**	**1997 (4)**	**1999 (5)**	**Dif. (2)-(1)**	**Dif. (3)-(2)**	**Dif. (4)-(3)**	**Dif. (5)-(4)**
Debt	103.7	117.9	124.0	120.4	117.7	14.2	6.1	-3.6	-2.6
Surplus	-11.0	-9.4	-9.1	-2.8	-2.3	**1.6**	**0.3**	**6.3**	**0.5**
Primary Surplus	**-2.7**	**3.6**	**2.3**	**7.0**	**6.1**	**6.2**	**-1.2**	**4.7**	**-0.9**
Curr. Revenues	**41.7**	**48.3**	**45.7**	**48.0**	**47.7**	**6.7**	**-2.7**	**2.3**	**-0.3**
Direct Taxes	14.2	16.5	15.1	16.4	15.3	2.4	-1.4	1.3	-1.1
Indirect Taxes	10.4	12.5	12.0	12.7	16.0	2.1	-0.5	0.7	3.3
Soc. Security Contr.	14.2	15.7	15.0	15.6	13.2	1.5	-0.7	0.6	-2.4
Primary Expenditures	**44.3**	**44.8**	**43.4**	**40.9**	**41.6**	**0.5**	**-1.4**	**-2.4**	**0.7**
Transfers and Subsidies	21.6	23.3	22.7	20.2	20.1	1.7	-0.5	-2.6	-0.1
Wage Payments	12.6	12.4	11.9	11.6	11.3	-0.3	-0.4	-0.3	-0.4
Purchases	4.8	5.1	5.0	6.6	7.0	0.4	-0.1	1.5	0.4
Investment	3.3	2.6	2.3	2.4	2.6	-0.6	-0.3	0.1	0.2

In 1998, the government continued its rather restrictive policy concerning social transfers, health care expenditures, which could be cut due to an increase in the contribution rates for the self-employed, and transfers to local governments. (OECD Economic Survey 1999:52-3) An expansionary initiative was taken with the introduction of a minimum income scheme aiming to help low income earners and families to find employment (OECD Economic Survey 1999:63). More significantly, the structure of revenues was changed by a broad based tax reform. The most important features of the reform are the following: first, the introduction of a new regional tax on production activities with the abolition of a number of excise duties, capital taxes and health contributions; second, the revision of the personal

income tax; third, the reorganisation rules governing the taxation of capital gains; fourth the introduction of a two-tier system for corporate taxation; fifth, the change of the VAT tax system (see OECD Economic Survey 1999:68-70, Banca d'Italia Economic Bulletin 1998) Overall, the tax reform was designed to rationalise and simplify the tax system and to increase the fiscal autonomy of lower levels of government.

In general, the short term changes of the fiscal strategy in Italy is rather the result of revenue policies than of expenditure expansion. The tendency to reduce public expenditures relative to the economy, actually, had started before 1993 for wage payments. During the revenue-based deterioration of the balance in 1994, all spending categories were redressed, although transfers relatively little compared to their previous increase. From 1990 to 1993, the ratio of cyclically adjusted transfers to GDP increased by 1.69 percentage points, which was by far the biggest increase among all categories. From 1993 to 1994, transfers only decreased by 0.5 percentage points, whereas other spending categories contributed 0.9 percentage points to the overall reduction. This changed in the final consolidation episode from 1995 to 1997, when transfer payments became the primary source of expenditure retrenchment. Over the entire consolidation episode, the ratio of cyclically adjusted transfers to GDP decreased by 2.6 percentage points. This is higher than the aggregated reduction of primary expenditures (2.4 percentage points of GDP), among others because purchases increased by 1.5 percentage points and public investment grew in line with the economy. In 1998/9, when the primary balance deteriorated again, transfers and wage payments continued to fall, while purchases grew further and public investment expanded modestly. More precisely, cyclically adjusted transfer payments decreased by 0.1 and wage payments by 0.4 percentage points of GDP. The aggregated effect of these contradictory tendencies was a small increase of the spending level in cyclically adjusted terms. However, due to falling interest payments, relative to the economy, the overall deficit level decreased in recent years and even the debt level could be brought on a declining trajectory.

8.2.10 The Netherlands

The Dutch Consolidation Programmes are closely related to the coalition accords settled by the governing parties at the beginning of the their terms. Correspondingly, the first convergence programme presented in 1992 re-states the fiscal consolidation plan previously spelled out in the coalition agreement of 1989. The programme uses the budget balance and the collective burden as the most relevant planning variable and indicates the intention of the governing coalition to gradually reduce the central government deficit by 0.5 percentage points per year. Following this adjustment plan, the government should meet the EU deficit reference value in 1993. By 1994, the budget balance should be reduced to -2.4 percent of GDP and the debt level be on a declining trajectory. The consolidation had to be primarily achieved through expenditure cuts since the coalition agreement, moreover, stipulated that the collective burden, i.e. taxes and social security contributions, remain below 47.7 percent of GDP.

A new convergence programme was presented in 1994, covering the term of the incoming government until 1998. It puts a stronger emphasis on structural measures and integrated fiscal policy in the overarching macro-economic strategy to reduce unemployment. An important change concerning the new government programme is that the government uses real expenditure as the relevant policy variable. Real expenditure of the central government and the social security system, including health expenditures, should decrease by 0.7 percent on average per year. The distribution was as follows: central government spending would be allowed to increase 0.3 percent, social security should be cut be 2.1 percent and health expenditures by 0.7 percent. Compliance with these expenditure goals would allow the government to ease the tax burden and, at the same time, reduce the deficit to two percent of GDP in 1998. (see Convergence Programme October 1994)

Policies to implement the twofold strategy of expenditure and deficit reduction initially included a series of short- and long-term measures. The short-term measures were taken in 1992-1994 to cope with the budget overrun caused by the economic downturn and special factors, such as a large inflow of asylum seekers. Among others, cuts in subsidies for public housing, a reduction in development aid and defence as well as across-the-board cuts of spending were imposed in 1992. (OECD Economic Survey 1992:42) The following year, across-the-board cuts of central government expenditures as well as one-off measures, such as delaying payments and selling government property, helped to contain budget overruns (OECD Economic Survey 1993:38-9).

In addition more lasting reforms of social security expenditures were taken. In 1992 a reform of the health care financing system started which was designed to improve efficiency and competitiveness.[88] Moreover, a law to reduce the number of claimants in the disability scheme introduced financial incentives for employers to discourage the use of the scheme. In 1993 the Act to Reduce the Inflow into Incapacity for Work Schemes reduced of the level and duration of disability benefits. Under the new scheme full benefits could not be received for more than six years. Subsequently a lower entitlement was paid depending on the age at which the scheme was entered and the previous salary. The reference point for eligibility became the ability to perform any paid job, regardless of previous training or work experience. (IMF Country Study 1997:30-1, De Nederlandsche Bank Annual Report 1995: 76) Later on, the penalty for employees entering the scheme had to be revoked and instead a number of measures to promote reintegration was installed. (OECD Economic Survey 1998:84) In 1994, sickness payments were shifted to the business sector, which was obliged to continue to pay wages of at least 70 percent of the salary to sick employees for two weeks in firms below 15 employees and six weeks in firms above this threshold (IMF Country Studies 1997:31, OECD Economic Survey 1998:91). The collective sickness insurance scheme was eventually abolished in 1996. Under the new regulation firms were made legally responsible for sickness payments during the first year of sickness and employees enter a disability scheme afterwards (IMF Country Study 1997:31).

Regarding unemployment related benefits, the minimum social security benefits were kept stable in nominal terms from 1993 to 1996 (IMF Country Study 1996:2, 1997:31-2) Then, the government tried to abandon the indexation of social benefits to wages in 1995, but had to restore this legal requirement in the subsequent year. In 1995, however, stricter requirements with regard to work history were imposed for the eligibility for unemployment benefits (De Nederlandsche Bank 1995:76). A new law coming into force in 1996, banned unemployment benefits in case of voluntary unemployment and made other penalties mandatory, which previously had been applied at discretion. Refusal to accept a suitable job results in a complete and permanent withdrawal of unemployment benefit. (OECD Economic Survey 1998:98)

Finally the social assistance scheme was revised in 1996. The new law gives more responsibilities to local authorities for assistance policies and benefits. First, the law included measures to improve the reintegration of beneficiaries in the active labour market, such as co-operation with the employment service. Second, it asked for actions to combat fraud, and third it simplified the structure of social assistance with only three levels of benefits. But local authorities had discretion to give additional allowances (OECD Economic Survey 1998:101-2)

[88] The reform started in 1989. The second stage of the reform, among others, introduced the so-called "functional descriptions" of some care provisions and conditions creating more competition among providers of health care. Due to political resistance, the third stage of the reform, planned for 1994, was postponed to 1996 (OECD Economic Survey 1994:51)

Table 8.2.10: The Netherlands in the 1990s

Year	1991 (1)	1992 (2)	1993 (3)	1994 (4)	1996 (5)	1999 (6)	Dif. (2)-(1)	Dif. (3)-(2)	Dif. (4)-(3)	Dif. (5)-(4)	Dif. (6)-(5)
Debt	75.7	76.4	77.6	74.0	73.8	62.9	0.7	1.1	-3.6	-0.2	-10.9
Surplus	-3.2	-4.4	-3.6	-4.2	-1.8	-0.6	**-1.1**	**0.8**	**-0.6**	**2.4**	**1.3**
Primary Surplus	**-0.1**	**-0.7**	**1.7**	**0.3**	**2.7**	**2.0**	**-0.6**	**2.3**	**-1.4**	**2.5**	**-0.7**
Curr. Revenues	**45.6**	**45.2**	**46.6**	**43.4**	**43.7**	**42.5**	**-0.4**	**1.4**	**-3.2**	**0.2**	**-1.2**
Direct Taxes	15.7	14.9	16.1	13.3	12.8	11.5	-0.8	1.2	-2.8	-0.5	-1.2
Indirect Taxes	10.3	10.6	10.9	10.8	11.2	11.9	0.3	0.3	-0.1	0.4	0.7
Soc. Security Contr.	15.1	15.6	15.8	16.1	15.5	15.7	0.5	0.2	0.3	-0.6	0.2
Primary Expenditures	**45.7**	**45.9**	**44.9**	**43.1**	**40.9**	**40.5**	**0.2**	**-0.9**	**-1.8**	**-2.2**	**-0.4**
Transfers and Subsidies	21.8	22.0	21.3	20.2	18.1	16.7	0.2	-0.7	-1.1	-2.1	-1.4
Wage Payments	10.7	11.0	11.1	10.8	10.4	10.2	0.2	0.2	-0.4	-0.4	-0.2
Purchases	13.5	13.6	13.7	13.2	12.7	13.0	0.1	0.1	-0.5	-0.5	0.3
Investment	2.5	2.6	2.6	2.5	2.8	2.6	0.1	-0.1	0.0	0.2	-0.1

The government took not only ‘emergency measures’ on the expenditure side of the budget the public deficit in the early 1990s, but also increased taxes as well. In 1993, the direct tax burden rose because income tax brackets were not adjusted for inflation. Moreover, the collection of corporate taxes was advanced and the rate of social security contributions increased (De Nederlandsche Bank 1993:61-2). However, this policy orientation was quickly reversed in the following year by a tax policy geared towards a lower tax burden on labour and the anti-cyclical stimulation of the economy. The government increased the standard allowance on labour income and reduced the tax rate payable under the first tax band (De Nederlandsche Bank 1994:60) Moreover, it lowered employers' contribution to the social security system (ibid:58). The last initiative was extended in 1996 and 1997 with the aim to get low wage earners into work. Employers' social security contributions were reduced for a new employee earning 15 percent more than the minimum wage. For hiring a long-term unemployed at a wage 30 percent higher than the minimum, additional reductions were conceded up to 4 years. (OECD Economic Survey 1996:63) In addition, the tax ratio for the first income bracket was lowered further and tax-free allowances for wage-earners increased. The revenue shortfall associated with these reductions was to be financed through higher taxes and taxes and social security contributions of households, which were raised in 1997, as well as higher energy taxes (De Nederlandsche Bank 1997:77, OECD Economic Survey 1998:52).

A noteworthy fiscal impact of the policy measures implemented by successive Dutch governments is that four episodes of expansion and consolidation during the 1990s are all marked by falling cyclically adjusted primary expenditures as share of GDP. During the first episode cyclically adjusted figures declined by 0.9 percentage point due to a reduction in transfer payments and capital expenditures. In 1993/4 all spending categories were reduced by -1.8 percentage points of GDP. During the subsequent consolidation phase until 1996 and the expansion thereafter, transfer payments account for nearly the entire spending adjustment. They decreased by 2.1 respectively 1.4 percentage points of GDP over the two phases. In the last phase the level of cyclically adjusted primary expenditures decreased only 0.4 percentage points of GDP, i.e. the development in transfers was offset by an expansion in other

spending categories. In addition, the level of wage payments lowered by one percentage point after 1993.

As a consequence, the direction into which the budget balance developed was most of the time determined by swings in public revenues. During the initial consolidation episode, cyclically adjusted current revenues increased 1.4 percentage points of GDP, mostly due to rising direct taxes. During the fiscal expansion in 1993/4, the overall increase was more than reversed. During revenues increased slightly by 0.2 percentage points, primarily due to an increase in indirect taxes. In line with the goal of the coalition agreement, direct taxes contributions continued to fall and social security contributions started to decline. The first trend also continued into the expansionary phase after 1996, where aggregate revenues fell somewhat less than expenditures. Here cyclically adjusted direct taxes decreased 1.2 percentage points of GDP and social security contributions.

8.2.11 Portugal

In 1991, when the Portuguese government released its first convergence programme, the debt level of the public sector reached 67.3 percent of GDP and the overall budget deficit 6.0 percent of GDP. Thus, there was an obvious need for fiscal consolidation to comply with the reference values of the Maastricht Treaty. But the Portuguese government set somewhat different priorities by including fiscal policies in its overarching strategy towards macroeconomic convergence, particularly in inflation dynamics, with other European countries. In each year, the inflation objective therefore ought to be used to determine the overall level of primary spending. Based on this expenditure goal and an optimistic growth projection of four percent of GDP between 1993 and 1995, the government aimed at reaching the three percent reference value on average between 1993 and 1995.

Although the convergence process started with a forceful consolidation, fiscal forecasts had to be strongly revised when the country was hit by the European wide recession in 1993. Starting from an overall deficit of 8.7 percent of GDP in 1993 the revised programme aimed at reaching 3.3 percent of GDP on average between 1995 and 1997. The fiscal strategy to achieve the goal still broadly followed the outline of the original programme, although it put a stronger emphasis on fiscal consolidation on its own rights and the reduction of the size of the state in the economy.[89]

The fiscal strategy spelled out in the convergence programme of March 1997 again strongly relied on expenditure control, an improvement of the fiscal administration, particularly for taxation, and privatisation. But spending and tax measures should be geared to "comply with the social responsibilities" of the government (Convergence Programme, 1997:14). With a stronger emphasis on social measures, the fiscal consolidation proposed in the programme was relatively moderate despite projections of GDP growth around 3.4 percent. Starting from a conservative estimate for the budget deficit of 2.9 percent of in 1997, the deficit should reach 1.5 percent in 2001.

Nominal expenditure ceilings initially presented the central mechanism to achieve the spending level corresponding to the inflation target.[90] The ceiling, in turn, provided the basis for wage setting in the public sector and the central government budget. Expenditure measures in the programme focused on wage compensation, first, because the were regarded as crucial in complying with the fiscal targets, and second, because collective agreements in the public sector typically lead private sector agreements in Portugal (see Convergence Programme, November 1991). In addition to general wage

[89] According to the convergence programme the Budget law for 1993 and 1994 asks the public administration at all levels of government to adjust resources so as to achieve the fiscal Maastricht criteria. (Convergence Programme 1993:4)

[90] According to the government forecast, average primary expenditures should be 5.3 trillion escudos in 1993-5 and the average deficit 3w.1 trillion escudos (Convergence Programme 1991: Annex 4).

restraint, in 1992, the government passed a law aiming at increasing mobility within the civil service and cutting back the numbers of employees in certain department.[91]

The expenditure strategy proposed to consolidate the budget balance complemented the focus on constraining expenditures with revenue raising measures. Four policy measures were implemented. First, tax brackets and allowances applicable to the personal income tax were adjusted at the target inflation rate, i.e. any rate above the target automatically lead to a higher tax rate. Moreover, the tax base was broadened by a reduction of exemptions. Second, the VAT was changed in accordance with Community obligations on tax harmonisation. The zero VAT rate was replaced by a 5% rate and some groups of products were shifted from the reduced to the normal VAT rate (Convergence Programme 1991:7, European Economy Suppl. A 2/1992). Third, the government continued the privatisation of public enterprises. Privatisation proceeds, to be used for debt repayments, should help to remove the government as a net borrower from domestic capital markets and reduce the interest rate, in addition to the lower inflation rate targeted by the government (Convergence Programme 1991:8). Finally, the effectiveness of the tax administration and its control over tax evasion and fraud should be improved through a reduction in the periods allowed for the transfer of tax payments, improved recovery procedures for arrears, a simplification of accounting procedures and a more rapid centralisation of information and resources. (ibid.: 3)

After the initial consolidation phase in 1992, the emphasis on expenditure ceilings, wage restraint and privatisation, on the one hand, and the improvement of tax administration, on the other hand, was maintained. Yet, the economic recession forced the government to shift concrete policy measures towards the sustainability of social security expenditures, which had been the strongest growing source of spending, and measures to stimulate the economy such as higher public investment and subsidies. The government increased the retirement age for women as well as the number of years necessary to earn the maximum pension and it revised the formula for calculation pensions (Convergence Programme Nov. 1993, European Economy Suppl. A, December 1993) Moreover it announced a major programme of low cost housing and subsidies to exporters hit by the recession as well as subsidised loans to farmers (European Economy Suppl. A, May and Sept. 1993) and implemented various tax deductions and exemptions to stimulate investment. At the same time, it took several measures to recuperate the tax base since tax loopholes proved to be a serious problem (OECD Economic Outlook 1994:41). Among others, it reduced maximum deductions on retirement savings schemes, eliminated double tax benefits for housing savings accounts increased withholding taxes for emigrant savings accounts and imposed a 20% tax rate on profits on real estate investment funds. (Convergence Programme November. 1993).

During the subsequent fiscal consolidation from 1994 to 1997, revenues benefited above all from rising corporate income tax revenues as a consequence of the recovery of companies profits as well as legal measures approved in 1993 and 1994 to broaden the tax base as well as a reduction in tax deductible accumulated losses (Banco de Portugal Annual Report 1996:109, 1997:109-10). Moreover, direct taxes on corporate and personal income rose due to the greater effectiveness of the tax administration (Banco de Portugal Annual Report 1997:109-10, 1998:119) In the realm of indirect taxes, different measures with partly countervailing effects where taken. The VAT rate was revised in different occasions. The VAT rate rose to 17 percent in 1995, while at the same time, the higher rate on luxury goods was eliminated. In 1996, a new intermediate rate of 12 percent was introduced applying to goods previously taxed at 17%. (European Economy Suppl. A December 1994 and August/September 1996, Banco de Portugal Annual Report 1997:110) Moreover, the car tax grew strongly due to a broadening of the tax base and the introduction of a new tax scale in 1995 and 1996,

[91] (the law envisages a class of surplus staff receiving a reduced salary, measures to encourage early retirement and the taking of unpaid leave) (EE 7/92)

but revenues from stamp taxes performed rather weak due to rate reductions in 1996 and 1997 (Banco de Portugal Annual Report 1997:111, 1998:120).

In 1996 and 1997, the government also introduced mechanisms to contain expenditure growth or reduce spending during the budget year, such as a 10% freezing of current expenditures in case of variable and contingent payments and 5% for current transfers to independent services and funds as well as 6% for capital expenditures. In addition it imposed a total freeze of staff recruitment. The savings thus made in the operating budget and the reduction of interest payments should be used to finance, to a large extent, the deficit in the capital accounts. Finally, the health care sector putting increasing pressure of the budget, should be reformed and modernised to improve its services and, at the same time, to limit spending growth. Several measures were implemented to gradually reform the sector from 1997 onwards, most of which became effective after the period under consideration.[92]

However, the government also took expansionary initiatives. Importantly, it extended the coverage of the income maintenance programme to the entire country in line with the social goals of the convergence programme (European Economy Suppl. A, Aug./Sept 1997). Expenditures related to the means-tested minimum programme actually increased fivefold, reaching 33,4 billion in 1998 (Banco de Portugal Annual Report 1999:137). Furthermore, the government implemented a programme for subsidised interest of loans for own housing purchases.

Table 8.2.11 Portugal in the 1990s

Year	1988 (1)	1991 (2)	1992 (3)	1993 (4)1	1997 (5)	1998 (6)	Dif. (2)-(1)	Dif. (3)-(2)	Dif. (4)-(3)	Dif. (5)-(4)	Dif. (6)-(5)
Debt	65.0	67.3	59.9	63.1	62.1	56.6	2.3	-7.4	3.2	-1.0	-5.5
Surplus	-3.5	-6.0	-2.9	-6.1	-2.5	-1.8	**-2.5**	**3.1**	**-3.2**	**3.6**	**0.7**
Primary Surplus	**3.3**	**1.0**	**3.4**	**0.5**	**2.0**	**1.5**	**-2.3**	**2.4**	**-2.9**	**1.5**	**-0.6**
Curr. Revenues	**34.8**	**36.4**	**40.0**	**39.5**	**41.2**	42.4	**1.5**	**3.6**	**-0.5**	**1.6**	**1.3**
Direct Taxes	6.7	8.8	9.9	9.3	10.5	10.9	2.1	1.1	-0.6	1.2	0.4
Indirect Taxes	14.3	13.1	13.9	13.4	14.4	15.2	-1.2	0.8	-0.5	1.0	0.8
Soc. Security Contr.	9.9	10.6	11.2	12.2	12.0	12.2	0.7	0.6	1.0	-0.2	0.2
Primary Expen-ditures	**31.6**	**35.4**	**36.6**	**39.0**	**39.1**	41.0	**3.8**	**1.2**	**2.4**	**0.2**	**1.8**
Transf. & Subsidies	13.5	14.7	15.5	17.1	17.2	18.2	1.2	0.8	1.6	0.1	1.0
Wage Payments	11.0	13.1	14.1	14.4	14.8	14.9	2.1	1.0	0.3	0.4	0.0
Purchases	3.5	4.1	3.2	3.5	3.7	4.1	0.6	-0.9	0.3	0.2	0.4
Investment	3.4	3.3	3.8	4.0	4.2	4.3	-0.1	0.4	0.2	0.2	0.1

[92] The supply of health services shall be made more efficient through more autonomy but also accountability of health care centers, therapy-based budget allocations and coordination of budget planning through regional agencies. An identity card and the conversion of health related tax deductions into tax credits, subject to an overall ceiling, and initiatives to change cost sharing mechanisms should help to rationalize patients' usage of health care. (see OECD Economic Survey 1998, 1999 for details).

On the expenditure side of the budget, the restraint on operating expenditures was immediately visible for non-wage government consumption, which were reduced by almost a percentage point of GDP between 1991 and 1992. Yet, wage payments increased by one percentage point of GDP between 1991 and 1992. The government reduced wage compensation to 13.9 percent of GDP in 1994 and 1995 after a further small increase to 14.4 percent in 1993. A significantly larger spending reduction was produced by the reduction of interest payments, which fell from 7.9 percent of GDP in 1991 to 6.2 percent in 1993. Since the overall spending level started to decline in 1993, the short term fiscal consolidation in 1992, raising the budget deficit to 2.9 percent of GDP and the primary cyclically adjusted deficit from 1 percent of GDP in 1991 to 3.4 percent of GDP in 1992, can be attributed to higher revenues. Total revenues rose by 3.6 percentage points to 40.7 percent of GDP in 1992. Most of this improvement resulted form higher direct and indirect tax revenues. As intended by the tax strategy, the adjustment of tax allowances and brackets by the targeted inflation rate of 8 percent resulted in a higher effective tax rate since income increased by an estimated 16 percent of GDP (OECD Economic Outlook 1993:41)

The overall effect of the spending initiatives reported for 1993 was a strong fiscal expansion, particularly in transfer payments, which was enforced by the economic downturn, driving up the unemployment rate from 4.2 percent in 1992 to 7.2 percent in 1995. Cyclically adjusted primary spending rose from 36.6 percent of GDP in 1992 to 39 percent of GDP. Cyclically adjusted transfer payments rose by 1.6 percentage points of GDP. In 1994, actual spending returned to its pre-crisis level, but the smaller decline of cyclically adjusted figures indicates that this result was partly produced by the economic conjuncture. During the subsequent years until 1997, when the next programme was launched, transfers again increased moderately, reaching 17.3 percent of GDP in 1997. In addition, wage compensation started to rise again in 1996 and 1997 (Banco de Portugal Annual Report 1996, 1997). As a consequence, the cyclically adjusted primary expenditures reached the "crisis level" of 1993 again in 1997. Total expenditures remained fairly stable around 43.5 percent because the interest burden fell continuously from 6.3 percent of GDP in 1995 to 3.2 percent of GDP in 1999.

These fiscal measures taken from 1997 onwards lead to an expenditure driven fiscal expansion, measured by the cyclically adjusted primary deficit. While the actual overall budget balance improved from -2.5 percent in 1997 to -1.8 percent in 1999, the primary cyclical balance deteriorated from two percent to 1.5 percent of GDP in 1999. The small deterioration of the primary cyclically adjusted budget balance occurred despite increasing public revenues. In 1998/9, the growth of indirect tax revenues, which can be explained by higher revenues from VAT, was the most important source of this expansion. On the expenditure side of the budget, particularly the minimum income scheme contributed to the strong growth of transfers to households. Overall, actual primary spending grew by 1.8 percentage points of GDP. Transfers contributed about 50 percent to this development and a larger consumption of goods and services 20 percent.

8.2.12 Spain

In 1992, when the Spanish government launched its first Convergence programme, the deficit was 3.9 percent of GDP and the debt level amounted to 52.1 percent of GDP. Thus the debt level remained well below the critical Maastricht reference value, while the deficit level would have required a mild adjustment to meet the three-percent benchmark. The first convergence programme of April 1992 included fiscal policy into a broader two-pronged strategy: a radical change towards a balanced macro-economic policy-mix and structural reforms, particularly in the labour market and service sector. Within that framework, the government proposed a continuous reduction of the deficit from 4 percent of GDP in 1992 to one percent in 1996. The course of adjustment, however, was based on

excessively optimist growth assumptions of more than 3 percent of GDP per year. Moreover, the effect of the income tax reform decided in 1991 was still unclear.

The fiscal deficit being at 6.6 percent, the government had to seriously revise its convergence programme. The revision was presented in July 1994, when the Spanish economy started to recover. The economic strategy spelled out in the convergence programme continued to put a strong emphasis on structural reforms. The fiscal policy was further oriented towards fiscal consolidation, largely based on a reduction of current expenditures relative to GDP. This strategy was based on structural policy measures, which partly had already been approved in previous years, such as the tightening of unemployment benefits, and would become fully effective during the economic recovery. Moreover, the government intended to raise the efficiency of public administration through the modernisation of budgeting institutions and fighting tax or social security fraught. According to the convergence programme these measures should allow to comply with the three-percent reference value in 1997. (Convergence Programme July 1994) The convergence programme approved in April 1997 as well as the stability programme submitted to the Council in December 1998 reconfirmed the general economic strategy as well as orientation of fiscal policy measures. The first one projected the public balance to improve from -3 percent of GDP in 1997 to -1.6 percent of GDP in 2000, basically through a reduction of expenditures from 43.7 percent of GDP to 41.9 percent of GDP. The later one set forth a path of fiscal consolidation leading to a small overall surplus of 0.1 percent of GDP in 2002. At the time, expenditures should have been further reduced to 41.2 percent of GDP while public revenues should continue to remain fairly constant at 41.2 percent of GDP. As previously, most of this adjustment should be achieved through current expenditures. An expansion of public investment instead should support the convergence of Spain with other European countries in the medium term. (Convergence Programme April 1997, Stability Programme Dec. 1998)

In 1992 and 1993, the actual deficit deviated considerably from the proposed consolidation path. Due to the unforeseen effects of the income tax reform of 1991 and the short-fall of indirect tax receipts caused by the economic crisis, the government had to react with several "emergency measures": Unemployment benefits were tightened, the minimum contribution period for eligibility was lengthened and the maximum period of payments reduced. Disability benefits were partly transferred to companies and investment and capital as well as current transfers were cut. On the revenue side of the budget, the personal income tax schedule was revised upwards and the related withholding rates adjusted until the previous levels of tax rates were virtually reinstalled; the VAT standard rate was raised again from 13 to 15 percent, excise tax rates also increased (Banco de España Annual Report 1992) and, finally, the employers' social security contribution for unemployment was raised by one percentage point in 1992 (OECD Economic Survey 1993:37).

In 1993, the government somewhat changed its policy stance giving more importance to measures offsetting the effect of the economic crisis. Primarily transfer payments to social security funds, such as the labour office INEM, and other public companies and entities are responsible for the deterioration of the deficit in 1993. In addition, growing interest payments and government purchases contributed to the strong expansionary trend. Particularly, lower levels of government seem to have not always pursued the fiscal prudence to which they committed in 1992. At least, transfers from the central government to the regions remained a source of fiscal overrun until 1995 (OECD Economic Survey 1995:28). During 1993 only wage payments and financial charges remained on track, among others due to measures freezing public employment growth at the central government level (Banco de España Annual Report 1993). The regional governments, instead, allowed for relatively high wage hikes and hired more people (OECD Economic Survey 1994:29) Regarding taxation, the introduction of a super reduced VAT and the elimination of the upper rate caused lower tax revenues. But this was

more than offset, by an increase of social security contributions of0.5 percentage points and higher maximum contribution bases (ibidem).[93]

After the short expansionary interruption, the Spanish government initiated an expenditure based fiscal consolidation in 1994 which continues after the country's accession to EMU. Regarding public consumption, an agreement was reached with unions that public wages and pensions are to be raised in line with the official inflation target and not actual inflation from 1995 to 1997)(OECD Economic Survey 1996:138). Later on this was complemented by an agreement on wage moderation in 1995 and several directives to freeze public sector employment or payment (Banco de España Annual Report 1995 and 1997). In addition, the central government reached an agreement with regional governments on the financing of health services for the period 1994-97. Both levels of government agreed to maintain health expenditure growth in line with nominal GDP growth (OECD Economic Survey 1996:138).[94] In 1998 central government and unions reach an agreement on a new Civil Servants' Charter, also agreed with the territorial governments, under which the wages will be set at a centralised level (European Economy Supplement A March/April 1998). This helps to strengthen the position of the central government vis-à-vis sub-national governments, which sometimes conducted a less restrictive public pay policy.

Social transfers were curtailed even more than government consumption during the run-up to EMU. As mentioned previously, this was partly the effect of efforts made in 1992 and 1993 to trim social security expenditures. In 1994 the government, moreover, restricted access to the unemployment subsidy by lowering of acceptable income ceiling and a reduction of the subsidy. Moreover it adjusted the maximum and minimum unemployment benefits for childless persons (Banco de España Annual Report 1994). In 1997 the *Social Security Consolidation and Rationalization Act*, approved in October 1996 based on the recommendations of Toledo Pact, came into force. It guaranteed the purchasing power of pensions in terms of the CPI and increases the degree of proportionality in the system by raising gradually from 8 to 15 years the number of years applied to determine the pension base and by reducing the percentage applied to that base to calculate the amount of retirement pension, in cases where fewer than 25 years of contributions had been paid (Banco de Expaña Annual Report 1997). According to the OECD, the gradual widening of the pension base lead to a approximate reduction in the average pension of five percent. The law also incorporates the recent practice of indexing pensions to inflation (OECD Economic Survey 1998:71)

Tax policies were geared toward the stimulation of economic activity through a reduction of the direct tax burden and social security contributions, on the one hand, and to the rationalisation of the tax system, on the other hand. In 1994, tax exemptions for unemployment and invalidity benefits were eliminated and corporate income tax was changed to give investment incentives through deductions, respectively a temporary tax rebate for small and medium sized firms was established (Banco de España Annual Report 1994). In 1996, officially assessed values of property became the sole basis of personal income taxation, leading to a reduction of revenues (Banco de España Annual Report 1996) At the same time, corporate balance sheets were revalued and the tax on capital gains was set to a fixed rate, changing the previous regime with a progressively declining rate (ibidem). In 1997, a tax on insurance and capitalisation transactions conduced in Spain was established (Banco de España Annual Report 1997). The percentage of corporate income tax rose and the tax burden was based on profits during the current year for firms with an turnover above one billion pesetas (ibidem). A major income tax reform was eventually implemented in 1999. The reform completely redefined the previous system: it simplified the structure of income brackets, it cut maximum and minimum marginal tax rates from 56 to 48 respectively from 20 to 18 percent, and moreover, it redefined the

[93] Concerning indirect taxation, a new tax on transport was introduced (Banco de Expaña Annual Report 1993)

[94] This seems to be of particular importance since expenditure overrun due to transfers to the national health institute was a primary source of expenditure growth (OECD Economic Survey 1996: 24).

concept of taxable income taking stronger account of the economic capacity of tax payers.[95] Overall the tax reform intended to enlarge disposable income and, thereby, stimulate investment and consumption. The revenue loss during the first two years was estimated to be 550 billion pesetas.

Table 8.2.12: Spain in the 1990s

Year	**1987 (1)**	**1991 (2)**	**1992 (3)**	**1993 (4)**	**1999 (5)**	**Dif. (2)-(1)**	**Dif. (3)-(2)**	**Dif. (4)-(3)**	**Dif. (5)-(4)**
Debt	48.6	49.6	52.1	63.4	70.4	0.9	2.6	11.2	7.0
Surplus	-3.6	-4.2	-3.9	-6.6	-1.4	-0.6	0.3	-2.7	5.3
Primary Surplus	**-1.0**	**-3.0**	**-1.4**	**-2.4**	**2.0**	**-2.0**	**1.6**	**-1.0**	**4.5**
Curr. Revenues	**34.1**	**35.1**	**37.4**	**39.1**	**37.1**	**1.1**	**2.2**	**1.7**	**-2.0**
Direct Taxes	9.1	10.2	10.8	10.7	9.7	1.1	0.6	0.0	-1.1
Indirect Taxes	10.5	9.5	10.2	9.9	11.7	-1.0	0.7	-0.3	1.8
Soc. Security Contr.	12.3	12.6	13.6	14.4	13.3	0.3	1.0	0.7	-1.1
Primary Expenditures	**35.1**	**38.2**	**38.8**	**41.5**	**35.1**	**3.0**	**0.6**	**2.7**	**-6.4**
Transfers and Subsidies	15.3	16.4	17.0	18.3	15.6	1.2	0.5	1.3	-2.7
Wage Payments	10.2	11.1	11.8	11.8	10.5	0.9	0.7	0.0	-1.4
Purchases	6.4	6.4	6.7	7.2	6.6	0.0	0.3	0.5	-0.6
Investment	3.3	4.8	4.0	4.1	3.2	1.5	-0.8	0.0	-0.9

Indirect taxes were adjusted upward in various occasions. Excise duties on alcohol, tobacco and beverages were raised from 1994 onwards (Banco de España Annual Reports 1994, 1995, 1996) and the VAT tax rate rose one percentage point in 1995 (Banco de España Annual Report 1995). The higher indirect tax revenues was thought to cover the financing shortfall due to an one percentage point reduction of social security contributions. (ibidem) However, to improve social security financing and to strengthen the disincentives for unemployment, the government also ruled in 1994 that unemployed had to contribute to the social security system from the benefits received (Banco de Expaña Annual Report 1994) and it unified the different contribution ceilings to the pension system at the highest one. (OECD Economic Survey 1998:70). In 1999, the government approved a law promoting permanent employment. For every fixed-term contract converted into a permanent contract social security contributions are reduced by 35 percent. (European Economy Supplement A May/June 1999).

The Spanish public finances show clear tendency toward fiscal consolidation during the 1990s. After some erratic changes at the beginning of the decade, the primary cyclically adjusted deficit improved 4.5 percentage points of GDP between 1993 and 1999. Due to high interest payments, however, total deficit fell from 6.6 percent of GDP in 1993 to 6 percent in 1994 and increased again to 6.9 percent before it started to decline.

Beyond this relative continuous consolidation path, two distinct strategies can be discerned. In 1991/2, the above mentioned tax measures drove the fiscal consolidation process. The share of cyclically adjusted current revenues to GDP rose from 35.1 to 37.4 percent. Then it increased further to 39.1 in 1993 and fell to 37.1 percent of GDP during the final consolidation episode. In contrast, expenditure reductions provided the source of fiscal consolidation from 1994 onwards. The share of cyclically adjusted primary expenditures rose from 38.2 percent of GDP in 1991 to 41.5 percent in

[95] See the Convergence Programme (1998-2002), Annex 1. for a more detailed account.

1993. Then it fell to 35.1 percent in 1999. The fiscal expansion has to some extent to be attributed to the cyclical downturn. Actual transfers increased from 16.3 percent of GDP in 1991 to 18.3 in 1993. Then, cyclically adjusted transfers fell drastically to 16.5 percent in 1995 and remained close to 16 percent thereafter. Wage consumption also expanded by 0.7 percentage points of GDP between 1991 and 1993, but then declined by 1.3 percentage points until 1999. Non-wage consumption rose until 1993, starting at 6.4 percent of GDP in 1991 and reaching 7.2 percent in the mid-1990s. Then if decreased slightly to 6.6 percent of GDP in 1999.

8.2.13 Sweden

In 1995, when Sweden entered the European Union and submitted its first convergence programme, the country was recovering from a deterioration of its economic and fiscal position in the early 1990s, which was unprecedented in the country's recent history.[96] Due to the high elasticity of the budget to cyclical forces, the primary budget balance deteriorated from 5.7 percent of GDP in 1989 to -10.8 percent of GDP in 1993. But this deterioration was not entirely the effect of the economic bust as cyclically adjusted figures indicate. The primary cyclically adjusted budget balance fell from 2.1 percent of GDP to -5.8 percent of GDP in 1994. Concomitantly, the debt level skyrocketed from 42.9 percent of GDP in 1990 to 78.3 percent of GDP in 1994. Hence, Sweden clearly had an excessive deficit, when it entered the European Union.

The more impressive is the fiscal consolidation which Sweden achieved thereafter. The initial impetus came from consolidation packages introduced in 1994/5. The consolidation packages aimed at stabilising the debt level by 1996 and eliminating the public sector financial deficit by 1998. (Convergence Programme June 1995: 3) According to the convergence programme, 60 percent of the consolidation effort until 1998 should be based on expenditure reductions and the remaining 40 percent on tax increases. Moreover, the consolidation was planned to be front loaded reducing the public deficit by 3.5 percent of GDP in 1995, 1.8 percent in 1996 and about one percent of GDP in the subsequent two years (ibid.:10). The larger part of the expenditure reduction should redress transfers to households and central government consumption (ibidem: 9-10). Later on, reduced interest payments due to the reduced debt level and a lower risk premium should contribute to expenditure based consolidation (ibidem: 8). In addition, the budget consolidation programme was supplemented by institutional changes improving the public expenditure control (ibidem:13).

Swedish governments revised and updated the original convergence programme twice a year. The subsequent up-dates closely follow the current budget proposals at the time, which primarily strived to comply with the expenditure and deficit targets formulated in the first consolidation packages. Depending on the state of the economy and its implications for fiscal policy, therefore, they somewhat relaxed or tightened the fiscal stance. A tightening was necessary in spring 1996 and 1998, in the later case due to the danger of exceeding the nominal spending targets (see OECD Economic Survey 1997:55, 208) In 1997 a new medium term target was set for public finances. The Riksdag decided that the budget surplus in the public sector should amount to an average of 2 percent of GDP over the business cycle. Having achieve a comfortable budget surplus of 2 percent of GDP in 1998, this implied a deterioration of the budget balance to 0.5 percent of GDP in 1999 and 1.5 percent of GDP in 2000. The later target was revised upward to 2.0 percent of GDP later on. (Convergence Programme December 1998:4)

In 1994 the newly incoming government announced a consolidation package comprising revenue increases worth SKR 36.6 bill. relative to the baseline of unchanged policies and spending cuts of SKR 24.5 bill.; i.e. net of the revenue reductions due to spending cuts the package should produce savings of SKR 56.4 bill. Revenue raising measures included in the programme comprised the full

[96] For an description and an analysis of the crisis see IMF (1996) and Lindbeck et al. (1994)

taxation of dividends and capital gains on stocks, a higher tax rate on private pension income, retained tax on wealth and higher taxes on property, the limited indexation of personal income tax allowances, changes of the contribution to the sickness insurance and an increase of the state income tax rate from 20 to 25 percent. Lower spending was to be achieved through an abolition of special child-care allowance, reforms of family support and early retirement pensions, cuts in military spending, reduced state consumption and the limited indexation of pensions etc. The next consolidation package declared in the 1995/96 Budget proposal primarily addressed public spending. Spending should be reduced due to the following measures: lower child allowances and compensation in family insurance, reduction of pension and sickness insurance payments, cuts in labour market measures, subsidies and public investment. These measures were complemented by those proclaimed in the supplementary budget proposal of April 1995 envisaging the reduction of replacement rates in unemployment, sickness and parental insurance, reduced housing benefits and changed rules concerning compensation in ALMP. (OECD Economic Survey 1995:31-32, 120-1) To finance EU contributions, which would amount to roughly SKR 20 bill. in 1998, the government introduced a financing bill in November 1994. The additional revenues were to be raised by a 1.5 percentage point increase in employers' social security contributions, higher property taxes for the business sector and agriculture as well as increases in certain indirect and environmentally related taxes. (ibid.: 121) Since budget projections indicated that the targets of the consolidation package may not be met, the government introduced a supplementary reinforcement package of SKR 8 billion in Spring 1996.

Table 3: Sweden in the 1990s

Year	1989 (2)	1994 (2)	1998 (3)	1999 (4)	Dif. (2)-(1)	Dif. (3)-(2)	Dif. (4)-(3)
Debt	46.9	78.3	73.7	68.3	31.4	-4.6	-5.4
Surplus	5.2	-11.0	1.9	2.3	**-16.2**	**12.9**	**0.4**
Primary Surplus	**2.1**	**-5.8**	**6.5**	**5.4**	**-8.0**	**12.4**	**-1.2**
Curr. Revenues	**58.5**	**56.7**	**59.6**	**58.8**	**-1.8**	**2.9**	**-0.8**
Direct Taxes	23.0	20.8	23.3	23.3	-2.2	2.5	-0.1
Indirect Taxes	15.3	15.0	15.9	16.8	-0.4	1.0	0.9
Soc. Security Contr.	13.8	14.4	15.1	14.1	0.5	0.8	-1.1
Primary Expenditures	**56.3**	**62.5**	**53.1**	**53.4**	**6.2**	**-9.4**	**0.3**
Transfers and Subsidies	29.4	33.4	26.6	25.9	4.1	-6.8	-0.8
Wage Payments	17.5	17.9	16.8	16.8	0.4	-1.1	0.0
Purchases	9.0	9.6	9.8	9.9	0.6	0.2	0.1
Investment	3.1	3.2	2.4	2.2	0.0	-0.8	-0.1

Later on, the austere expenditure policy was somewhat relaxed. While the expenditure limits were met in 1997 quite comfortably due to a wide safety margin, only emergency measures prevented an overrun in 1998. This resulted among others from a reversal of the replacement rate, which was raised to 80 percent for all social security schemes after having been reduced to 75 percent in 1996 (OECD Economic Survey 1999:104). In addition, other policy considerations, expressed in the so-called five point programme became more important. The programme addressed educational and environmental issues and included initiatives to support small- and medium-sized firms as well as labour-market, housing and social insurance measure. (OECD Economic Survey 1999:61). Due to one-off timing factors and a substantial rise in corporation tax receipts in 1998, this tendency was not reflected in the

1998 budget balance. Since these factors did not prevail in 1999, the exceptionally high tax level fell back to the level prior to 1998.

During the economic crisis in the early 1990s, the structural component of primary resources were affected by the tax reform and the termination of several temporary taxes. Moreover, they were the consequence of a rapid fall of inflation due to the method used for adjusting tax brackets (OECD Economic Survey 1994:28, Giavazzi & Pagano 1995: 20). On the other hand, transfers became the fastest growing expenditure category rising by 4 percentage points to GDP from 1989 to 1994, among others due to the large amounts of state support to major Swedish banks and the inflation adjustment of transfers (OECD Economic Survey 1995:28; Giavazzi & Pagano 1995:20). At an aggregate level, the cyclically adjusted revenue to GDP ratio decreased 1.8 percentage points while expenditures rose 6.2 percentage points and the cyclically adjusted primary budget balance deteriorated from 2.1. to -5.8 percent of GDP in 1994.

These developments were more than reversed during the subsequent consolidation. Most of the expenditure reduction between 1995 and 1998 resulted from a cut of transfer payments by 6.8 percent of GDP. Government wage expenditures grew less than GDP, while purchases increased their budget share. In addition, revenues contributed a proportionate amount to the fiscal recovery they had contributed to the deterioration. Cyclically adjusted direct tax revenues rose 2.5 percentage points of GDP over the period, which rules out the previous deterioration. While social security contributions where a secondary source of fiscal consolidation, the sizeable reduction of cyclically adjusted contributions produced the small deterioration of the budget balance in 1999. The factors leading to the extraordinary high tax level in 1998, did not continue into 1999.

8.2.14 United Kingdom

The country entered a recession at the turn of the decade which was accompanied by a strong deterioration of the budget balance, even thought the size of the deterioration was smaller than in Sweden. In 1993, when the United Kingdom launched its first convergence programme, the deficit stood at eight percent of GDP and the debt level had grown from 43.2 percent of GDP to 56.2 percent of GDP between 1989 and 1993. Correspondingly, the convergence programme identifies the need to correct this position and sets a balanced budget of the public sector as the medium-term target. However, no time path is given for the fiscal adjustment (Convergence Programme May 1995:5). From 1994 onwards, the balanced budget rule was supplemented by the golden rule as guiding principle for the fiscal policy stance, i.e. on average public sector borrowing should not exceed net capital spending over the business cycle. With the approval of the Code for Fiscal Stability and the Finance Act 1998, the golden rule was supplemented with a sustainable investment rule: net public debt as a proportion of GDP should be held stable and at a prudent level over the cycle. A debt level below 40 percent of GDP was considered to be adequate. (Convergence Programme December 1998: 25).

Successive British governments have used fiscal targets to reduce the deficit and restrain public expenditures. In autumn 1992, the Chancellor announced a new system of expenditure control, whereby spending would be planned in terms of an aggregate termed new control total (NCT). The NCT includes all general government expenditures except that on cyclical social security, central government debt interest, certain accounting adjustments and privatisation proceeds. From its inception, the NCT was constrained to a rate which ensured that total spending grows by less than the economy (Convergence Programme Mai 1993:10) Then the focus on expenditure restraint, already detectable in the first convergence programme, became more pronounced in 1996 (Convergence Programme April 1996:9). In the medium term, the level of public spending was planned to fall below

40 percent of GDP.[97] This was expected to happen during the budget years 1997/8. (Convergence Programme March 1997:15).

As a result of these expenditure targets, government consumption and running-cost growth was strongly restraint during these years. Particularly defence spending was cut.[98] In addition, growth of investment spending was restricted below the growth rate of the economy. Moreover, governments introduced several changes to the social security system. Invalidity Benefit was replaced by Incapacity Benefit in 1995. The new scheme applies to tougher medical test to assess incapacity an eligibility. The government decided to replace unemployment benefits by the Jobseeker's Allowance in October 1996. The entitlement period should be halved to six months for the contributory element of the scheme and the income-related element aligned to the means-tested income support scheme (OECD EC 1996:103).

On the revenue side a multitude of initiatives were taken, which were largely fiscally neutral until 1997. Changes becoming effective in 1998 led to higher direct taxes, while indirect taxes and social security contributions were only mildly affected. Initially tax policy was geared toward helping business to recover from the crisis and reducing unemployment. Among the alleviating measures announced in the Budget 1993 for the current and up-coming years was a widening of the initial income tax band, a doubling of the threshold beyond which property transactions are taxed, a reform of corporation tax affecting dividend distributions, lower business property taxes and VAT relief on bad loans. (European Economy Suppl. A 5/93). Conversely, lengthening of the freeze on income tax allowances and the basic income tax rate limit, restricting the value of the married couple's allowances and of tax relief for mortgage interest to 15 percent from April 1995 onwards, introduction of a 3 percent tax (which was subsequently reduced to 2.5 percent) on most insurance premiums and duties on air fare, cars, energy, alcohol and tobacco financed the above measures by raising additional revenues. (OECD EC 1994:37, 1995:117).

When the new Labour government resumed power a windfall tax was levied on privatised utilities to finance a GBP 5 bill *Welfare to Work* programme, which among others encourages the reintegration of young and long-term unemployed. In addition, corporation tax was cut from 33 to 31 percent and that on small companies from 23 to 21 percent. Enhanced capital allowances were granted to SME. The tax credits on dividends from pension funds and companies was abolished as well as the income tax relief on private medical insurance contributions for the over-60s. As of April 1998, mortgage interest rate tax relief was reduced again from 15 to 10 %. Regarding indirect taxes, the Budget of 1997 lowered the VAT rate on domestic fuel from 8 to 5 percent, increased road fuel duties by 1 percent per year over the already existing 5 percent year real rate of increase, tobacco duties by 2 percent per year over and above the already existing 3% per year real rate of increase and alcohol duties in line with inflation. The gas levy on domestic consumers was cut to zero. (European Economy Suppl. A 08-09/97)

The Budget 1998/99 started a broader tax and benefit reform including a reform of National Insurance Contributions, the introduction of the working Families Tax Credit and of a child care credit. The corporate tax rate was reduced for large companies from 31 to 30 percent and the advance corporation tax abolished (effective April 1999). The income tax was removed for families with incomes below GBP 220 and for families with two or more children earning less than 50 percent of the national average. The value of the married persons tax allowance was reduced and taxes on motoring fuels increased. Finally, employers' contribution to national insurance was removed for employees earning

[97] This target was set in terms of the GGE(X), i.e. general government expenditures excluding privatisation proceeds and spending financed out of National Lottery proceeds and netting interest and dividend receipts from gross payments. (Convergence Programme March 1997:15)

[98] See appendices to convergence programmes providing figures for the impact of budget measures.

less than GBP 81 per week and increased to 12.2% for employees earning more. (European Economy Suppl. A 05/98)

The balance deteriorated from 0.9 percent of GDP in 1989 to -8.0 percent of GDP in 1993. As a consequence, the debt level, which was on a downward trajectory, started to rise again in 1992 and 1993, although small stock-flow-adjustments also contributed to this phenomenon (EMI 1998:263).

The consolidation which started after 1993 reversed the previous unsustainable trend in public spending. The actual deficit rose from 8 percent of GDP to a surplus of 0.7 percent of GDP in 1999. This improvement was to a large extent the consequence of the above mentioned discretionary measures, as the cyclically adjusted figures indicate. The cyclically adjusted primary balance improved from -4.4 percent of GDP to 3.1 percent of GDP in 1999, mostly due to the overall spending restraint which contributed four-fifth to the improvement. The spending reduction until 1998 was primarily achieved in wage consumption. Wage payments decreased by 3.7 percentage points while transfer payments were reduced by 2.2 percentage points to GDP in terms of structural changes. The initial fall of wages was produced by an impressive amount of employment reduction between 1993 and 1995. During these years, several pubic firms were privatised, most importantly British Rail and British Coal in 1994 and 1995. (European Economy 03/93, OECD Economic Survey 1993:58, 1995:118) The combined effect of these measure plus cuts in public investment reduced the non-cyclical primary spending level by 6.1 percentage points, which was 0.9 percentage points below the starting value of the prior fiscal expansion. The contribution of revenues to the consolidation process can be mostly ascribed to the additional direct taxes raised after 1997, which included a windfall tax on the gains of privatised public utilities (Convergence Report 1998: 187)

Table 4: United Kingdom in the 1990s

Year	1989 (1)	1993 (2)	1999 (3)	Dif. (2)-(1)	Dif. (3)-(2)
Debt	43.2	56.2	54.0	13.0	-2.1
Surplus	0.9	-8.0	0.7	**-9.0**	**8.7**
Primary Surplus	**0.9**	**-4.4**	**3.1**	**-5.3**	**7.5**
Curr. Revenues	**38.7**	**38.6**	40.0	**-0.1**	**1.4**
Direct Taxes	15.6	14.4	16.0	-1.2	1.6
Indirect Taxes	11.9	13.2	13.6	1.3	0.4
Soc. Security Contr.	7.3	7.9	7.5	0.6	-0.4
Primary Expenditures	**37.8**	**43.0**	36.9	**5.2**	**-6.1**
Transfers and Subsidies	15.8	19.4	17.2	3.6	-2.2
Wage Payments	11.9	11.1	7.4	-0.8	-3.7
Purchases	7.4	9.4	10.7	2.0	1.4
Investment	2.3	2.4	1.4	0.1	-1.0

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European Economy Supplement A
IMF Staff Country Study
OECD Economic Survey

8.2.15 Summary Tables

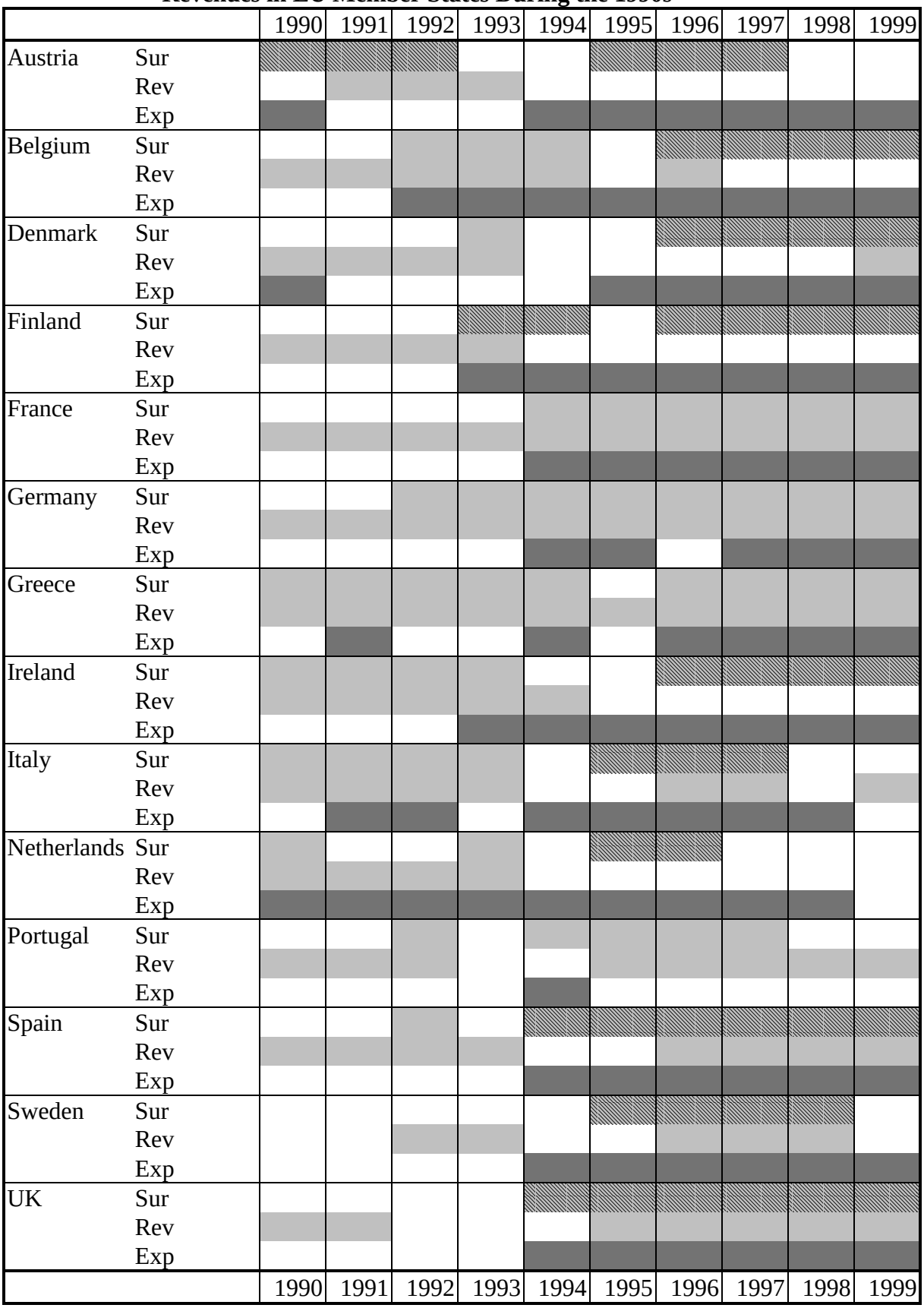
Table 8.2.15:Fiscal Consolidations and Expansions During the 1990s

Country	Year	Δ Prim. Surplus (1)	Δ Prim. Expenditures (2)	Contr. of (2) to (1) (3)	Δ Surplus (4)	Δ Debt Level (5)
Austria	1988-92	2.2	-1.8	82.5	2.6	-0.2
	1993-4	-2.5	2.3	92.4	-3.1	7.4
	1995-7	3.0	-2.8	90.9	3.1	-1.1
	1998-9	-0.6	-0.1	-22	-0.2	-1
Belgium	1990-1	-0.9	1.4	163.5	-0.8	1.7
	1992-4	3.8	-0.6	16.6	1.4	5.9
	1995	-0.5	-0.2	-48.3	0.9	-3
	1996-9	1.3	-1.3	101.7	2.9	-15.7
Denmark	1988-92	-2.7	1.6	59.6	-3.7	3.9
	1993	0.7	1.9	-259	-0.6	13.1
	1994-5	-4.0	0.6	14.2	0.6	-9.9
	1996-9	4.0	-3.4	85.7	5.2	-18.5
Germany	1989-91	-4.6	2.7	59.1	-3	0.2
	1992-9	4.1	0.3	-6.7	1.3	22.5
Finland	1990-2	-3	10.9	360.7	-11	27
	1993-4	2	-2.8	138.5	-0.3	18
	1995	-0.6	-1.8	-309.1	1.5	-1.4
	1996-9	4.1	-7.4	182.7	7.4	-13.2
France	1987-93	-3.3	2.6	80.3	-4.1	11.5
	1994-9	3.1	-1.3	41.5	3.8	13.6
Greece	1990-94	12.7	-0.1	1	4.4	42.2
	1995	-1.3	3.2	246.8	-0.2	0.8
	1996-9	3.7	-1.2	32.9	8.6	-4.9
Ireland	1990-4	2.5	1.7	-68.9	0.8	-4.5
	1995	-2	-1.8	-87.2	-0.5	-7.3
	1996-9	1.3	-3.4	254.1	5.9	-36.9
Italy	1985-3	8.0	1.3	-16.2	**2.9**	35.8
	1994	-1.2	-1.4	-116.6	0.3	6.1
	1995-7	4.7	-2.4	51.4	6.3	-3.6
	1998-9	-0.9	0.7	73.2	0.5	-2.6
Netherlands	1991-2	-0.6	0.2	29.1	-1.1	0.7
	1993	2.3	-0.9	40.1	0.8	1.1
	1994	-1.4	-1.8	-127.5	-0.6	-3.6
	1995-6	2.5	-2.2	89.9	2.4	-0.2
	1997-9	-0.7	-0.4	-58	1.3	-10.9

Portugal	1988-91	-2.3	3.8	167.9	-2.5	2.3
	1992	2.4	1.2	-48.8	3.1	-7.4
	1993	-2.9	2.4	82.8	-3.2	3.2
	1994-7	1.5	0.2	-10.3	3.6	-1
	1998-9	-0.6	1.8	325.6	0.7	-5.5
Spain	1987-91	-2	3	153.3	-0.6	0.9
	1992	1.6	0.6	-39.6	0.3	2.6
	1993	-1	2.7	269	-2.7	11.2
	1994-9	4.5	-6.4	144.1	5.3	7
Sweden	1989-94	-8	6.2	77.5	-16.2	31.4
	1995-8	12.4	-9.4	76.3	12.9	-4.6
	1999	-1.2	0.3	28.6	0.4	-5.4
UK	1989-93	-5.3	5.2	98.5	-9	13
	1994-9	7.5	-6.1	81	8.7	-2.1

Note: All fiscal variables are measured as share of GDP and differences not growth rates. Fiscal variables in column (1) and (2) are cyclically adjusted. The contribution rate is indicated in percent.

Table 8.2.16: Fiscal Expansions and Contractions of the Surplus, Expenditures and Revenues in EU Member States During the 1990s



Note: All fiscal variables refer to cyclically adjusted figures measured as share of GDP. Episodes are identified by a change of the cyclically adjusted resource flow of more than 0.5 percentage point in one or several consecutive years. The shaded areas indicate a fiscal consolidation, revenue expansion respectively expenditure reduction. Lined bars for fiscal consolidations indicate expenditure-driven episodes.

8.3 Questionnaire

1. Do you think that the Maastricht Criteria were important for economic policy in your country in the 1990s?

   --very important --important --somewhat important --not important

2. Did the Maastricht criteria have an impact of political decisions of the national government in your country during the 1990s?

   -- yes --no

3. In your opinion, would the fiscal corrections observed in recent years have taken place without the Maastricht criteria?

   --no --perhaps --very likely

4. In your opinion, was the Maastricht process important,

   --because it created political pressure on the government from outside the country?

   -- because it provided clear targets as guidelines for domestic policy?

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