THE EMU REGIME AND GOVERNMENT PREFERENCES FOR THE PROVISION OF STABILISATION

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In this paper, we attempt at mapping preferences for 'government provision of stabilisation' – which should be understood as action by governments, past and present, that have a stabilising effect on economic activity – at the national level in the EMU on the basis of some indicators of government activity. We find that the EU Member States exhibit differences as regards 'revealed preferences' for government provision of stabilisation, depending both on "need" and "taste" factors. In EMU, with price stability as the nominal anchor, monetary policy dominates fiscal policy and architecture of the Stability and Growth Pact secures balanced budgets at the national level. If it is the case that there exists a 'preference gap', in the sense that the monetary authority is forgiving on unemployment but non-forgiving on inflation and that the reverse is true for the fiscal authorities, this may put stress in the system and result in an inefficient overall regime.

1. Introduction

In EMU, the overall macro-economic policy regime institutionalises price stability as the nominal anchor and sets a straightjacket on fiscal policies; in EMU monetary policy dominates fiscal policy. The rationale behind the monetary and fiscal rules in EMU should be seen against the failures of "Keynesian" activism to deliver stability and full employment in the 1970's and 1980's. By tying the hands of policy makers, the EMU rules work as a commitment mechanism to increase credibility while shifting the main policy focus from short-term stabilisation concerns towards medium-term efficiency concerns.

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The challenge is how to combine the medium- and long-term commitments with short-term flexibility. Indeed, after the room of manoeuvre having been restricted by the market forces in the 1990's, the EMU rules have also been viewed as a way to regain lost room of manoeuvre for short-term budgetary stabilisation initiatives. This may be an indication that there is a gap between the preferences underpinning the EMU institutional framework and the revealed preferences, in terms of outcomes, held by governments. Indeed, while progress in structural reform appears to be relatively slow, short-term stabilisation concerns remain high on the agenda. If such a "preference gap" actually exists there is a risk that the EMU macro-economic regime will under-perform while stress in the system gradually builds up. In the end, if government preferences do not adapt, this type of strain could lead to that the institutional set-up is questioned. Against this background, the purpose of this paper is to have a look at the revealed preferences for government provision of stabilisation across EU Members States and discuss some of the policy implications in EMU. This is done by looking at the supply of, and demand for, government provision of stabilisation at the national level.

The paper is organised as follows. Section 2 outlines the case for stabilisation policies. Section 3 looks at the different channels of government provision of stabilisation with a view to make a mapping of the "revealed preferences" across Member States. Section 4 examines the implications under EMU regime. Finally, Section 5 discusses some policy implications of EMU and Section 6 concludes.

2. The case for stabilisation policies and Government provision of stabilisation in EMU

There are traditionally two rationales for stabilisation policy.[1] Firstly, to the extent that economic fluctuations correspond to excess volatility in the economy explained by different market failures, such as imperfect competition and various adjustment failures, a welfare gain could be realised by successful stabilisation policies. With a real-business cycle approach towards explaining the business cycle, the case for stabilisation policies would be highly questionable. Secondly, a case for stabilisation

[1] According to the Palgrave dictionary, stabilisation policy normally refers to discretionary measures, or "deliberate changes in government policy instruments in response to changing macro-economic instruments, in order to stabilise the economy".

policies can also build on incomplete capital markets where risk averse agents would like to but can not fully diversify away business-cycle risks. This calls for provision of additional social insurance from the government. However, the development of better functioning capital markets weakens this case.

The consensus advice on the use of budgetary demand management is that they should be used, if ever, in case of demand-side shocks rather than supply-side shocks and when shocks are of a temporary rather than permanent nature (see European Commission, 2000). Such guidelines are useful as a benchmark in discussions on what should be the right policy response in different situations. However, in practice, given the inherent uncertainty of business cycle assessments in real-time, when policy decisions are taken, it is very difficult, if not impossible, to tell the true nature of shocks. Under such uncertainty it is reasonable to believe that policy-makers decisions hinges importantly on ideological beliefs and regarding the role of the market and the responsibility and capacity of the government to intervene.

To separate stabilisation policies from welfare and redistribution policies is not clear-cut, especially in an ex-ante/ex-post perspective. This is because policy-makers simultaneously strive for allocation, redistribution and stabilisation objectives. Thus, policies typically target at the same time a low and stable inflation rate, a low and stable unemployment rate and high and stable disposable incomes. In the same vein, the distinction between stabilisation policies in terms of providing social insurance and general redistribution policies is unclear. What ex ante can be seen as social insurance, may ex post look like redistribution (the "Musgrave distinction", see Andersen, 2001).[2]

Indeed, it is possible to argue that the build-up of the large public sectors in European welfare states is a result of the interplay between stabilisation and welfare policies. Expansionary measures introduced for (stabilisation purposes) in downturns have tended to become permanent (welfare policies). As the institutional framework affects the economic structure, the "need" for stabilisation is also affected. This well documented non-reversibility of discretionary measures (see section 3) is

[2] In addition, when evaluating ex post the relative success of different budgetary stabilisation policies, the assessment is usually not made against the primary objectives of stabilisation policies, but against swings in overall economic activity (GDP), a variable that governments, in the short-term, might not be primarily concerned with *per se*.

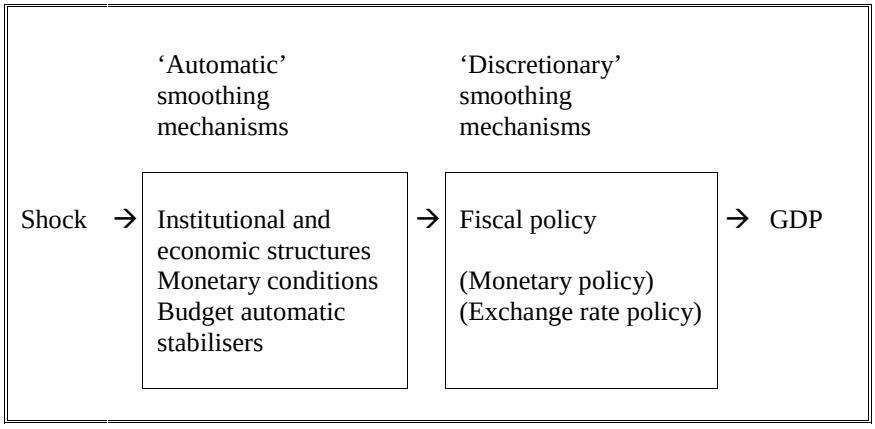
consistent with a general desire to gradually increase the span of the welfare state.[3]

Government provision, or supply, of stabilisation includes all government actions that have a stabilising impact. This encompasses both automatic and discretionary elements, as policy-makers actions are not only decided by their current preferences; they also have to act within an institutional framework that is inherited from previous governments. In the end, the institutional structures today can be seen as the result of incremental discretionary actions in the past. The issue of to what extent, and how fast, a government and/or a parliament is empowered to act may be important in this regard.

The automatic elements are the budgetary automatic stabilisers, the stabilising properties that stem from the size of the public sector (being less cyclically sensitive than the private sector) and the use of regulation in product and labour markets. Figure 1 illustrates the effect of an external

Fig. 1

Smoothing mechanisms



[3] Tanzi and Schuknecht (2000) concludes that 'While initially, the two world wars permitted some significant increases in revenue and expenditure levels, it was the period between 1960 and 1980 that saw the most rapid expansion. Changes in public expenditure levels largely followed changes in attitudes towards the role of the state and changes in the institutions which constrain government intervention in the economies.'

shock at the national level in EMU is decided by national institutional and economic structures, the common monetary policy and the working of the automatic budget stabilisers. In order to further limit the impact on economic activity, the government may decide to provide additional stabilisation through discretionary actions.

The preferences for stabilisation are simultaneously decided by the "need" and "taste" for stabilisation. The "need" for stabilisation depends on how sensitive an economy is to external shocks which in turn depends on industry structure, trade openness, the optimality of monetary conditions etc. In this context, the "need" could be thought of as the provision of stabilisation necessary to reach a certain (minimal) degree of stabilisation. However, even if the government satisfies the "need" for stabilisation, they may still have a "taste" for more. The "taste" for stabilisation depends on ideology, that is, views on the role and responsibilities of the State and the market. By looking at the government provision of stabilisation and indicators of the need for stabilisation it is possible to say something about the "revealed" preferences for stabilisation held by governments. This is done in section 3 below.

3. Government preferences for the provision of stabilisation

There are many ways to capture a government's preferences for the provision of stabilisation. Aggregate measures are often used, such as the level or change of total spending or revenues, either directly for cross-country comparisons or in relation to cyclical developments. Such measures could understate the provision of stabilisation, as e.g. regulation of markets is not directly captured. However, they could also, possibly, overstate the provision of stabilisation, if e.g. there are important elements of tax churning[4] in a country.

In this section, four sources of stabilisation – both discretionary and rule based – are considered. These enables us to tentatively map EU

[4] Fiscal churning measures the extent to which the same households both receive government payments and pay taxes. Tanzi and Schuknecht (2000) find that in 1993-1995, on the basis of the OECDs estimates of tax churning in eleven industrialised countries, government spending could be reduced from 50% of GDP to around 30% of GDP without making anybody worse off. This excludes the welfare gains one could expect from cutting taxes, possibly distortionary, with a proportional amount.

government's preferences for the provision of stabilisation, as revealed by these channels, hence, revealed preferences. These are:

- The use of discretionary fiscal policies. The use of discretionary fiscal measures aimed at stabilising the economy is considered. The use of such measures in the past and their success is discussed, together with some implications for today with respect to the case for 'fine-tuning' the economy within the framework of the EMU.
- The operation of the automatic stabilisers. Part of the government budget expenditures and revenues fluctuate with systematically with economic activity. On the revenue side, tax revenues fluctuate with tax bases. On the expenditure side, unemployment related expenditures correlate with the cycle. In this way the automatic stabilisers help stabilise disposable income over the cycle.
- The size of the public sector. The creation and expansion of the shielded sector work as a stabilising factor in the economy to the extent that it is less cyclically sensitive than the private sector. First, to the extent that the government spending is partly characterised by autonomous spending. Second, to the extent that the public sectors have generally grown almost constantly, until the 1990s consolidation process. Third, the overall size may reflect a government's view on the importance of government intervention in the economy.
- The use of regulatory instruments. Government may use regulation to guide outcomes in product and labour markets with a view to reduce business-cycle risks. For example, government provides protection against unemployment risk for risk averse agents.

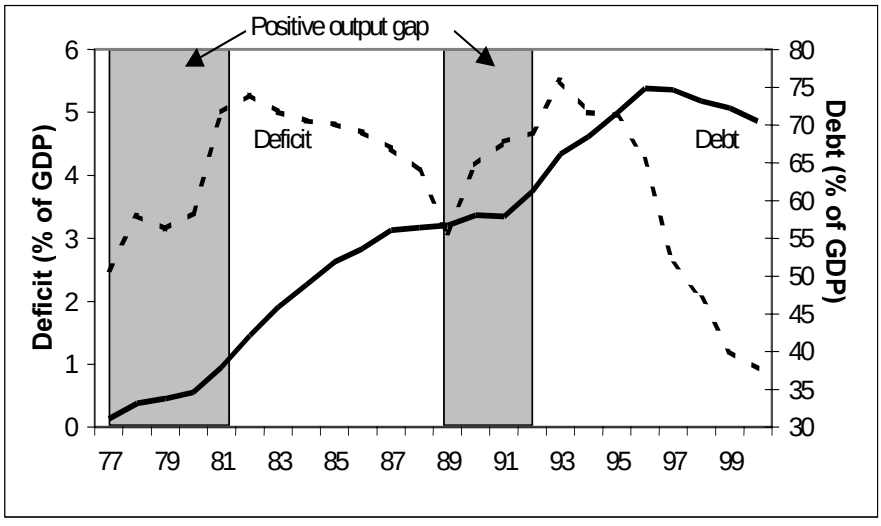
3.1 The use of discretionary fiscal policies

An active use of discretionary fiscal policy measures in general, and for stabilisation purposes in particular, may be taken as an indicator of the preferences of governments to intervene and adjust market outcomes. However, looking at past evidence it must be concluded that the effectiveness of discretionary polices for stabilisation purposes seems to be questionable. This can be related to several factors, political economy related and the well-known implementation difficulties involved due to time lags and specification complexity. Even so, policy-makers may still have a "taste" for using discretionary polices for short-term demand management.

Having said this, the Public Finance Report 2000 (European Commission, 2000) contained an analysis of the use of discretionary fiscal polices across EU Member States over the period 1970-2000. Deficits did not fall as expected during periods of high economic growth, implying that countries offset the working of the automatic stabilisers via discretionary tax cuts or expenditure increases. As a consequence, public debt continued to rise. Such fiscal relaxation in good times in turn necessitated a tightening during economic downturns. Hence, instead of smoothing the business cycle, fiscal policies have contributed to amplifying the output swings. Deficits rose between 1976 and 1981 when there was a positive output gap, but were placed on a downward path afterwards when the economy was in a prolonged period of below trend GDP growth. Pro-cyclical behaviour continued into the 1990s when the inevitable reduction in deficits took place to return budget positions to a sustainable footing: this partly contributed to a period of subdued economic growth. This expansionary stance reflected the developments following German unification and took place in the wake of the strong recession hitting several EU countries at the beginning of the 1990s.

Graph 1

Rising budgetary imbalances in the euro area



Source: PFR 2000.

Also shown in the PFR-2000, individual countries behaved differently as not all countries ran pro-cyclical policies, in particular the split between high debt and low debt countries seems relevant. The former group recorded much higher structural deficits, partly reflecting the higher interest burden. They also tended to pursue a pro-cyclical fiscal policy for all positive output gaps and for strongly negative output gaps leading to an accumulation of public debt over the cycle. Lower debt countries let the automatic stabilisers play more freely.

Table 1

Fiscal stances and output gaps across EU, 1970-95

% of GDP	Average absolute value fiscal stance 1970-1995	Difference to EU average	Average fiscal stance in times of negative OGs	Average fiscal stance in times of positive OGs
B	1.1	–0.1	1.1	–0.6
DK	1.2	0.0	0.0	0.0
D	1.0	–0.2	0.3	–0.4
EL	1.9	0.7	0.6	–0.3
E	0.8	–0.4	0.2	–0.1
F	0.6	–0.6	0.2	–0.2
IRL	1.4	0.2	0.8	–0.6
IT	1.1	–0.1	0.3	0.1
L	1.5	0.3	0.5	–0.6
NL	1.0	–0.2	0.4	–0.2
AT	0.8	–0.4	0.1	0.0
P	1.6	0.4	0.1	–0.2
FIN	1.2	0.0	0.2	–0.2
SW	1.5	0.3	0.5	–0.4
UK	1.3	0.1	–0.1	–0.2

Source: AMECO and own calculations.

Table 1 looks at the average fiscal stance (change in primary cyclically-adjusted balances) over the 1970-1995 period. The average absolute value of the fiscal stance could be taken as an indicator of the degree of fiscal activism and use of discretionary fiscal policy measures. On this basis Greece, Portugal, Luxembourg and Sweden stand out as countries where this indicator would be above EU average and Spain, France and Austria on the opposite side. As indicated by Graph 1 above, fiscal polices appear to have been of a pro-cyclical nature implying loosening policies when gaps are negative and tightening when gaps are positive. This picture is confirmed when looking at the fiscal stance in times of positive and negative output gaps. Clearly, on average the fiscal stance has been tightening in bad times and loosening in good times. Overall, governments appear to have been adapting their expenditures annually to its resources rather than smoothing over the cycle.

3.2 The automatic budget stabilisers

The more the budget reacts automatically and pro-cyclically to economic fluctuations, the more counter-cyclical fiscal impulses it provides to the economy. In bad times, budget revenues weaken while expenditures increase and vice versa in good times. Where to draw the line between what is automatic and not is not straightforward. The standard approach is to focus on budget components which due to the institutional arrangements of the budget, i.e. tax and benefit systems, lead to systematic pro-cyclical movements in the budget. On the revenue side, such a systematic link is found for tax revenues (direct, indirect and corporate taxes) and social security contributions. On the expenditure side, unemployment related expenditures fluctuate with the unemployment rate.[5]

The budget sensitivity to cyclical developments depends both on the sensitivity of government revenues and expenditures to economic fluctuation and on the magnitude of expenditures and revenues of several

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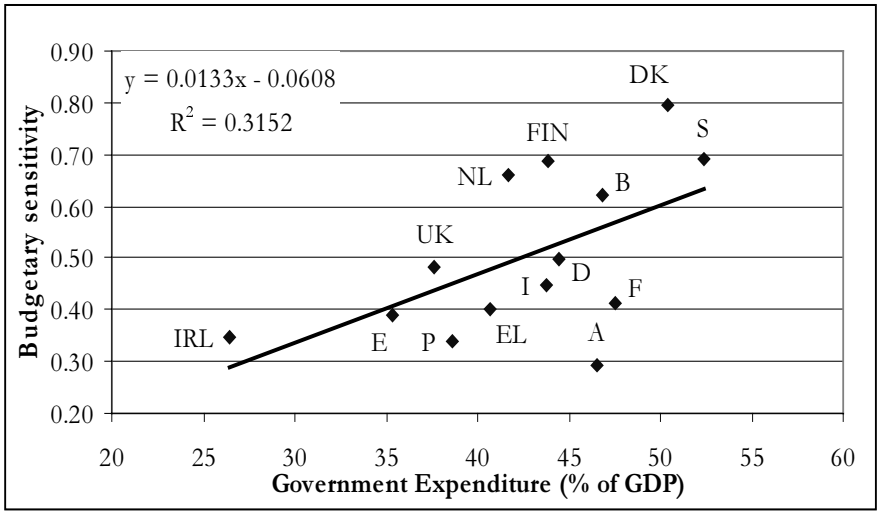
[5] Other expenditure items beside unemployment benefits - for instance, social and health care expenditure - may fluctuate with the cycle. However, it has proven empirically difficult to find a consistent pattern. A related issue is how to deal with the different budgetary rules on expenditures and revenues that have been introduced in several Member States in the last few years. For example, the Dutch budget system includes specific budgetary rules which partially offset the budgetary impact of the automatic stabilisers, making it difficult to distinguish between automatic and discretionary changes. In addition, beyond such institutionalised mechanisms, the question can be raised to what extent discretionary fiscal policy measures, which as seen above have tended to be systematically pro-cyclical, should also be seen as "automatic" (see Melitz, 2000).

variables, such as the size of government, the structure of cyclically sensitive tax bases, the progressivity of tax rates, the cyclical sensitivity of tax bases, the generosity of unemployment benefits and the cyclical sensitivity of unemployment.

Graph 2

Budgetary sensitivities and government size



Source: European Commission (2002).

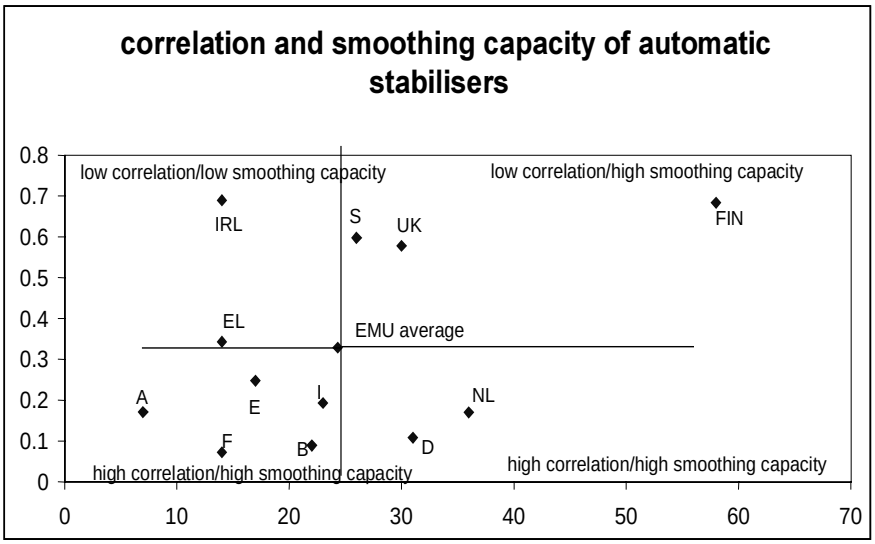
The average budgetary sensitivity to the output gap is around 0.5, implying that if the output gap changes with 1%-point, the average budgetary impact is estimated to be around 0.5% of GDP. Most of the budget sensitivity is on the revenue side (about 0.4) while the expenditure side is less cyclically sensitive (about 0.1). The size of the budgetary sensitivity is closely linked to the share of government revenues and expenditures to GDP. Graph R illustrates the strong linear relationship between budget sensitivity and the share of government expenditures to GDP. However, the relationship is not perfect as the structure of tax bases, the degree of progressivity of the tax system, the generosity of unemployment benefit systems etc. also plays a role. The Nordic countries

typically have above average sensitivities at 0.7-0.8 while countries like Ireland, Portugal and Austria have below average budgetary sensitivities.

However, this does not ensure that automatic stabilisers are generally sufficient to deliver the appropriate macroeconomic stabilisation. Indeed, the measure of the smoothing capacity varies across studies. Other studies arrive at different ranking of countries, reflecting different estimates of the cyclical sensitivity of the budget to economic activity, different typology of shocks underlying the simulations and model differences.[6] For example, according to alternative simulations performed with NiGEM, automatic stabilisers would have a very low smoothing capacity in Finland, which would be a matter of concern given the asynchrony of the economic cycle in this country with the EMU average.

Graph 3

Correlation and smoothing capacity of the automatic stabilisers



Source: European Commission (2002).

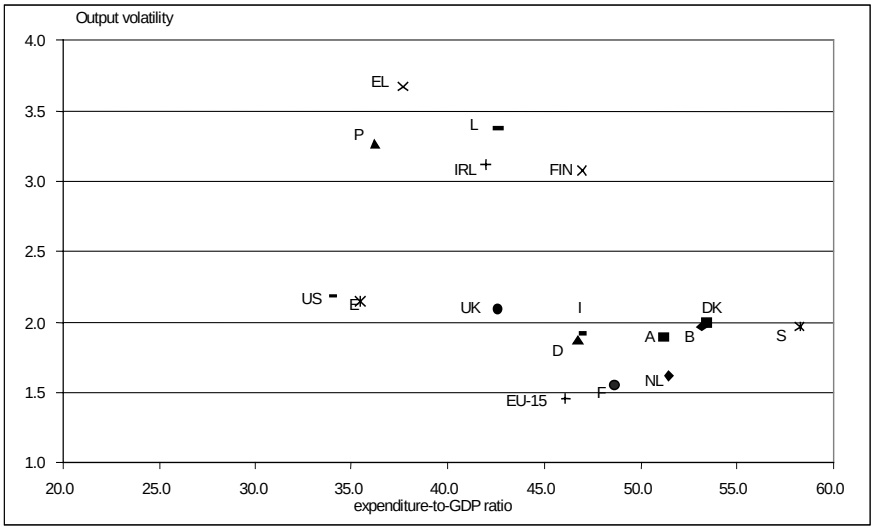
6 See PFR 2001 for a review of these studies.

3.3 The size of government

In this section, the stabilising effect of the size of government and the components of spending are considered, as well as the composition of government spending in the Member States and related to the EU-average, EU-15.

Graph 4

Output volatility and average size of government, 1970-2000



Source: AMECO.

Graph 4 suggests that there is a negative relationship between output volatility and government size.[7] This is in line with previous empirical work. Gali (1994) find a robust negative relationship between the variation in GDP growth and both the government tax- and purchase-to-GDP ratio.

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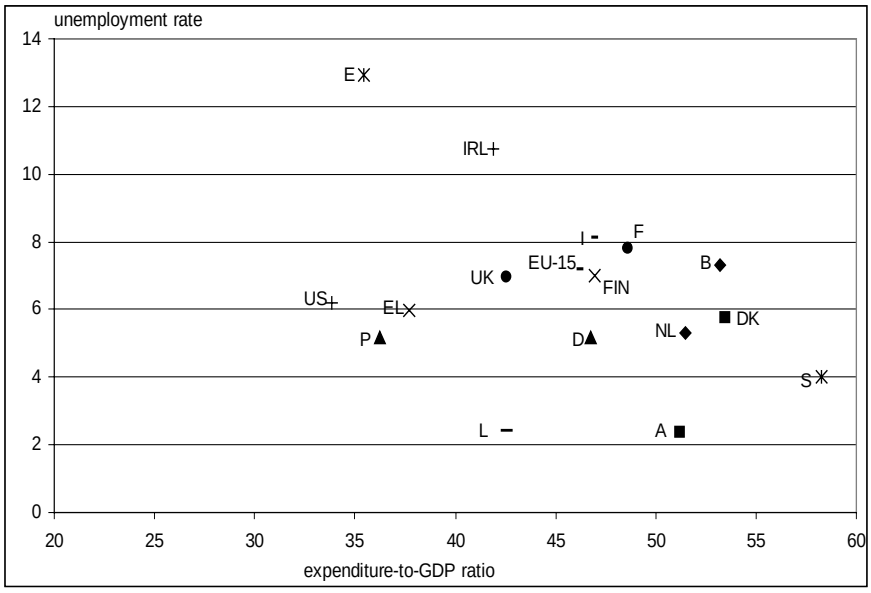
[7] The correlation coefficient across all EU countries between output volatility and total expenditure is -0.63 for the average over the period 1970-2000. Similarly, the correlation between output volatility and i) public consumption and ii) transfers to households are –0.61 and –0.57, respectively. A weaker relationship is found between output volatility and public wages, with a coefficient of –0.32. However, the negative relationships are smaller when output volatility is related to the composition of spending, with coefficients of –0.35 w.r.t public consumption, -0.14 w.r.t. transfers to households and 0.20 w.r.t. public wages.

Fatas and Mihov (1999) takes Gali's empirical work as their starting point. Their results for the OECD countries support the findings of Gali, i.e. the size of a government is negatively correlated with output volatility. This relationship is robust when controlling for several variables and also if private sector output is used. They extend their analysis to US states and their analysis confirms the results arrived at when analysing the OECD countries.

Graph 5

Average unemployment rate and size of government, 1970-2000



Source: AMECO.

However, as noted in section 2 above, it is not obvious that governments are primarily concerned with output volatility per se when formulating policy in real-time. One could imagine that the key variable of interest is the unemployment rate, in particular, i) low unemployment and ii) stable unemployment. In Graph 5 above, the average unemployment rate is plotted against the size of governments in the Member States for the

period 1970-2000.[8] This suggests a negative relationship between government size and the unemployment rate.These stylised facts suggest that the degree of government provision of stabilisation, as proxied here by the size of government spending, has a stabilising effect on the economy. Member States with big governments have on average experienced less output volatility. Moreover, they have on average had a relatively low and stable unemployment rate.

In Table 2 the average total expenditure and its sub-components over the period 1970-2000 are given. As this sample covers more than 30 years, and therefore includes several cycles, one could argue that these ratios represent steady-state proportions, with an average expenditure-to-GDP ratio of 46.1% for the EU. Public consumption and household transfers accounted for three-quarters of total expenditure in the EU. Other components of expenditure are interest payments of almost 4% of GDP, and investment, subsidies and other expenditure, which accounted for 2-3% of GDP.

The biggest component of spending in most countries is public consumption and the wage bill make up more than half of this in all countries (up to almost three-quarters). Transfer payments to households is the other main expenditure post and, to a varying degree, interest payments are important due to the debt situation, ranging from 0.7% of GDP (low-debt Luxembourg) and 7.9% of GDP (high-debt Belgium). Expenditure on investment, subsidies and others are smaller in relation to GDP.

As the EU public finances were in balance in 2000 (for the first time in 30 years), it is interesting to look at the situation on the expenditure side in the Member States in relation to the EU average. In Table 3 below the deviation in percentage points from the EU-average is given for i) the period 1970-2000 and ii) in 2000.

Among the big Member States with medium-sized governments, Germany, France and Italy increased the positive deviation to the EU-average in 2000 compared with the long-term average. By contrast, the United Kingdom increased the negative deviation. Among the Member States with a big government, Belgium, Austria and Sweden decreased the

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[8] The correlation coefficient across all EU countries between output volatility and the unemployment rate is -0.41 for the average over the period 1970-2000. Moreover, the correlation between output volatility and the standard deviation of the unemployment rate is –0.32.

Table 2

Average government expenditure in Member States, 1970-2000

% of GDP	Total expenditure	Interest	Final consumption expenditure	*Compensation of employees*	Social transfers other than in kind	Subsidies	Gross fixed capital formation	Other
B	53.2	7.9	21.3	11.9	16.2	2.2	3.1	2.5
DK	53.5	5.0	25.4	17.2	16.1	2.1	2.5	2.3
D	46.7	2.5	19.4	10.0	16.9	2.1	2.9	2.9
EL	37.7	5.4	13.9	10.2	12.4	2.7	3.0	0.2
E	35.5	2.3	13.9	9.6	11.9	1.8	3.1	2.5
F	48.6	2.3	21.0	12.8	16.9	2.0	3.4	3.1
IRL	41.9	5.8	15.9	10.6	11.8	4.3	3.5	0.6
I	46.8	7.2	17.3	11.3	14.9	2.2	2.9	2.3
L	42.5	0.7	14.5	9.1	17.6	2.6	4.7	2.4
NL	51.5	4.7	19.4	11.3	20.0	2.3	3.1	2.1
A	51.2	3.0	18.5	11.6	17.5	2.9	3.8	5.6
P	36.2	4.2	14.8	10.9	10.1	2.7	3.4	1.0
FIN	46.9	1.9	20.0	13.8	14.5	2.9	3.5	4.2
S	58.3	4.7	26.1	17.7	17.8	3.7	3.6	2.4
UK	42.5	4.1	20.1	11.3	12.7	1.5	2.7	1.4
EU-15	46.1	3.8	18.5	11.6	16.4	2.3	3.0	2.2
US	33.9	3.9	16.8	10.6	9.9	0.5	2.6	0.2

Source: AMECO.

Table 3 (top)

Government expenditure in Member States in relation to EU-15, average over 1970-2000 and in 2000

EXPENDITURE OF GENERAL GOVERNMENT, DEVIATION FROM EU-15 AVERAGE 1970-2000 AND 2000 (*percent of GDP)*															
	Total expenditure		UMTS excluded	Interest		Final consumption expenditure		*Compensation of employees*		Social transfers other than in kind		Subsidies		Gross fixed capital formation	
	1970-2000	2000	2000	1970-2000	2000	1970-2000	2000	*1970-2000*	*2000*	1970-2000	2000	1970-2000	2000	1970-2000	2000
B	7.1	3.7	2.7	4.1	2.9	2.8	1.3	*0.4*	*1.2*	–0.1	–0.8	–0.1	0.2	0.1	–0.5
DK	7.3	8.3	7.3	1.3	0.3	6.9	5.2	*5.6*	*6.5*	–0.3	1.0	–0.2	0.9	–0.5	–0.6
D	0.6	0.2	1.7	–1.3	–0.5	0.8	–0.9	*–1.6*	*–2.1*	0.6	2.7	–0.2	0.4	–0.1	–0.4
EL	–8.4	3.0	2.1	1.6	3.2	–4.6	–4.4	*–1.4*	*1.5*	–3.9	0.2	0.4	–1.1	0.0	1.8
E	–10.7	–5.9	–6.7	–1.5	–0.6	–4.6	–2.5	*–2.0*	*0.2*	–4.4	–3.8	–0.5	–0.2	0.1	0.9
F	2.5	7.1	6.1	–1.4	–0.6	2.5	3.4	*1.2*	*3.3*	0.5	1.9	–0.3	0.0	0.3	0.7
IRL	–4.2	–13.7	–14.7	2.0	–1.8	–2.6	–6.5	*–1.0*	*–2.3*	–4.5	–7.9	1.9	–0.6	0.5	1.5
I	0.7	0.8	1.0	3.5	2.6	–1.2	–1.9	*–0.3*	*0.3*	–1.4	0.6	–0.1	–0.1	–0.1	0.1
L	–3.6	–5.7	–6.7	–3.0	–3.6	–4.0	–3.6	*–2.5*	*–2.2*	1.2	–2.0	0.3	0.3	1.7	1.8

Table 3 (bottom)

Government expenditure in Member States in relation to EU-15, average over 1970-2000 and in 2000

EXPENDITURE OF GENERAL GOVERNMENT, DEVIATION FROM EU-15 AVERAGE 1970-2000 AND 2000 (*percent of GDP*)															
	Total expenditure			Interest		Final consumption expenditure		*Compensation of employees*		Social transfers other than in kind		Subsidies		Gross fixed capital formation	
			UMTS excluded												
	1970-2000	2000	2000	1970-2000	2000	1970-2000	2000	*1970-2000*	*2000*	1970-2000	2000	1970-2000	2000	1970-2000	2000
NL	5.4	–0.3	–0.7	0.9	0.0	0.9	2.8	*–0.3*	*–0.2*	3.6	–4.2	0.0	0.2	0.0	0.9
A	5.1	6.5	5.9	–0.8	–0.4	0.0	–0.5	*0.1*	*1.2*	1.1	2.7	0.5	1.3	0.8	–0.6
P	–9.9	–1.5	–2.2	0.4	–0.8	–3.7	0.2	*–0.7*	*4.6*	–6.3	–4.0	0.4	–0.4	0.4	1.5
FIN	0.8	3.2	2.2	–1.9	–1.1	1.5	0.9	*2.2*	*2.9*	–1.9	0.5	0.5	0.2	0.5	0.3
S	12.2	12.0	11.0	1.0	0.3	7.6	6.2	*6.1*	*6.4*	1.4	2.2	1.4	0.6	0.6	0.2
UK	–3.6	–8.5	–7.1	0.3	–1.0	1.6	–1.4	*–0.3*	*–3.0*	–3.7	–2.9	–0.8	–0.8	–0.3	–1.1
EU-15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	*0.0*	*0.0*	0.0	0.0	0.0	0.0	0.0	0.0
US	–12.3	–13.7	–14.6	0.1	–0.2	–1.8	–5.5	*–1.0*	*–1.1*	–6.5	–5.5	–1.9	–0.9	–0.4	0.4

Source: AMECO.

BOX: Why is there such a big difference in government size?

Three main factors are typically found that explains the size of governments. Trade openness, demographic situation and GDP per capita. The first two are related to the insurance argument; insurance against foreign risk and income insurance over the lifetime. The latter is a wealth factor; 'because it can be afforded'. Martinez-Mongay (2002:1) finds that these three variables robustly explain government size.

Rodrik (1998) finds that there is a robust relation between the openness of an economy and the size of its government. The rationale for this empirical result put forward by Rodrik is that government spending acts as an insurance against external risk. This thus suggests that a large government have a stabilising effect on income for very open economies.

This perspective implies that the insurance element of government activity is important. As noted above, the insurance argument for government size makes it difficult to distinguish from welfare policy.

However, the literature also points to other explanations. Even after controlling for the above-mentioned variables, substantial differences in terms of government size persist.

The expansion of the public sector observed in most European countries since the 1960s suggest that there is a case for inertia in public activities. Once a reform has been introduced, it appears to be very difficult to remove it, or even to contract it. This public choice approach to explaining persistent differences in government size between countries has recently prompted increased interest.

Persson and Tabellini (1998) address the issue of government size and its relation to the political system. They find that a presidential regime

– as opposed to a parliamentary – leads to smaller governments. The rationale behind this result is that such a regime increases competition between politicians and voters. They also find for parliamentary regimes, majoritarian – as opposed to a proportional – elections leads to less public goods. They find strong and robust support for these predictions, also when controlling for several other variables. Persson (2001) elaborates the ideas in Persson and Tabellini. He finds that presidential regimes display smaller and less persistent government spending responses to income shocks, compared with parliamentary regimes. He also finds that in parliamentary regimes, majoritarian elections have less broad spending programs and also smaller and less persistent government spending responses to income shocks, compared with proportional elections.

This supports the view that size of public activities as well as the degree of inertia can be explained by the political system in a country. As Persson and Tabellini points out, more competition (in the election process) always brings about a lower supply of public goods as the benefits of fewer voters are internalised. Another source for inertia is proposed by Becker and Mulligan (1998), who finds that tax efficiency is related to the size of the government and that the causality is from tax and spending efficiency to the size of government.

Following these approaches, it appears reasonable to assume that the expansionary element of government activities in particularly proportional parliamentary systems has contributed to the creation of formal and rule based budgetary processes in recent years. This enables politicians to limit demands of increases of the government from the electorate with reference to spending limits being out of control (ruling by tying one's hands). A severe economic crisis can also serve the purpose of a politician being able to 'sell' a policy of downsizing the government, if there is a perception among the electorate that the government is 'big'.

positive deviation, as did the Netherlands and fell below the EU average whereas Denmark retained an unchanged positive deviation. Of the Member States with a small government, Spain and Portugal decreased the negative deviation in 2000. Greece also decreased the negative deviation and rose above the EU-average.

The composition of expenditure in relation to the EU-average over the entire period compared with 2000 provides an indication as to governments preferences at present.

- A majority of Member States was below their relative long-term average in 2000 regarding interest payments and public consumption. However, a majority was above their relative long-term average in 2000 regarding public wages.
- A majority of Member States was above their relative long-term average in 2000 regarding transfer payment to households and subsidies.
- About half of the Member States was above/below their relative long-term average in 2000 regarding investment.

The persistence in having a big or a small government and being above or below the EU-average appears to be quite strong. Only two Member States changed their relative position – one big government was below and one small government was above the EU-average in 2000. This persistence of government size is addressed in the box below 'Why is there such a big difference in government size?'.

In this section we have looked at government spending and not on government revenue. If one looks at a long enough period, a similar conclusion as regards the size of government would be reached, as the NPG condition should ultimately bite. Indeed, Martinez-Mongay (2002) arrives at similar conclusions concerning the stabilising effect of government size regardless of using overall spending or revenue using long-term averages. However, more detailed analysis of the effects of the structure of spending and revenue on output volatility could challenge the consensus result of the stabilising effect of a big government. Martinez-Mongay (2002:2) finds that when studying the structure of taxes, it appears as if labour taxation, in relation to total labour costs, is positively correlated with output volatility. This has some interesting implications, which are addressed section 5.

3.4 The use of regulation

This section looks at the use of employment protection legislation (EPL) and product market regulation (PMR) across Member States, primarily on the basis of the discussion presented by the OECD in the report "EMU – One year on" (OECD, 2000). Government use regulation in order address production externalities (for example pollution) or to affect the strength of competition on product and labour markets. They also use regulation to reduce job insecurity, or provide social insurance against unemployment risk, both by providing income insurance through unemployment benefits (UB) and by making it difficulty to dismiss workers through EPL. There seems to be a trade-off in the use of these two instruments, where countries that have generous UB make less use of EPL and vice-versa (see Boeri *et al.*). Of course, here UB is part of the automatic stabilisers analysed above.

A high degree of PMR leading to lower competitive pressures and a slower price adjustment may also have a smoothing impact on employment over the business cycle as labour hoarding increases. However, as argued in the OECD report, there could be a trade-off against higher output volatility here as adjustment in quantities increase. The OECD indeed finds that output volatility in real output is higher than in employment but that the ratio between the two has been reduced over time, an indication of higher competitive pressures.[9] However, when it comes to EPL and PMR there is also possibly a trade-off between any positive stabilisation impact and the impact on the level of economic growth and structural employment. Clearly, a high degree of EPL and PMR may make markets inflexible, reduce adjustment mechanisms to shocks and weaken rather than strengthen competitive pressures, all with negative welfare effects. Indeed, a high degree of correlation exists between the relative rigidity of product and labour market regimes. PMR and EPL tend to be mutually supportive implying that lack of competition in product markets compounds the misfunctioning of labour markets created by job-security provisions (Buti and Sapir, 2000)

Table 4 shows relative indexes across EU Member States for EPL and PMR (and the sum of the two). The indexes for EPL and PMR are taken from the OECD (tables 9 and 10 in OECD, 2000) but have been

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[9] See Annex 5 in OECD, 2000.

normalised against the euro area average for comparison (euro area =100, > 100 implies a more stringent degree of regulation).

Looking at EPL there is a clear divide between Latin speaking and Germanic speaking Member States. EPL seems more stringent in the south (EL, E, F, I, P all above average), while Ireland and the UK are outliers on the other side of the spectra (but still with a higher index than the US). However, the trade-off between EPL and UB mentioned above should be remembered. Even so, a similar pattern and ranking emerges when looking at PMR and ultimately the overall index. Government in southern Member States seems somewhat more "dirigiste" than other continental or Nordic states with the Anglo-Saxon duo clearly as the least regulated economies.

3.5 A tentative mapping of the revealed preferences for government provision of stabilisation

On the basis of the discussion above, a tentative, very preliminary, mapping of the Member States revealed preferences for government provision of stabilisation is given in Table 5. For reasons of simplicity and lack of obvious alternatives, all indicators are given equal weight. Obviously, this is only a very tentative mapping which could be developed further. Nevertheless, some observations can be made from this.

Firstly, there seems to be a difference as to *how much* stabilisation is provided by government outside monetary policy. On the one hand Ireland, Spain and the UK appear to be the least concerned with provision of government stabilisation. This could of course partially also reflect a more active use of monetary policy in the past. On the other hand, Finland, Sweden and Denmark appear most concerned with provision of government stabilisation, something that also could be a reflection of their higher "need". Looking at the larger Member States, it is interesting to note that Germany, France and Italy are clustered together in the middle.

Secondly, there seems to be a difference between Member States *as to how* stabilisation is provided. Looking at the correlation between indicators there seems to be i) a trade-off between the use of discretionary fiscal policy and the size of governments/ size automatic stabilisers and ii) a trade-off between automatic stabilisers and regulations, in line with the observed trade-off between the use of unemployment benefits and unemployment security legislation and iii) as expected, there is a relatively close relationship between government size and automatic stabilisers.

Table 4

Index of employment protection legislation (EPL) and product market (PMR) regulation (1998, euro area =100)

	EPL	Rank	PMR	Rank	Overall	Rank
B	72	8	106	4	89	5
DK	52	9	78	8	65	8
D	97	6	78	8	87	6
El	121	2	122	2	121	1
E	110	4	89	7	100	4
F	107	5	117	3	112	2
IRL	34	10	44	10	39	9
I	114	3	128	1	121	1
NL	83	7	78	8	80	7
A	83	7	78	8	80	7
P	128	1	94	5	111	3
FIN	72	8	94	5	83	6
S	83	7	78	8	80	7
UK	17	11	28	11	23	10
Euro area	100		100		100	
US	7	12	56	9	31	11

Source: OECD, 2000 (tables 9 and 10), Buti and Sapir (1998) and own calculations.

Table 5

Overview table on revealed preferences for government provision of stabilisation

	Use of discretionary fiscal policies	Automatic stabilisers	Size of government sector	Use of labour and product market regulation	Total points	Overall ranking
B	4	6	7	5	23	3
DK	5	9	8	4	25	2
D	4	5	5	5	19	6
EL	9	4	3	7	23	3
E	3	4	2	6	14	10
F	2	4	6	7	18	7
IRL	6	4	3	2	14	10
I	4	4	5	7	20	5
NL	4	8	6	5	22	4
A	3	2	7	5	16	8
P	7	2	3	7	19	6
FIN	5	8	5	5	23	3
S	7	8	9	5	28	1
UK	6	5	3	1	15	9

Note[10]: 1 (low) 5 (average) 9 (high).

[10] Normalised for each category so that the highest (or lowest) ranking country exactly equals 9 (or 1).

Overall, countries with high preferences for government provision of stabilisation (Sweden, Finland and Denmark) have big governments and large automatic stabilisers. By contrast, countries with low preferences for government provision of stabilisation (Ireland, Spain and the United Kingdom) appear to have used discretionary fiscal policy (Ireland and the United Kingdom), and market regulations (Spain) more actively. Indeed, this points to the close relationship between the provision of stabilisation and the build-up of the welfare state.

The tentative results in Table 5 above must however be considered in the light of different needs across Member States. As outlined in section 2, the demand for more stabilisation will depend on 1) to what extent the common monetary stance is suitable for the individual country ("need") and 2) government views on the role and responsibility of government in the provision of stabilisation ("taste").

In EMU, monetary policy is conducted with a view of the euro area as a whole. This implies that depending on the country-specific situation as compared to the average, the common monetary stance may not be fully optimal on the country level. Countries with possible overheating pressures (i.e. positive output gaps and high inflation) may face the lowest real interest rates, thus possibly contributing to increase imbalances rather than reducing them.[11] Cyclical patterns across economies are also influenced by the trade structure and openness and the industry structure. Overall, the small open economies in the EU appear more vulnerable to external shock and are also more likely to experience an asymmetric impact of common shocks as compared to the average. Hence, these countries would appear to have a higher "need" for stabilisation polices than larger countries in order to reach the same degree of overall stabilisation.

4. Preferences for stabilisation and the EMU regime

What does the analysis above imply for stability and growth polices under the EMU regime? The key issue is the relationship, and possible trade-offs, between the size of government, provision of stabilisation and

[11] In short, this is the national stabilisation challenge in EMU. However, this existed also before EMU. For example, the situation was similar over the adjustment period leading up to EMU given the different cyclical conditions in Germany and the rest of the EU. If anything, one of the arguments for EMU has been to reduce this one-country country bias in EU the monetary policy framework.

increasing demands on a better growth performance. This has been pointed out by Jonung (2001) who discusses several scenarios, which could challenge the policy paradigm of the EMU. He points out that if the euro area would display price stability for a sustained period, but economic growth would be relatively poor compared with the rest of the world – for example in the absence of structural reform – the price stability regime would come under stress, which could lead to the abandoning of the same.

To ensure efficiency, a macro-economic stabilisation regime requires that government preferences regarding the provision of stabilisation must be compatible with the choice of anchor driving the regime. If not, the overall regime will work inefficiently and gradually suffer from increased strain. In the end, either policy maker's preferences must adapt or the institutional set-up must change. These preferences should be understood in terms of outcomes, that is, what governments actually do, not what they would like to do had they the free choice starting from scratch.

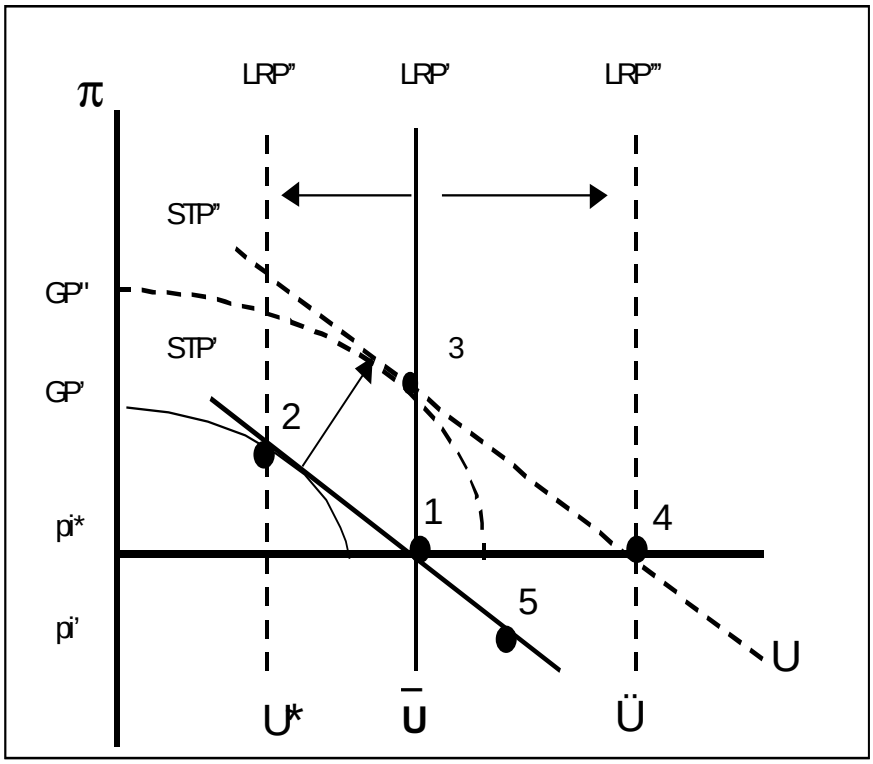
Following the discussion in Bordo and Jonung (2001), a regime is the set of arrangements, including institutions and expectations within which policy makers decide their actions. The monetary and fiscal policy regime jointly determines the prevailing stabilisation policy regime. In this context, two types of monetary policy regimes and fiscal policy regimes can be identified. On the monetary side, the "convertibility" principle follows the rule of a fixed price of a metal (gold). This translates into fixed exchange rates across countries following the same convertibility principle. The "paper" standard on the other hand allows for a choice between fixed and floating exchange rates. On the fiscal side, regimes based on inflationary finance (monetization of debt) and non-inflationary finance (no borrowing from central bank) can be distinguished. The choice of an anchor is key in the design of the stabilisation regime and determines the relationship between the monetary and the fiscal regime. A monetary regime based on the convertibility principle requires a non-inflationary fiscal regime to remain credible. Here, monetary policy dominates fiscal policy. A "paper money" regime with fixed exchange rates or price stability as an anchor also dominates the fiscal regime as it requires a non-inflationary fiscal regime. However, an inflationary fiscal policy regime dominates monetary policy and the policy anchor would typically be the unemployment rate.

This mechanism is shown in Graph 6 opposite. The EMU institutional framework is represented by the nominal anchor, π^*, and the

long-run Phillips curve (LRP'). If EMU governments hold the same preferences as the ones underpinning the EMU institutional framework, unemployment will be at Ū. If governments aim for a more ambitious unemployment target, say U*, this can only be achieved through structural reforms improving the working of the economy, thus lowering the NAIRU and shifting the LRP to LRP". If governments have different preferences on the trade-off between inflation and unemployment (as represented by GP') they may want to exploit the short-term Phillips curve (STP') in order to reach U*. However, if so, the monetary authorities would raise interest rates to defend the inflation target and STP would shift to STP'', implying higher real interest rates and higher unemployment at Ü (point 4). Facing STP", the government would aim for additional discretionary measures to lower the unemployment rate which in turn would shift the STP outwards

Graph 6

Long- and short-run Phillips curve



again. Over time, such an unbalanced policy-mix would make the NAIRU increase and the LTP shift to LTP'''. In aggregate terms, the macro-economic regime would thus under-perform and put stress in the system, calling for a change in government preferences or the nominal anchor.

Graph 6 can also be read from the viewpoint of an individual country in EMU. Then there is a case for exploiting the STP to the extent that the common monetary policy is sub-optimal at country level. For example, if the common interest rate is too high for the country specific viewpoint, the country may be at point 5 with below target inflation, high real interest rates and high unemployment. In this case, the country could provide more national stabilisation policy to reduce unemployment from Ü to Ū (ideally then by allowing the automatic stabilisers to play freely) without any counter reaction from the monetary authorities, in particular if the impact on euro area inflation is limited. Therefore, to the extent that the STP is only exploited to neutralise the additional need for stabilisation provided by the common monetary policy, this should pose no real problem for the overall framework. However, the government could be more ambitious regarding unemployment and strive for U*. From an economic point of view, in the case of a single country acting in this way, externalities would be small and of little concern on aggregate level. However, in a club based on equal treatment of its members, allowing this type of "free-riding" behaviour for one member is a concern due to the precedence it sets and the incentives it gives to other members and, in the end according to this interpretation, the risk of an overall under-performing macro-economic regime. Hence, the importance of applying the EMU rules in an equal way across countries.

5. Discussion

If indeed governments would find that it should provide more stabilisation it is not easy to see how it could be increased, even with a more lenient budgetary framework. There appears to be limited possibilities for extending, or even maintaining a status quo of the scope of the public sector, particularly for countries that already provide a relatively high degree of stabilisation. First, higher automatic stabilisers would typically require higher or more progressive taxes, which would raise efficiency concerns. Second, the expected demographic effects point to an increase in age-related expenditure which would, if taxes can not be

increased, have to be partially financed by lower of non-age related expenditure.

At the same time, while being a controversial issue, there seems to be some trade-off between government size and economic growth. For example, Henreksson and Fölster (2000) find evidence of a robust negative correlation between the size of the public sector and economic growth. This suggests that, in the longer term, there may be pressures for growth-enhancing policies at the expense of the size of government and therefore also the provision of stabilisation.

In a recent paper Martinez-Mongay (2002:2) studies the government revenue side and finds that the level of labour taxation is positively correlated with output volatility. This result could challenge the traditional view of the stabilising effect of a big government. That is, the stabilising effect critically depends on the composition of taxes. In Buti *et al.* (2002) a model is developed in which high (distortionary) taxes have a destabilising effect on output if a supply shock occurs, as it affects the slope of aggregate supply. If it is the case that there is no trade-off between stability and efficiency, the policy implications appear straightforward: lower distortionary taxes, achieve greater output stability as well as higher output.

Overall, the rationale of the EMU framework is very much guided by an assumption that there is no real trade-off between stabilisation and efficiency, making structural reform the key instrument both to achieve more stabilisation and higher growth rates. Indeed, as indicated in section 2, in a regime implicitly built on the "convertibility" principle, there is an intrinsic need to have flexible markets. More flexible labour markets would help smoothing shocks. This should be complemented by more complete and flexible capital markets, allowing risk averse agents to better diversify cyclical risks privately, thus possibly limiting the need for government intervention. To the extent that such structural reform provides for better growth prospects, any "preference" gap regarding stabilisation should decline. It should also be noted that the policy advice that the European Commission and the Council has been delivering in the context of the Stability and Growth Pact, the Lisbon targets, the Cardiff processes and the Broad Economic Policy Guidelines clearly appear to be in full compliance with this approach.

Even so, given the empirical evidence on the difficulties with pursuing stabilisation polices, especially on the budgetary side, the increased perception that the EU growth performance must be improved,

that negative externalities from high tax burdens should be decreased, the acknowledged role of structural reform to achieve both growth and stabilisation, it is somewhat surprising that the room of manoeuvre for stabilisation policies in EMU is such a prime concern. In the framework of this paper this could signal different beliefs, basically on the shape of the long-term Philips-curve. However, it could also mask another concern, more linked to political-economy aspects, namely that governments, rather than being concerned by stabilisation per se would like to maintain some leeway as regards welfare and redistribution policies, especially so in downturns when resources become scarce and they find themselves bound by the strict budgetary rules in place made necessary by applying the "convertibility" principle.

Finally, if preferences do differ between the institutional framework and governments, why is this? Following the literature by Persson and Tabellelini (2001) it could be argued that electoral rules and political regimes would be central. A country like the UK, with a lower "preference" for government provision of stabilisation, indeed has a majoritarian regime which typically would lead to smaller welfare programs, while the Nordic countries, with a higher "preference" for stabilisation, have proportional elections typically associated with bigger governments. In the end, the question here becomes whether voters' preferences drive the electoral regime or vice versa.

6. Conclusions

The current economic policy debate in the EMU is focused on the case for stabilisation policies by means of national fiscal policy, as monetary policy is being conducted with respect to the EMU average. These aspects are important in the new regime the EMU represents, with price stability as the nominal anchor. In EMU, monetary policy dominates fiscal policy and the architecture of the Stability and Growth Pact secures balanced budgets at the national level.

On the basis of some indicators of government activity, we attempt at mapping preferences for 'government provision of stabilisation' – which should be understood as action by governments, past and present, that have a stabilising effect on economic activity – at the national level in the EMU. For the purposes of this paper, we define 'revealed preferences' as government provision of stabilisation. The analysis indicate that the EU

Member States exhibit differences as regards their 'revealed preferences' for stabilisation which is explained both by their 'need' and 'taste" for stabilisation.

If it is the case that there exists a 'preference gap', in the sense that the monetary authority is forgiving on unemployment but non-forgiving on inflation and that the reverse is true for the fiscal authorities, this may put stress in the system and result in an inefficient overall regime. At present, there is a firm commitment, at the EU-level, to the successful implementation of EMU and its arrangements, most notably the Stability and Growth Pact. However, in a longer-term perspective, the EMU is on uncharted territory. As noted by Bordo and Jonung (2001), history cannot offer much in the way of guidance, as such a grand scale and far-reaching macro-economic regime as the EMU does not have any comparable precedence.

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