Bringing Macroeconomics Back into the Political Economy of Reform: the Lisbon Agenda and the 'Fiscal Philosophy' of EMU*

DEBORAH MABBETT
Birkbeck, University of London

WALTRAUD SCHELKLE
London School of Economics

Abstract

The Lisbon Strategy supports reform of Member States' tax-benefit systems while the 'fiscal philosophy' of the EMU postulates that governments should allow only automatic stabilizers, built into tax-benefit systems, to smooth aggregate income. We ask whether these two pillars of EU economic governance are compatible. By exploring how structural reforms affect fiscal stabilization, we complement a political economy literature that asks whether fiscal consolidation fosters or hinders structural reforms. Using EUROMOD, a tax-benefit model for the EU-15, we identify the connections between specific tax and benefit reforms and the size of the stabilizers. We conclude that Lisbon-type reforms may worsen the stabilizing capacity of tax-benefit systems.

Introduction

This article asks to what extent two central pillars of economic governance in the EU are compatible. The European agenda for growth and jobs encompasses

both the Maastricht pillar for macroeconomic stability and the Lisbon pillar for microeconomic or structural adjustment. The Maastricht pillar is promoted by the Stability and Growth Pact (SGP) and the Broad Economic Policy Guidelines (BEPG), while the Lisbon pillar is developed through the European Employment Strategy (EES). We begin by viewing the issue of compatibility in political economy terms and then explore the economic aspect further, focusing on the 'automatic stabilizers'. Automatic stabilizers are revenue and expenditure items of the budget that vary counter-cyclically with the income or spending of households and thus add to their disposable income in recessions and reduce it in booms. They are 'automatic' in the sense that governments do not need to enact their operation through policy adjustments since they vary with GDP by design.

The fiscal philosophy of the SGP and BEPG endorses 'rule-based' as opposed to discretionary macroeconomic stabilization.[1] Governments should rely on the automatic stabilizers to do the smoothing of aggregate income. However, the endorsement of automatic stabilization is half-hearted, as the prevailing tenor of the EU's reform agenda is that structural reform will also take care of macroeconomic stabilization. The structural reform agenda emphasizes the desirability of increasing the flexibility of the labour market and improving incentives for job creation through lower tax rates (Commission, 2005a, p. 6). These reforms are seen as 'improv[ing] the overall adaptability and adjustment capacity of economies in response to changes in *cyclical* economic conditions' (Commission, 2005b, p. 15; authors' own emphasis). In other words, appropriate microeconomic policies will obviate the need for macroeconomic stabilization. In fact, a weakening of automatic stabilizers may be a blessing in disguise as less stabilization would improve the private sector's own capacity to adjust and self-insure (Buti *et al.*, 2002; Buti and van den Noord, 2003). We address this argument both theoretically and empirically.

Our article proceeds as follows. Firstly, we outline in section I how our study relates to wider debates in the political economy literature. Section II describes the conceptual framework. Our empirical analysis in section III tries to establish, first, whether there is any evidence for reforms taking place to an extent that could affect the macroeconomy; secondly, how reforms would affect automatic stabilizers based on simulations in EUROMOD, a tax-benefit model of the EU-15 countries; and, thirdly, whether our results suggest a tradeoff between stabilization and adjustment. The conclusions outline some policy implications.

---

[1] See, for instance, Barrell and Pina (2000, p. 1) and Buti *et al.* (2003, p. 28) on the underlying philosophy of the Pact.

I. The Conflicting Political Economy of the EU's Simultaneous Agenda

The relevant political economy literature on the links between structural reforms and fiscal policy can be divided into two strands. The first starts from the diagnosis of pervasive credibility problems in policy-making and argues in favour of fiscal consolidation being undertaken simultaneously with structural reform, as is currently promoted by the SGP/BEPG and the Lisbon Agenda. The second strand, based on the comparative study of major reform processes, calls for sequential timing of reforms and budget consolidation, suggesting that fiscal austerity might otherwise impede structural reform. Our analysis fits into the second strand, to which we add the idea that structural reform under conditions of permanent fiscal austerity may jeopardize the stabilizing qualities of fiscal systems, despite the potential for enhancing them.

The 'Back Against the Wall' Rationale for the EU's Simultaneous Agenda

The first strand maintains that the simultaneous agenda of the EU promises a double dividend of fiscal prudence and reform activism (Bean, 1998; Padoan and Rodrigues, 2004). More specifically, the hardening of governments' budget constraints will provide a political environment which facilitates labour market reforms. Because public expenditures are constrained by a fiscal rule such as the Stability Pact, the labour market parties (unions in particular) eventually realize that increases in wages and other costs have an immediate impact on employment. This 'back against the wall' hypothesis maintains that fiscal crises make reform easier because they raise awareness of the costs of the status quo and thus weaken the opposition to reform (Rodrik, 1996, pp. 26–29; IMF, 2004a, pp. 113–15). In more formal terms, an unconstrained government is assumed to choose time-inconsistent, inflationary policies. Once prevented from doing so by monetary and fiscal rules, its incentives change in favour of promoting labour market reform to lower the equilibrium unemployment rate.

The most explicit argument along these lines can be found in Calmfors (2001, pp. 268–70). In his model, the government weighs up inflation, unemployment and labour market reforms, all of which are disliked by the majority in the electorate, who are also the dominant group in the labour market. Reforms can reduce equilibrium unemployment, but they are undertaken only if the benefits in lower expected inflation and unemployment outweigh the costs in terms of lower real wages or less employment security enjoyed by those in employment. In this model, the loss of access to countercyclical monetary and fiscal policies increases the incentive for reform. The model assumes that labour market flexibility can dampen cycles induced by both supply and inflation shocks, a view we question below. It is also assumed that

more reform and less countercyclical demand-management is socially desir-
able, because such a move would raise the welfare of labour market outsiders,
who are the political minority.

In 'back against the wall' models, all policy-making is seen as distortionary,
unless it consists of attempts to correct structural market imperfections that can
reduce the long-term equilibrium rate of unemployment. Given their prefer-
ences, governments need to be whipped into such enlightened reform policies.
Externally enforced fiscal consolidation may provide for such a whip and thus
yields a double dividend of increased structural flexibility and fiscal prudence.

The 'Need for Bribes' Rationale for Sequencing the EU's Dual Agenda

The second strand of the political economy literature sees tensions between
an ambitious agenda of structural reform and fiscal consolidation. It is based
on what might be called a 'need for bribes' hypothesis, suggesting that fiscal
space is required so as to allow compensation of potential or actual losers
from reforms. Testing for these alternative hypotheses, the IMF sides with the
'need for bribes' hypothesis and recommends accepting a temporary wors-
ening of public finances to make reforms happen (IMF, 2004a, pp. 115–16
and 132; IMF, 2004b, pp. 48 and 58). A rise in the budget deficit at the
beginning of the reform process may be necessary not only to buy off
opposition but also in order to bear the upfront costs of reforms, such as
establishing more effective employment agencies in preparation for welfare-
to-work measures.

This strand of the literature is interested in what determines reform
dynamics,[2] stimulated by the wealth of experience with major reform pro-
cesses in countries at all levels of political and economic development
(Rodrik, 1996). Partly for reasons of econometric methodology, policy-
making is conceptualized as the outcome of a government optimizing an
objective function that is representative of an electoral platform or of the
median voter's preferences. By contrast with Calmfors's model, there is no
'persecuted minority'; if it faced no obstacles, the government would steadily
implement the measures that make the political economy move on the reform
path towards the desired state of labour, product and financial markets or the
tax system.[3] But the government is constrained by entrenched special interests

---

[2] Other papers following this line of argument are Fernandez and Rodrik (1991), Pierson (2001), Grüner
(2002) and Wyplosz in IMF (2004a, pp. 130–31).
[3] Econometrically, this means that a dynamic equation links the annual changes in structural reform
indicators to their past levels (i.e. taking account of initial conditions and path dependency), to a set of
explanatory variables that presumably constrain a policy-maker's reform decision (the economic and
political constraints identified by the literature on the political economy of reform) and to a stochastic term
that captures uncertainty (IMF, 2004a, Appendix 3.2).

as well as facing uncertainty arising from economic factors that are not directly under its control (IMF, 2004a, p. 109). These constraints determine whether structural reforms get sufficient political support to be carried out.

One important argument in favour of the 'need for bribes' is that structural reforms under conditions of 'permanent austerity' (Pierson, 2001) are biased towards measures which are fiscally favourable and shift costs to firms. In particular, stricter employment protection may be conceded in exchange for lower non-employment benefits. Such perverse reforms are a product of reform activism under fiscal constraints. The Lisbon Agenda may thus get a double whammy from simultaneous fiscal consolidation and welfare reform: not only does austerity weaken the political support for reforms but it also gives interest groups reasons to seek forms of compensation that obstruct specific Lisbon goals. The general implication of this argument is that tax and benefit policies can support the efficient operation of markets, as groups will otherwise promote their interests through channels which distort markets. It therefore rests on a political economy in which governments may conduct enlightened policies to counteract market failures.

In practice, the extent to which the Maastricht criteria have generated a double whammy is questionable, partly because governments have not always complied with the fiscal rules. Fatàs *et al.* (2003) find that, in the run-up to EMU, some governments engaged in procyclical contractions to meet the Maastricht criteria but, with the exception of Italy and Portugal, fiscal stances after 1998 have not been procyclical. Buti *et al.* (2002) and Buti and van den Noord (2003) argue that governments have been able to pursue fiscal consolidation through welfare reforms without procyclical effects. With the partial exception of these latter studies, there has been little analysis of how structural reforms may affect macroeconomic conditions, nor their impact on fiscal instruments for stabilization.[4]

To sum up: the literature implies two stark hypotheses on the simultaneous agenda of the EU. The 'back against the wall' approach argues that combining fiscal consolidation with structural reforms yields a double dividend, providing both for healthier public finances and signalling to entrenched interests that the status quo has become too expensive and must be changed. The 'need for bribes' hypothesis implies that the dual agenda of the EU will obstruct reforms because simultaneous fiscal consolidation and reform is likely to weaken political support and create counterproductive incentives for governments.

---

[4] Commission (2005c, pp. 33–37) reviews the literature on the 'macroeconomic impact of some packages of Lisbon reforms', yet all that this survey provides are various estimates of the *aggregate* gains in GDP growth to be expected from microeconomic reforms in product and labour markets or investment in the 'knowledge economy'.

Bringing Macroeconomics Back into the Political Economy of Reform

In this section, we extend the 'need for bribes' approach to argue for the importance of automatic stabilizers. Our argument is that policies to counteract special interests and combat market failure operate best when they are institutionally embedded, as governments' discretionary interventions have a tendency to be procyclical.[5] Procyclicality can arise from political opportunism by governments constrained only by a deficit limit, or by efforts to conduct a discretionary countercyclical policy which are liable to be foiled by decision and implementation lags. These problems point to the value of automatic stabilization mechanisms generated by spending and revenue-raising processes which are deeply institutionalized.

If we think of structural reforms as involving changes to long-standing benefit commitments and tax assessment practices, we can see that there are at least three channels through which reforms might affect macroeconomic conditions and the conduct of policy. First, structural reforms could affect households' expectations of their permanent income. Contributory insurance systems in particular make commitments which households may rely on in formulating their expectations. Reforms to these systems amount to a publicly endorsed breaking of commitments. They have the potential to affect households' confidence in collective insurance and thus their spending decisions.[6] Second, if employment protection is reduced and job-changing becomes more frequent, household incomes could become more volatile. The potential impact on household income expectations and consumption is uncertain: if increased labour market flexibility leads to lower long-term unemployment, income fluctuations might be of shorter duration if higher frequency. Third, reforms which lower tax rates or reduce benefits for low-income and unemployed households will reduce the size of the automatic stabilizers, implying that less smoothing of disposable income relative to market income will take place, which could also affect consumption, particularly among households which are constrained to base their consumption on their current income. The focus of this article is on this third channel but we also touch briefly on the second channel.

Our conceptualization of the sources of macroeconomic instability is Keynesian in that we assume that product markets are monopolistically competitive, i.e. firms have some price-setting power and engage in product differentiation ('branding'). In such markets, firms are demand constrained. Moreover, fluctuations in nominal demand are not immediately countered by

---

[5] Hallerberg and Strauch (2002) find that automatic countercyclical tax and spending changes were offset by increased spending during economic upturns.
[6] Compare the recent comments of the governor of the Bank of Finland that the weakness of the Eurozone is baffling: 'Perhaps reforms first increase uncertainty' (*Financial Times*, 2005).

compensating price adjustments; instead, costly processes of wage and price inflation or deflation are set in motion by fluctuations in demand in the absence of countercyclical monetary and fiscal policies. If households are far-sighted, confident about the stability of their permanent income and able to smooth their consumption path with the aid of savings and credit, their reactions will tend to be stabilizing and countercyclical demand management policies will be less important. Our argument that the automatic stabilizers are important therefore assumes that these conditions do not hold; in particular, that a significant proportion of households is credit constrained to some extent and thus varies consumption with fluctuations in current income (Andrés *et al.*, 2004). More generally, failures in markets for insurance as well as credit lead to fluctuations in consumption (Flemming, 1973). By making countercyclical payments to households and levying procyclical taxes, governments stabilize household disposable incomes in ways which private financial markets do not.

A key implication of this 'market failure' case for stabilization is that the promotion of increased wage and price flexibility, as envisaged by the Lisbon agenda, does not make macroeconomic problems go away. Our line of reasoning can be contrasted with that of Buti and van den Noord (2003) which prioritizes microeconomic flexibility.[7] They argue that automatic stabilizers will make households less flexible in adjusting to supply shocks. Buti and van den Noord's argument relates to an intuition which has coloured understandings of the effects of the Lisbon process, which is that an economy with improved microeconomic flexibility will experience less persistent macroeconomic shocks, so that micro adjustment can be a substitute for macroeconomic stabilization (Commission, 2005b). This intuition attributes macroeconomic problems to wage and price rigidity. Our argument is that macroeconomic stabilization is needed to counteract market failures which are not due to wage or price rigidity but to the uncertainty of household income and limitations of financial markets. Complete credit and insurance markets would enable all households to maintain stable consumption in the face of income fluctuations. The incompleteness of these markets gives automatic stabilizers their importance.

In pointing to the existence of market failure, we depart from 'back against the wall' models which see government intervention as the source of macroeconomic instability. At the same time, we extend the 'need for bribes' theory by acknowledging the problem of procyclical discretion in fiscal policy. Stability in the structure of tax and benefit commitments generates automatic

---

[7] See Auerbach and Feenberg (2000) for an alternative model where labour supply flexibility increases cyclical volatility, and the automatic stabilizers work partly by dampening variations in labour supply.

stabilizers which do not sacrifice the potential role of governments in counteracting market failures and limiting perverse impacts from interest group activism.

II. How Structural Reforms Affect Automatic Stabilizers

Defining Automatic Stabilizers

As the discussion above has suggested, we are focusing on automatic stabilization within the context of a Keynesian analysis of the macroeconomy and this affects the way we define and measure the stabilizers. A number of studies have shown that larger public sectors reduce economic volatility (Rodrik, 1998; Fatás and Mihov, 1999; Agell, 2002; Andrés *et al.*, 2004). These authors give an eclectic account of the ways in which the public sector may stabilize the economy. Rodrik (1998, pp. 1019–21) offers a view in which the government (as a whole) is conceived of as a 'safe' sector generating relatively stable income flows for households (e.g. through employment) as well as through transfers. However, he also tests the idea pursued here, that in high-income, developed countries the government plays its risk-mitigating role primarily through the provision of social security rather than through consumption and employment and finds it strongly supported by the statistical evidence.

Our Keynesian analysis of income insurance focuses on the ways that taxes and benefits reduce the volatility of households' disposable income relative to their market income. The reduction in volatility is designated by σ, the coefficient of cyclical stabilization (see Box 1 below for a formal derivation). It is possible to derive estimates of σ directly from time series data, as has been done by Sachs and Sala-i-Martin (1992) and Bayoumi and Masson (1995). These analyses have yielded 'ballpark' figures for σ in the USA of 30–40 per cent; in other words, the volatility of disposable income is 60–70 per cent of the volatility of gross income. However, these studies do not attempt to distinguish between automatic stabilizers and the effects of discretionary adjustments to fiscal policy; nor do they provide a framework for linking specific policy parameters to the magnitude of fiscal stabilization. These limitations can be overcome by using a tax-benefit simulation model to calculate σ and we do this below, using EUROMOD. The method resembles that used in a study by Auerbach and Feenberg (2000) to arrive at estimates of σ for the USA of 25–30 per cent.

The measures for automatic stabilization reported here are explicitly based on the impact of taxes and benefits on the household sector. This approach to the stabilizers contrasts with that taken by the European Commission (2002) and the OECD (van den Noord, 2000), where automatic stabilization is

conceived in terms of the cyclical sensitivity of the government budget. There are several important differences between the factors which drive changes in the budget balance to GDP ratio (BB/GDP) and those that stabilize household disposable income (Mélitz, 2005). Most notably, the BB/GDP ratio is affected by corporate tax receipts, whereas in our framework, variations in corporate taxes are unlikely to have a significant stabilizing effect on demand because firms are not generally credit-constrained: their expenditure depends on expected profits rather than current (net) income (Auerbach and Feenberg, 2000, p. 18, make a similar point).[8]

What Determines the Size of Automatic Stabilizers?

The impact of an automatic stabilizer such as the personal income tax or unemployment benefits is the result of two components:

Responsiveness: a stabilizer must vary with the business cycle so as to trigger a counter-cyclical response. This responsiveness or cyclical sensitivity is measured by the elasticity of the particular budget item with respect to income. For instance, a proportional income tax has an elasticity of 1: a 1 per cent change in taxable household income produces a 1 per cent change in tax revenue. The more progressive the tax structure, the higher the elasticity and the larger the countercyclical responsiveness of automatic stabilizers (Auerbach and Feenberg, 2000, pp. 14–17; van den Noord, 2000, pp. 7 and 16). The withdrawal of benefits as income increases also raises responsiveness; thus high effective marginal tax rates are good for stabilization although they may be bad for work incentives.

Weight: the effect of a budget item on the volatility of household income increases with its share of income. The share of taxes or transfers varies widely across different household income groups; this may be significant in determining their role in stabilizing consumption. Smoothing the income of individuals with a high propensity to spend or households that are credit constrained will make stabilization more effective as more of the income smoothing translates into consumption smoothing. Moreover, low incomes also tend to be more volatile, so there is more to stabilize to begin with (Auerbach and Feenberg, 2000, p. 12). Thus, transfers and tax credits that directly target low income earners will have a stronger stabilizing effect.[9]

---

[8] However, it could be argued that the fiscal nexus between the government and the corporate sector may contribute to stabilization if the corporate tax take is highly cyclically responsive and allows the corporate sector to act as a provider of temporary income insurance by hoarding labour.

[9] However, Auerbach and Feenberg (2000, pp. 13–14) estimate that a large share of automatic stabilization benefits richer households where the multiplier effect is minimal.

Which Elements of the EES are Likely to Have an Impact?

As mentioned in the introduction, we focus on the European Employment Strategy (EES) as the core element of the Lisbon Strategy. Three elements of the Strategy are particularly relevant here. The first imperative is to make fiscal revenue systems more 'employment friendly'. Measures entail (a) reducing taxes and social insurance contributions for workers or companies; and (b) lowering effective marginal tax rates, particularly for low-income or secondary earners. A second theme is the declared intention to make benefit systems more 'activating' for the inactive, the precariously employed and the unemployed. Measures include lower replacement rates, shorter benefit durations and the conditioning of benefits on participation in work or training programmes; they also entail increases in the minimum wage or the introduction of targeted tax credits. Finally, the Strategy advocates making employment contracts more flexible. The measures that governments envisage under this heading are not of immediate consequence to public finances but are supposed to reduce employment protection and to facilitate part-time work, in particular for women.

What impact are these reforms likely to have on the responsiveness and weight of automatic stabilizers?

- Lowering average and marginal effective tax rates (including social insurance contributions) can be expected to have a negative impact on the effectiveness of disposable income smoothing. Lower tax takes reduce the weight of the stabilizers, while lower marginal tax rates reduce responsiveness. There is an offsetting effect on the responsiveness of automatic stabilizers if governments simultaneously introduce tax credits for low-income earners, as some have done, making automatic stabilizers more responsive to fluctuations in these low incomes. However, it is unlikely that this is noticeable in the aggregate, given their negligible weight.
- Reforms of the benefit system that try to shift a share of welfare transfers to in-work benefits have an ambiguous effect. Transfers may become cyclically more sensitive since permanent transfers such as early retirement, disability or assistance to long-term unemployed become temporary, potentially responding more to the business cycle. However, benefit cuts reduce the weight of this automatic stabilizer. In sum, the net effect of reforms on the benefit side will largely depend on whether responsiveness or weight is the dominant determinant of the size of automatic stabilizers.

As noted, reforms to employment protection legislation do not affect public finances directly. Their indirect effects on the need for stabilization are

complex. There may be higher turnover in the labour market, exposing households to more risk. At the same time, households' ability to manage risk may increase if their income sources are more diversified, due to higher participation rates and a wider range of labour market opportunities.

III. Empirical Analysis: the Potential Impact of Lisbon Reforms on Stabilization

In this section, we try to provide evidence for what may appear as a pure thought experiment: what would happen to stabilization if Lisbon-type reforms, in particular the EES, were implemented? We ask, first, whether there is any evidence of these reforms happening and whether any pattern relevant to our study emerges. Then we use EUROMOD to examine the stabilizing capacity of tax-benefit systems in 14 EU states. Finally, we look at empirical evidence for the hypothesis that weaker automatic stabilizers may be a blessing in disguise by improving the microeconomic adjustment capacity of Member States.

Is there Evidence of Lisbon-Type Reforms that Might Affect Stabilization?

Member States report on their reform programmes in their National Action Plans (NAPs) on Employment. Although the mid-term review of the European Commission claims that the reform record has been poor (Commission, 2005a), our own analysis of the NAPs suggests that states are undertaking reform measures, albeit often small and incremental in their impact.[10] This is confirmed by the evidence available from the social reforms database of the Fondazione Rodolfo Debenedetti (FRD), summarized in Table 1. This database documents reforms in employment protection legislation and non-employment benefits in the EU-14 countries from 1987 to 2002.[11] Dividing the data into two periods, 1987–94 and 1995–2002, gives us some indication of whether there has been an increase in reform activism in the period covered by the Lisbon process, although the dates used are dictated by the availability of the data.

Table 1 synthesizes the FRD information in an admittedly crude way. The *direction* of reforms is indicated by positive and negative values, i.e. they are assigned a plus if the database classifies them as 'increasing flexibility'

[10] In a more extended version of this article, available at «http://www.boeckler.de/cps/rde/xchg/SID-3D0AB75D-BE407DA6/hbs/hs.xsl/33_45901.html», we have documented in an appendix the reforms affecting automatic stabilizers that Member States reported.

[11] We leave out pension reforms. Other documentation can be found in Fondazione Rodolfo Debenedetti (2001) for reforms until 1998, in Carone and Salomäki (2001) for the second half of the 1990s and in IMF (2004a) but only in a highly aggregated form.

Table 1: Welfare State Reform Direction[a] and Intensity[b], 1986–94 and 1995–2002

	Employment protection legislation		Non-employment/ unemployment benefits		Number of reforms[c] that decrease (−) or increase (+) flexibility of systems	
	1987–94	1995–2002	1987–94	1995–2002	1987–94	1995–2002
Austria	−1	+3	0[d]	+8	2 (−); 1 (+)	4 (−); 11 (+)
Belgium	+1	+2	+4	+5	1 (−); 5 (+)	3 (−); 9 (+)
Denmark	0[d]	+1	+4	+9	2 (−); 4 (+)	2 (−); 8 (+)
Finland	+2	+3	+2	+13	0 (−); 2 (+)	2 (−); 14 (+)
France	−5	−6	+2	−6	4 (−); 2 (+)	16 (−); 9 (+)
Germany	−1	+3	−1	+14	3 (−); 2 (+)	4 (−); 18 (+)
Greece	+2	+4	−2	+5	1 (−); 2 (+)	1 (−); 7 (+)
Ireland	−1	−5	+6	+8	2 (−); 5 (+)	6 (−); 8 (+)
Italy	+1	+8	0[d]	+5	4 (−); 4 (+)	1 (−); 12 (+)
Netherlands	+1	+5	+1	+19	4 (−); 5 (+)	2 (−); 20 (+)
Portugal	+2	−2	−2	−1	4 (−); 3 (+)	12 (−); 9 (+)
Spain	+1	−2	+4	+2	1 (−); 4 (+)	7 (−); 6 (+)
Sweden	+1	+3	+3	+12	1 (−); 4 (+)	1 (−); 11 (+)
United Kingdom	0[d]	−6	+5	+11	1 (−); 4 (+)	9 (−); 9 (+)
Number of reforms[c]	15 (−); 16 (+)	39 (−); 41 (+)	15 (−); 31 (+)	31 (−); 110 (+)	30 (−); 47 (+)	70 (−); 151 (+)

Source: Fondazione Rodolfo Debenedetti social reforms database, available at: «http://www.frdb.org/documentazione/centro_doc.php».

Notes: [a] − for reducing, + for increasing the flexibility of the system or rewards from the labour market, according to the Fondazione RDB database. [b] ±1 for 'marginal' reforms, ±2 for 'structural' reform measures; one reform package can contain several (marginal) measures thus valued. Packages of multiple reforms were scored as having an intensity value of 2 if they contained two or more marginal measures and an additional 2 for including a structural measure (so ±4 is the maximum for the intensity of any one reform package, ±2 if it contains only marginal measures). [c] Number of (more or less flexibilizing) reforms irrespective of intensity; the net value of a reform package containing countervailing measures determines classification as − or +. [d] The zero value signifies countervailing reforms, not the absence of reforms.

(making systems less protective or generous) and vice versa, a minus if reforms are classified as 'decreasing flexibility' (making them more protective or generous). The data in columns 1–4 summarize the overall impact of reforms, taking into account the *intensity* of each reform, measured by assigning a value of ±1 to 'marginal' and ±2 to 'structural' reforms. Columns 5 and 6 and the final row indicate the number of reform measures adopted.

The main result is that member countries have become considerably more active in the second period (compare columns 5 and 6) as well as more inclined to reduce benefits for people out of work and increase incentives to work (compare columns 3 and 4). Reforms are often incremental and they sometimes point in opposite directions, as simultaneous (+) and (−) measures in columns 5 and 6 indicate (France, Portugal and Spain in the second period provide stark examples). Restructuring rather than retrenchment across the board seems to be the result (Rhodes and Ferrera, 2000). The results in columns 1 and 2 are compatible with the findings of the IMF (2004a) study according to which governments are less keen on reforms of employment protection – in fact some have increased rather than decreased protection.

In sum: there has been a clear change in the thrust of admittedly gradual reforms that broadly corresponds to the thrust of the Lisbon Agenda, namely to improve work incentives as determined by the tax-benefit system.

How is the Size of Automatic Stabilizers Likely to be Affected?

We outlined above how Lisbon reforms may affect stabilization. For our evaluation of the impact of the reduction of benefits or of average and marginal tax rates, we use EUROMOD, a tax-benefit simulation model based on micro-data for individual households in each of the EU-15 Member States (Immervoll *et al.*, 1999). It allows us to make comparable calculations of the effects that changes in policy parameters, such as taxes or benefits, have on household income. One limitation of EUROMOD is that the model does not allow for behavioural responses in consumption or labour supply to feed back onto household income and employment. However, this means that we can focus on the direct implications of the Lisbon reforms, without having to disentangle effects induced by the assumptions of a behavioural model (Atkinson, 2002, pp. 8–9; Sutherland, 2005).

Our empirical assessment seeks to establish how much the size of automatic stabilizers would be affected by reforms which change *responsiveness*, measured as the (marginal) income elasticity of the affected automatic stabilizer and *weight*, which is its share in disposable household income. As Box 1 shows, the coefficient of cyclical stabilization, σ, is the product of the

responsiveness and weight of each of the taxes and benefits which affect household disposable income.[12]

Box 1: Estimating the Size of Automatic Stabilizers and their Determinants

The stabilization coefficient relates household market income y^m to disposable income y^d: By treating transfer payments to households (benefits) as negative taxation, we get:

$$y^d = (1 - \sigma)\, y^m \tag{1}$$

$$\sigma = \sigma\left(t_p, t_s, b; y^m\right) \tag{2}$$

The stabilization coefficient σ is a function of personal income taxes (t_p) and social insurance contributions (SICs) (t_s) on the revenue side and benefits (b) on the expenditure side. These taxes and transfers determine the relationship between gross and disposable household income. There is no reason to expect σ to be constant and for the analysis of cyclical stabilization we would ideally estimate σ for changes in income around its trend or equilibrium value. However, a simulation model like EUROMOD examines changes in income, benefits and taxation relative to the model baseline (in this case, 1998), rather than relative to equilibrium income.[13] The model allows us to simulate a rise or fall in income and thereby measure the coefficient of cyclical stabilization as

$$\sigma = 1 - \frac{\Delta y^d}{\Delta y^m} \tag{3}$$

where Δ signifies 'arithmetic change' in the respective variable.

An equivalent method for estimating σ is to identify the elasticity of taxes, SICs and benefits with respect to a change in market income and derive σ as the sum of the elasticity times the share in y^m of each component:

$$\sigma = \beta_p \cdot s_p + \beta_s \cdot s_s - \beta_b \cdot s_b \tag{4}$$

where β_i represents the income elasticity of each component and s_i represents the share in y^m of each component. It can easily be shown that equations (3) and (4) are equivalent formulations of the stabilization coefficient (with t_p for income tax, t_s for employee SIC and b for benefits):

$$\sigma = \frac{\Delta y^m - \Delta y^d}{\Delta y^m} = \frac{\Delta t_p + \Delta t_s - \Delta b}{\Delta y^m} \tag{3a}$$

$$\sigma = \left(\frac{\Delta t_p}{\Delta y^m}\, \frac{y^m}{t_p} \cdot \frac{t_p}{y^m}\right) + \left(\frac{\Delta t_s}{\Delta y^m}\, \frac{y^m}{t_s} \cdot \frac{t_s}{y^m}\right) - \left(\frac{\Delta b}{\Delta y^m}\, \frac{y^m}{b} \cdot \frac{b}{y^m}\right) \tag{4a}$$

$$= \beta_p \cdot s_p + \beta_s \cdot s_s - \beta_b \cdot s_b$$

---

[12] The following is based on Mabbett (2004). We are grateful to the EUROMOD research team (Immervoll *et al.*, 2006), in particular Holly Sutherland, for giving us permission to use these results here.
[13] The microdata in EUROMOD are adjusted to 1998 values, but countries were not all at the same point in their economic cycles when the data were collected in the 1990s, so the deviations are not from the same cyclical position. This might affect the results if there are significant non-linearities in aggregate tax and benefit responses to changes in income.

Table 2 presents estimates of the stabilization coefficient σ generated by simulating a 10 per cent increase in earnings. The model calculates for each household the effect of higher earnings on taxes, SICs and benefit entitlement. The simulation does not include any status changes for household members (e.g. from unemployment to employment) so the effect on benefits is slight since only benefits which are related to earnings, such as working tax credits or social assistance, are affected.

The first three columns tell us, to take the example of Austria (AT), that for a 10 per cent increase in earnings, income taxes respond strongly in that they increase by 16.4 per cent. By contrast, SICs rise a less than proportional 7.7 per cent; and benefits decrease hardly at all.[14] It can be seen that, for all countries except France,[15] income tax rises by more than 10 per cent (elasticity of household income tax with respect to earnings is greater than 1), while the converse is true for SICs in all countries except Ireland. The values for the stabilization coefficient in the last column range from 0.31 for Spain to 0.57 for Denmark. In other words, the tax and benefit system reduces the fluctuations of disposable income by one-third to more than one-half. This is consistent with the estimates of coefficients of 0.25–0.3 for the USA generated by Auerbach and Feenberg (2000) using a similar methodology. We would expect European values to be higher, because European welfare states are larger.

Since we argued that the net impact of Lisbon-type reforms will depend on which determinant is more dominant, it is of interest to disentangle whether responsiveness or weight contributes more to the stabilization coefficients in our set of countries. As Chart 1 (disregarding benefits) illustrates, weight is the dominant determinant of the size of the stabilizers. Stabilization coefficients are positively correlated with weight (the black dots follow a rising trend) while no such relationship is discernible for responsiveness (the square and triangle data points follow neither a rising nor declining trend). We can also see that Denmark and Finland, to the right of the graph (i.e. with high values for the stabilization coefficient) have relatively unresponsive tax and SIC structures, yet their weight compensates this. Conversely, Ireland has the lowest weight of taxes and SICs in household

---

[14] In principle, it is possible to simulate the change in (un)employment status related to a rise in earnings by using Okun's Law (Mabbett, 2004, p. 10, table 3). This would increase the size of stabilizers on the benefit side.

[15] The somewhat surprising result for France reflects a base effect. When earnings rise by 10 per cent, market income rises by less than 10 per cent because households have other sources of income. A proportional income tax would therefore also rise by less than 10 per cent: in the case of France, by 8.7 per cent. This result does not show up for other countries which have significant non-earned household market income because of higher progressivity in the tax system. For a full breakdown, see Mabbett (2004, Table 1).

Table 2: Estimates of Responsiveness, Weight and Income Stabilization in the EU-14

	Responsiveness[a] of automatic stabilizers			Weight[b] of automatic stabilizer (s_i)		Stab. co-efficient
	Income tax (β_p)	Employee SIC[c] (β_s)	Benefits (β_b)	Income tax and SIC[c]	Benefits	σ
AT	16.4	7.7	0.0	36	38	0.46
BE	13.7	8.5	-0.3	38	40	0.51
DK	11.4	8.1	-0.6	49	25	0.58
FI	11.3	8.3	-0.2	42	37	0.55
FR	9.1	8.1	-0.6	31	36	0.33
GE	17.5	7.5	-0.6	36	29	0.51
GR	14.7	5.3	0.0	28	24	0.32
IR	18.8	10.9	-0.5	21	19	0.39
IT	11.2	8.4	-0.3	31	30	0.41
NL	19.0	5.8	-0.4	35	21	0.46
PT	14.4	8.5	-0.4	25	22	0.33
SP	16.4	3.8	0.0	22	29	0.32
SW	10.7	4.7	-0.5	42	38	0.49
UK	12.0	9.0	-0.5	25	21	0.33

Source: EUROMOD and own calculations based on Mabbett (2004).
Notes: [a] Percentage change from baseline value due to a 10 per cent change in earnings (marginal income elasticity). [b] Percentage share in gross household income. [c] Social Insurance Contributions.

Chart 1: Determinants of the Size of Automatic Stabilizers
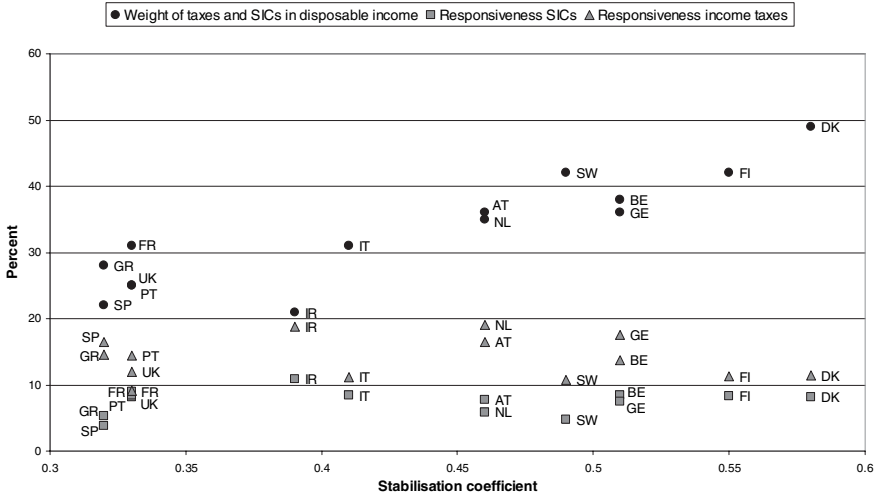
Source: Table 2.

income, but high responsiveness. Ireland's stabilization coefficient is high given the small size of its government, although it is still below the EU average of 0.45.

The immediate conclusion for tax reforms is, first, that income tax and SIC reforms are central to what is going to happen to automatic stabilizers, because it is unlikely that the responsiveness of benefits can be massively increased, given that entitlements typically do not depend on income alone. A second conclusion is that lowering average income taxes, to reduce the tax burden overall or by shifting to indirect taxes, is likely to have a more pronounced weakening impact on automatic stabilizers (by reducing weight) than flattening marginal tax rates (which diminishes responsiveness). These conclusions are borne out by the fact that there is no low-weight (small government) country with a stabilization coefficient above the average. The reverse does not hold, however. There are fairly 'weighty' tax-benefit systems that do not achieve a corresponding stabilizing effect (notably France and Italy). Therefore weight helps but does not guarantee effective stabilization.

Obviously, these simulations cannot but give a rough indication of what Lisbon-type reforms – making tax and benefit systems 'more employment-friendly' – would do to macroeconomic stabilization, but they do suggest that Lisbon-type reforms could have the negative side-effect of weakening fiscal stabilization.

Is Effective Automatic Stabilization Bad for Adjustment?

Our conclusion from the EUROMOD simulations must address a possible objection that Buti and van den Noord (2003) formulate most forcefully: is this weakening of conventional demand stabilization really a loss, once we take labour supply adjustments into account? Their answer is a resounding 'No'. They claim that automatic stabilizers are not the solution but the problem in that they prevent adjustments to supply shocks, thus making for stability with high unemployment. Weakening them generates a double dividend of supply-side flexibility and more effective stabilization through *micro*economic adjustment. The converse argument is that, notwithstanding the possible effects of taxes and benefits on individual behaviour (micro-level effects), the stabilizers have a positive impact on macroeconomic conditions.

The empirical data we used for our earlier analyses allows us to do a limited evaluation of this hypothesis. If it holds, tax-benefit systems that yield high stabilization coefficients according to our EUROMOD simulations (Table 2) should have both high levels of unemployment and high unemployment persistence (low volatility of unemployment).

As regards levels of unemployment, we find not a positive but a (weak) negative correlation: tax-benefit systems with stronger stabilizing qualities or more generous unemployment benefits, respectively, had lower average unemployment rates in the period 1997–2004 (Chart 2a).[16] The results for persistence or volatility of unemployment in Chart 2b also fail to show the relationship hypothesized by Buti and van den Noord (2003) which implies a negative correlation (the higher the stabilization coefficient, the more persistent is unemployment).

An important criticism of the economic impact of social security benefits is that they reduce flexibility by operating asymmetrically over the cycle, generating permanent responses (long-term unemployment, early retirement) to cyclical downturns. Our analysis suggests that demand stabilization through automatic fiscal mechanisms does not increase unemployment and does not add to unemployment persistence. We have not been able to examine the cyclical responsiveness of transfer payments directly, but recent work by Mélitz (2005) suggests that transfer payments have a distinct counter-cyclical pattern in European countries, rather than exhibiting asymmetric persistence. This appears to work through a variety of channels: for example, pension payments may fall relative to GDP in upturns due to postponement of retirement. Such mechanisms would imply that automatic stabilization through the
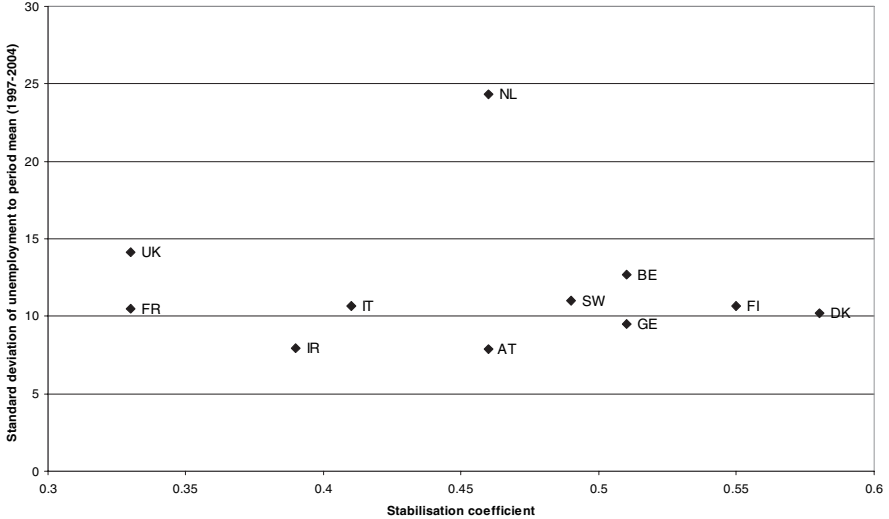
---

[16] The Pearson correlation coefficient is −0.28.

Chart 2a: The Size of Automatic Stabilizers and Unemployment Levels
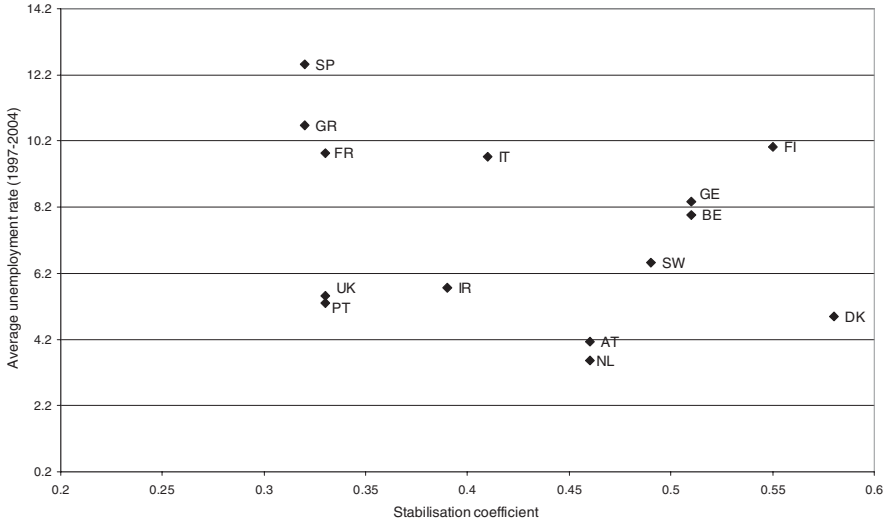
Sources: OECD Quarterly Labour Force statistics, and Table 2.

Chart 2b: Automatic Stabilizers and Unemployment Persistence

Sources: OECD Quarterly Labour Force statistics, and Table 2.

benefit system may allow households to adjust labour supply to labour demand, enhancing rather than impairing flexibility.

Conclusions

Our exploratory study suggests that Lisbon-type reforms, such as lowering the average tax burden and reducing high effective marginal tax rates, are problematic from the point of view of fiscal stabilization. This is because they would lower the weight and the responsiveness of Member States' tax systems to shocks and business cycle fluctuations. The potentially positive effects of reforms on the cyclical responsiveness of benefits are too small to compensate. Negative spillovers from structural reforms on the stabilizing qualities of tax-benefit systems are particularly worrying for EMU members since they have little scope for discretionary fiscal policy. This finding is relevant for the political economy of reform and European integration. The dual agenda of the EU induces governments to ask their electorates not only to accept that not all past commitments as regards old-age or unemployment benefits will be honoured but also that they will have to self-insure more volatile market incomes.

Our findings on the size of stabilizers, as summarized in Table 2 and Chart 1, contain some lessons for the ongoing restructuring of welfare states. First of all, if governments are mindful not only of microeconomic flexibility but also macroeconomic stability, they may want to exploit the possibilities of raising the progressivity of taxes while lowering the overall tax burden. SICs are generally less progressive (responsive) than income taxes, so reform of social insurance contribution structures or substitution of taxes for SICs may improve the operation of the stabilizers. However, there is no continuous tradeoff between responsiveness and weight; progressivity cannot vary that much and has to be limited as government gets bigger. The empirical results reported here give little insight into the potential on the benefit side, but theory suggests that Lisbon-type benefit reforms may actually be constructive since their overall thrust is 'activation' which in the context of our study means replacing permanent transfers by temporary ones.

Finally, we would like to stress that it is unlikely that fiscal stabilization can be substituted by more flexible supply-side adjustment. Furthermore, we question the 'back against the wall' political economy which suggests that the absence of countercyclical macroeconomic policy will strengthen incentives to reform. On the contrary, we see adverse macroeconomic conditions as making welfare reforms more difficult and our results suggest that such reforms may weaken fiscal stabilization. This suggests that more attention

should be paid to the compatibility of welfare state reforms and macroeconomic policy for which the recent decision to 'streamline' (link) fiscal policy co-ordination and the Lisbon process (Commission, 2005c) provides an opportunity.

Correspondence:
Deborah Mabbett
School of Politics and Sociology
Birkbeck, University of London
London WC1E 7HX, UK
Tel: 020 7631 6784
e-mail: d.mabbett@bbk.ac.uk

References

Agell, J. (2002) 'On the Determinants of Labour Market Institutions: Rent Seeking vs. Social Insurance'. *German Economic Review*, Vol. 3, No. 2, pp. 107–35.

Andrés, J., Doménech, R. and Fatás, A. (2004) Government Size and Macroeconomic Volatility. Strathclyde-Glasgow seminar programme, available at: «http://homepages.strath.ac.uk/~hbp99140/Domenech.pdf».

Atkinson, A.B. (2002) *Evaluation of National Action Plans on Social Inclusion: The Role of EUROMOD*. EUROMOD Working Paper No. EM1/02 (Cambridge: Dept of Applied Economics).

Auerbach, A.J. and Feenberg, D. (2000) *The Significance of Federal Taxes as Automatic Stabilizers*. NBER Working Paper No. 7662 (Cambridge, MA: NBER).

Barrell, R. and Pina, A.M. (2000) *How Important are Automatic Stabilizers in Europe? A Stochastic Simulation Assessment*. EUI Working Paper ECO 2000/2 (Badia Fiesolana: European University Institute).

Bayoumi, T. and Masson, P. (1995) 'Fiscal Flows in the United States and Canada: Lessons for Monetary Union in Europe'. *European Econome Review*, Vol. 39, pp. 253–74.

Bean, C.R. (1998) 'The Interaction of Aggregate Demand Policies and Labour Market Reform'. *Swedish Economic Policy Review*, Vol. 5, Autumn, pp. 353–82.

Buti, M. and van den Noord, P. (2003) *What is the Impact of Tax and Welfare Reforms on Fiscal Stabilizers? A Simple Model and an Application to EMU*. European Economy Economic Papers No. 187 (Brussels: European Commission).

Buti, M., Martinez-Mongay, C., Sekkat, K. and van den Noord, P. (2002) *Automatic Stabilizers and Market Flexibility in EMU: Is there a Trade-Off?* OECD Economics Working Paper ECO/WKP(2002)21 (Paris: OECD).

Buti, M., Eijffinger, S. and Franco, D. (2003) *Revisiting the Stability and Growth Pact: Grand Design or Internal Adjustment?* European Economy. Economic Papers No. 180 (Brussels: European Commission).

Calmfors, L. (2001) 'Unemployment, Labor Market Reform and Monetary Union'. *Journal of Labor Economics*, Vol. 19, No. 2, pp. 265–89.

Carone, G. and Salomäki, A. (2001) *Reforms in Tax-Benefit Systems in Order to Increase Employment Incentives in the EU*. European Economy Economic Papers No. 160 (Brussels: European Commission).

Commission of the European Communities (2005a) 'Working together for growth and jobs. A new start for the Lisbon strategy'. 'Communication to the Spring European Council'. *COM* (2005) 24 (Brussels: Commission of the European Communities).

Commission of the European Communities (2005b) 'Integrated guidelines for growth and jobs (2005–2008)'. *COM* (2005) 141 final (Brussels: Commission of the European Communities).

Commission of the European Communities (2005c) 'The economic costs of non-Lisbon. A survey of the literature on the economic impact of Lisbon-type reforms'. *SEC* (2005) 16 (Brussels: Commission of the European Communities).

Fatás, A. and Mihov, I. (1999) *Government Size and Automatic Stabilizers: International and Intranational Evidence*. Discussion Paper No. 2259 (London: CEPR).

Fatás, A., Hagen, J. von, Hughes Hallett, A., Strauch, R.R. and Sibert, A. (2003) *Stability and Growth in Europe: Towards a Better Pact*. Monitoring European Integration 13 (London: Centre for Economic Policy Research).

Fernandez, R. and Rodrik, D. (1991) 'Resistance to Reform: Status Quo Bias in the Presence of Individual-Specific Uncertainty'. *American Economic Review*, Vol. 81, No. 5, pp. 1146–55.

Financial Times (2005) 'Eurozone's Weakness Baffling, Says Banker'. 25 May, p. 12.

Flemming, J. (1973) 'The Consumption Function When Capital Markets are Imperfect: The Permanent Income Hypothesis Reconsidered'. *Oxford Economic Papers*, New Series, Vol. 25, No. 2, pp. 160–72.

Fondazione Rodolfo Debenedetti (2001) 'Appendix: Taking Stock of Social Policy Reforms in Europe'. In Bertola, G., Boeri, T. and Nicoletti, G. (eds) *Welfare and Employment in a United Europe* (Cambridge, MA: MIT Press).

Grüner, H.P. (2002) 'Unemployment and Labour-Market Reform: A Contract Theoretic Approach'. *Scandinavian Journal of Economics*, Vol. 104, December, pp. 641–56.

IMF (2004a) 'Fostering Structural Reforms in Industrial Countries'. *World Economic Outlook* (April) (Washington, DC: International Monetary Fund).

IMF (2004b) 'Euro Area Policies: Selected Issues'. *IMF Country Report* No. 04/234 (Washington, DC: International Monetary Fund).

Immervoll, H., O'Donoghue, C. and Sutherland, H. (1999) *An Introduction to EUROMOD*. EUROMOD Working Paper EM0/99 (Cambridge: Dept of Applied Economics).

Immervoll, H., Levy, H., Lietz, C., Mantovani, D. and Sutherland, H. (2006) 'The Sensitivity of Poverty Rates to Macro-Level Changes in the European Union'. *Cambridge Journal of Economics*, Vol. 30, No. 2, pp. 181–99.

Hallerberg, M. and Strauch, R. (2002) 'On the Cyclicality of Public Finances in Europe'. *Empirica*, Vol. 29, No. 3, pp. 183–207.

Mabbett, D. (2004) *Fiscal Stabilizers in Europe: The Macroeconomic Impact of Tax and Benefit Systems*. EUROMOD Working Paper EM7/04 (Cambridge: Dept of Applied Economics).

Mélitz, J. (2005) *Non-discretionary and Automatic Fiscal Policy in the EU and the OECD*, CEPR Discussion Paper No. 4988 (London: Centre for Economic Policy Research).

Noord, van den, P. (2000) *The Size and Role of Automatic Stabilizers in the 1990s and Beyond*. OECD Economics Working Paper ECO/WKP(2000)3 (Paris: OECD).

Padoan, P.C. and Rodrigues, M.J. (2004) *A 'Good Quality Finance Rule'*. EPC Issue Paper No. 12 (Brussels: European Policy Centre).

Pierson, P. (2001) 'Coping with Permanent Austerity: Welfare State Restructuring in Affluent Democracies'. In Pierson, P. (ed.) *The New Politics of the Welfare State* (Oxford: Oxford University Press).

Rhodes, M. and Ferrera, M. (eds) (2000) *Recasting European Welfare State* (London and Portland, OR: Frank Cass).

Rodrik, D. (1996) 'Understanding Economic Policy Reform'. *Journal of Economic Literature*, Vol. 34 (March), pp. 9–41.

Rodrik, D. (1998) 'Why Do Open Economies have Bigger Governments?' *Journal of Political Economy*, Vol. 106, pp. 997–1032.

Sachs, J. and Sala-i-Martin, X. (1992) 'Fiscal Federalism and Optimum Currency Areas: Evidence from Europe and the United States'. In Canzoneri, M., Grilli, V. and Masson, P. (eds) *Establishing a Central Bank: Issues in Europe and Lessons from the US* (Cambridge: CUP).

Sutherland, H. (ed.) (2005) *Micro-level Analysis of the European Social Agenda. Combating Poverty and Social Exclusion Through Changes in Social and Fiscal Policy*. EUROMOD Working Paper EM8/05 (Cambridge: Dept of Applied Economics).