Bringing macroeconomics back into the political economy of reform: the Lisbon Agenda and the ‘fiscal philosophy’ of the EU

Deborah Mabbett (Birkbeck, University of London)*
Waltraud Schelkle (London School of Economics & Political Science) **

May 2005

Abstract:
The Lisbon Strategy supports an overhaul of existing welfare state arrangements in the EU so as to further the goal of making the European economy a ‘most competitive and dynamic knowledge-based economy’. At the same time, the ‘fiscal philosophy’ underlying EU economic governance postulates that governments should allow only the automatic or ‘in-built’ stabilisers to do the smoothing of aggregate income while discretionary fiscal policy should pursue consolidation, not stabilisation. Our paper asks to what extent these two pillars of EU economic governance are compatible. We complement the existing political economy literature that asks whether fiscal consolidation fosters or hinders structural reforms by exploring how structural reforms affect both the need for and the effectiveness of demand stabilisation. Our results suggest that the need for stabilisation has not diminished in an era of incremental but steady reform activism. Moreover, Lisbon-type reforms tend to worsen the stabilising capacity of tax-benefit systems in member states despite their potential to improve it. From the perspective of the political economy of reform and European integration, this means that the dual agenda of the EU might undermine the trust in effective government.

* from September 2005.
** The paper was written while Waltraud Schelkle spent her sabbatical leave at CEPS (Centre for European Policy Studies, Brussels), the hospitable environment of which is gratefully acknowledged. Part of her research has been supported by the European Union under the 6th Framework programme (Contract No CIT1-CT-2004-506392). More information about the Integration Project “New Modes of Governance” can be found on the project website at www.eu-newgov.org

An extended version of this paper will appear as a CEPS working paper. We would both like to thank our discussant Robert Strauss (European Commission) and seminar participants at CEPS and the European Institute (LSE) for their constructive comments. We are particularly grateful to Jochen Mankart (LSE), Susanne Mundschenk (ZEI Bonn), Holly Sutherland (Essex University) and Panos Tsakloglou (Athens University) for sharing their expertise with us. The usual disclaimer applies.
Bringing macroeconomics back into the political economy of reform: the Lisbon Agenda and the ‘fiscal philosophy’ of EMU
Deborah Mabbett (Birkbeck, University of London) and Waltraud Schelkle (European Institute, LSE)

1 Motivation
The Lisbon Strategy supports an overhaul of existing welfare state arrangements in the EU so as to further the goal of making the European economy a ‘most competitive and dynamic knowledge-based economy’, including more and better jobs and social cohesion. At the same time, the fiscal philosophy of the Stability and Growth Pact (SGP), along with the Broad Economic Policy Guidelines covering all EU members, endorses ‘rule-based’ as opposed to discretionary macroeconomic stabilisation.1 Governments should allow only the automatic or ‘in-built’ stabilisers to do the smoothing of aggregate income while coordination must care for the long-term sustainability of public finances by forcing governments to play by the rules of ‘close to balance or in surplus’ over the cycle and no more than three per cent deficit to GDP, except in severe recessions. Our paper asks to what extent the two pillars of economic governance in the EU, the Lisbon and the Maastricht pillar, are compatible; specifically whether structural reforms support or weaken automatic stabilisation by the tax-benefit system of member states.

We will focus on the Employment Strategy within the Lisbon Agenda and use member states’ National Action Plans (NAPs) on Employment for 2004 to assess how the announced reforms of income taxes, social insurance contributions and benefits for low-income households affect automatic stabilisers. The latter are all revenue and expenditure items of the budget that vary counter-cyclically with the income or spending of citizens and thus add to their disposable income in recessions and reduce it in booms. In addition, we ask how the liberalisation of employment protection legislation would change aggregate volatility and thus the amount of income smoothing that automatic stabilisers are supposed to do.

Why might there be tensions between the thrust of the Lisbon Agenda and the fiscal philosophy of macroeconomic policy coordination in EMU? Just to give a stark example of what will be studied in more detail below: The mantra of every statement on the European reform and social policy agenda is that incentives for creating and maintaining employment need adjustment which translates into an explicit call for lower marginal and average tax rates (EC 2005: 6). By contrast, old and new research in public finance tells us that automatic stabilisers are more likely to be strong and effective if government is ‘big’ and thus the average tax rates high, or if the tax system is progressive which makes for high marginal tax rates (van den Noord 2000: 7; Auerbach and Hassett 2002: 237; 2002: 237;

---
1 See, for instance, Barrell and Pina (2000: 1), Hallerberg and Strauch (2002: 183-184) and Buti et al (2003: 28) on the underlying philosophy of the Pact: the deficit ceiling over the cycle must be chosen so as to allow for the operation of automatic stabilisers within the cycle. Barrell and Pina (2000) as well as Artis and Buti (2000) were optimistic about the implementation in member states.
Thus, there seems to be a tension between the ever popular call for lowering tax rates and the requirements of effective stabilisation in the EU. The Lisbon Agenda also contains elements that may actually strengthen the stabilisers built into the tax and transfer systems. To argue again by way of an example: reforms that would shift social expenditure from what have become permanent and open-ended transfers, such as those for long-term unemployment or early retirement, to temporary transfers, for instance to subsidies for entry wages and training, would go some way to increase the cyclical sensitivity of the benefit system. This responsiveness on the expenditure side of budgets is very limited in most member states (van den Noord 2000: 19; Mabbett 2004: 8, 10). Obviously, the extent of complementarity between welfare reform and fiscal policy coordination is of much interest since that would allow synergies between the two processes to be exploited.

Finally, a more recent strand of the literature on automatic stabilisers has looked at their operation on the supply side and considered the effect of other non-conventional channels of smoothing household income and consumption. Examples are counter-cyclical labour supply responses in progressive tax systems or well-developed consumer credit markets (Auerbach and Feenberg 2000: 14-17). The potential effects of Lisbon reforms on such non-Keynesian stabilisers are mixed. We explore one possible effect that challenges our assessment, namely that a weakening of automatic stabilisers may actually be a blessing in disguise as less stabilisation would improve the private sector’s own capacity to adjust and self-insure (Buti and van den Noord 2003).

Our paper proceeds in five steps: First, we outline in section 2 how our study relates to wider debates in the political economy literature. Section 3 will describe the conceptual framework. Our empirical analysis in the fourth section tries to establish, first, whether the need for stabilisation in the EU has increased; and, secondly, how reforms would affect automatic stabilisers based on simulations in EUROMOD, a tax-benefit model of the EU-15 countries. Finally, the conclusions sum up by outlining the possible implications for policy and reform coordination in the EU.

2 Literature review: The political economy of fiscal policy and reform.

2.1 The link between structural reform and fiscal consolidation

The political economy literature on the links between structural reforms and fiscal policy can be divided in two strands. The first starts from the diagnosis of pervasive time inconsistency in policymaking and argues in favour of fiscal consolidation being done simultaneously with structural reform, thus supporting the dual agenda of the EU. The second strand, based on the comparative study of major reform processes, sees inherent tensions that call for sequential timing of reforms and budget consolidation, suggesting that the Lisbon Agenda may otherwise suffer a double whammy from fiscal austerity.
The first strand maintains that the dual agenda of the EU promises a double dividend of fiscal prudence and reform activism, if membership acts as a disciplinarian device (Bean 1998; Padoa and Rodrigues 2004). More specifically, the hardening of governments’ budget constraints has the potential to provide incentives or the political room for manoeuvre to proceed with 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 realise that regulations and wage settlements have an immediate impact on employment that will be borne by private sector employers or union members. This ‘back against the wall’ hypothesis takes an optimistic view of the pressure on the government and subsequently on domestic opposition to reform. It maintains that fiscal crises in particular or macroeconomic crises generally make reform easier because they raise awareness for the costs of the status quo and thus weaken the opposition to reform (Rodrik 1996: 26-29; IMF 2004a: 113-115).

The most explicit argument along these lines can be found in Calmfors (2001: 268-270) who explicitly tries to “develop a clearer notion of labour market reform” than the literature so far. His model has a variable for structural reform in the loss function of the government and the central bank, presumably because they are unpopular with vocal constituencies. Reforms thus become a ‘policy bad’ alongside inflation and unemployment. At the same time, structural reform is able to reduce equilibrium unemployment in the Phillips curve of his model. The authorities will undertake reform only if forced by ‘sanctions’ in terms of policy and market outcomes that inflict losses on them. Such sanctions are provided by the Stability Pact and the sound policy mandate of the ECB, furthering fiscal consolidation and structural reforms. The crucial assumption for producing this result is that government has preferences that are systematically different from that of the median voter, thus creating a time-consistency or credibility problem of policymaking.

In order to assess whether governments have been successfully disciplined or not, this strand of the literature also needs the notion of one optimal policy or reform. This means typically that the economy is summarized by short-run Phillips curves that can be exploited by a short-termist government (Calmfors 2001, Buti and van den Noord 2003). In the long run, however, equilibrium (un)employment is determined in neoclassical, imperfectly competitive labour markets. This means that there is one benchmark of optimality for all political economies; any deviation from it can be interpreted as a manifestation of time-inconsistent policies that breaks the promise of sound policy and creates disequilibria for short-term political gains. An implication of this conceptualisation is that all policymaking tends to be distortionary, except if it consists of attempts to correct structural market imperfections that can reduce the longterm equilibrium of unemployment. Given their preferences, only a whip such as naming and shaming, or more effective hard sanctions, will make governments engage in such enlightened reform policies. Externally enforced fiscal consolidation may provide for such a whip and thus yields a double dividend.

The second strand of the political economy literature sees tensions between an ambitious agenda of structural reform and fiscal consolidation. In contrast to the ‘back against the
wall’ hypothesis, it is based on what might be called the ‘need for bribes’ hypothesis. It suggests that fiscal flexibility is required so as to allow compensation of potential or actual losers of reforms. Testing for these alternative hypotheses, the IMF sides with the ‘need for bribes’ hypothesis and recommends accepting a temporary worsening of public finances to make reforms happen (IMF 2004a: 115-116, 132; IMF 2004b: 48, 58). A rise in the budget deficit at the beginning may be necessary not only to buy off opposition from the beneficiaries of the status quo but also in order to bear the upfront costs of reforms such as implementing more effective employment agencies in preparation for welfare-to-work reforms.

This strand of the literature is very much focused on the question what determines reform dynamics. It has been stimulated by the wealth of experience with major reform processes in countries at all levels of political and economic development (Rodrik 1996). Partly for reasons of econometric methodology, policymaking is conceptualised as the outcome of a government optimising an objective function that is representative of an electoral platform or of the median voter’s preferences. But the government is also constrained by economic and political factors that are not directly under its control (Abiad and Mody 2003; IMF 2004a: 109 and Appendix 3.2). Without these constraints that determine whether structural reforms get sufficient political support to be carried out, a 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.

An important barrier to implementing the reforms that governments have committed themselves to is initial structural conditions, as indicated by the values of the labour, product or financial market indicators of a previous period. But and somewhat redeeming, the worse these initial values, i.e. the greater the need for reform thus measured, the more effort seems to be exerted in terms of the number of reforms passed and implemented, the notable exception being product market reforms (IMF 2004a: 111). Other determinants or constraints of reform that are identified as significant are the attitudes among the electorate (as indicated, for instance, by the share of voters above 65), macroeconomic conditions (eg. the state of the business cycle or fiscal deficits), characteristics of the political process (eg. electoral rules or ideological leaning of government) and the design of reforms (bundling or sequencing of reforms in other sectors).

One important argument in favour of the ‘need for bribes’ is that structural reforms under conditions of ‘permanent fiscal austerity’ (Pierson 2001b) are biased towards measures which are fiscally favourable and shift costs to firms. This is not due to a lack of reform activism; on the contrary, it is rather a product of reform activism under fiscal constraints.

---


3 Econometrically, this means that a dynamic equation links the annual changes in structural reform indicators to their past levels (ie. taking account of initial conditions and path dependency), to a set of explanatory variables that presumably constrain a policymaker’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).
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 governments incentives to engage in forms of compensation, such as stricter employment protection in exchange for lower non-employment benefits, that obstruct the specific Lisbon goals.

These problems are likely to be particularly important in labour markets characterised by high levels of insider power. The representation of insiders in protected employment may be strengthened by Lisbon-type reforms since reforms such as decentralisation of wage bargains. The weakening of union power could make employment relationships more rigid and insider-outsider patterns more entrenched at the firm level. Indirect evidence for this is that unionization as such is not correlated with reform inertia. On the contrary, provided that unions are encompassing they may actually facilitate reform. The IMF found that “[…] higher unionization rates are conducive to labour reforms, and, in the EU, to product market liberalization as well.” (IMF 2004b: 59) This empirical finding has been argued more generally by Agell (1999, 2002), Blanchard and Philippon (2004) and van der Ploeg (2004). Unions representative of heterogeneous interests have more reason to engage in consensual decisions over reform processes. [separate point] This means in turn that reforms intended to make labour markets more flexible may actually make them more rigid.

To sum up: The literature implies two stark hypotheses on the dual agenda of the EU. The first strand argues that combining fiscal consolidation with structural reforms yields a double dividend. Fiscal policy creates a situation of ‘back against the wall’ that constrains lavish fiscal handouts, providing both for healthier public finances and signalling to entrenched interests that the status quo has become too expensive and will be changed. The second strand argues that the dual agenda of the EU will obstruct reforms because reforms need ‘bribes’, i.e. fiscal flexibility for compensation of losers and meeting up-front costs. Simultaneous fiscal consolidation and reform is likely to weaken political support and create counterproductive incentives for governments, as illustrated with respect to insider-outsider relationships in labour markets. In other words, the reform process is likely to be hit by a double whammy of political unpopularity and pressures for perverse directions of reform.

Neither hypothesis problematises the relationship between fiscal stabilisation and consolidation. The ‘back against the wall’ hypothesis asserts that fiscal consolidation ultimately contributes or at least does no harm to macroeconomic stability (Buti et al 2002). Because rational expectations insure that everybody shares the model’s view of the economy, these proponents simply dismiss the possibility of a long-lasting recession that would have damaging effects on the politics of reform as participants would not see a payoff in improved employment outcomes. Conversely, the ‘need for bribes’ hypothesis looks at fiscal restraint only insofar it impacts on the politics of reform. While endorsing the need for bribes argument, the IMF study found that “the net number of flexibility-enhancing measures has been noticeably lower in ‘good times’, that is when actual and future growth prospects were high (1999-2000)” in the EU (IMF 2004b: 55). Indeed, good times saw an increase in reforms which strengthened employment protection, a
pattern compatible with the exercise of insider power in labour markets. The hypothesis thus implies that a recession is best for reform politics, provided there is enough fiscal room for manoeuvre.

The conceptualisation of government and policymaking underlying our study sides with the latter strand. It is arbitrary to assume that governments have systematically different preferences from the electorate they represent, as the first strand does. Yet it is plausible to assume that they may be too weak to act upon these preferences, policymaking being constrained by legitimately heterogeneous interests, or by institutional inertia as well as by uncertainty about the exact nature of the required reforms. If this view of government is basically justified, we should indeed see reform activism in the EU, roughly in line with what governments have signed up to under the Lisbon Agenda (see section 4.1). Our study departs from both strands of the literature in that it investigates the macroeconomic effects of reforms. In so doing, it contributes to the debate about the EU’s simultaneous agenda.

2.2 *Bringing macroeconomics back into the political economy of reform*

Following the line of the ‘need for bribes’ argument, namely pointing to unintended effects of policy processes, our study asks a question that to the best of our knowledge has not been dealt with in the literature. The closest to our research focus are Buti et al (2002), Buti and van den Noord (2003) and Fatás et al (2003: 38-40) who ask whether there are inherent tensions in EMU fiscal policy coordination, between the rules to enforce fiscal consolidation, in particular through welfare reforms, and the reliance on automatic stabilisation. Buti et al (2002) and Buti and van den Noord (2003) do not find any tension while Fatás et al (2003) find it in the run-up to EMU when some governments engaged in pro-cyclical contractions to meet the Maastricht criteria but, with the exception of Italy and Portugal, not after 1998. We do not take welfare reforms as synonymous with fiscal consolidation since there is no evidence that this is the sole concern of reforms (see section 4.1) and since the Lisbon Agenda also calls for lower taxes which does not help consolidation.4

Our question, by contrast, is: how would Lisbon-type reforms, if implemented, impact on macroeconomic stability and fiscal stabilisation in the EU? Lisbon reforms may unintentionally and inadvertently weaken the automatic stabilisers, which would clearly be a matter of concern since they are supposed to bear the brunt of stabilisation in EMU. Moreover, the Lisbon reforms themselves, in particular the flexibilisation of labour markets, may actually make employment, income and consumption more volatile and thus increase the need for stabilisation for any desired degree of social insurance. This two-fold impact, on the need for stabilisation and on the effectiveness of automatic stabilisers, is set out in our framework for analysis outlined in section 3.

---

4 EC (2005: 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 and from investment in the ‘knowledge economy’.
Our research question requires to broaden the notion of ‘effective’ fiscal policy in the political economy literature. ‘Effectiveness’ entails the sustainability of public finances, now the sole focus of fiscal policy coordination in the EU, as a necessary but not sufficient condition for stabilisation and efficient public goods provision. A budget, while supremely prudent and sustainable, can be too small to provide for effective stabilisation and social insurance. Automatic stabilisers can solve a number of problems, among them preventing the pro-cyclical handing out of bribes or the failure to consolidate in good times, both inherent in the political exchange that characterises reform processes in mature welfare states. Reliance on symmetrically operating stabilisers may thus create the fiscal space for manoeuvre, for instance to bear the upfront costs of reform.

Our study departs from the literature reviewed above by ‘bringing macroeconomics back in’. The existing debate is focused on a question which preoccupies governments these days, namely how can reform processes be got going, that it takes the effective functioning of automatic stabilisers for granted. Recent research has identified a number of factors – such as the degree of progressivity (see section 3.3) – that make the stabilisers more or less effective. Yet governments are about to change these by Lisbon-type reforms. The implicit assumption of the microeconomic flexibilisation agenda, according to which it has only favourable implications for macroeconomic stabilisation, is untenable. Real wages make relative and absolute prices, microeconomic adjustment and macroeconomic stabilisation, interdependent. A real wage is both the relative price of leisure in terms of goods and the ratio of two sets of absolute prices, namely the nominal wage level and the commodity price level. Flexibilisation in microeconomic terms means that nominal wages become more responsive to ups and downs in the local or national economy. This has inadvertently implications for the price level, not only for the relative prices of the goods in which labour is used more or less intensively. Whether a greater role for nominal wage adjustment in an economy leads to smoother or more volatile output and employment in macroeconomic terms is a priori an open question as we will explore when we discuss the Buti and van den Noord (2003) proposition that demand stabilisation hinders supply-side adjustment. What needs to be stressed at this stage, is that structural reforms do have macroeconomic spillovers, changing the need for stabilisation as well as the capacity of tax-benefit systems to stabilise.

The attempt to bring macroeconomics back in implies a different emphasis in political economy terms. Automatic stabilisers incorporate tax and social security commitments, but to the extent that governments embrace the Lisbon Agenda these commitments are subject to change: much of the welfare reform/labour market flexibilisation agenda actually advocates reneging on some of these commitments. Entitlements to a defined amount of unemployment benefits or pensions are called into question even though current and future beneficiaries paid contributions – and not only general taxes - into the respective social insurance systems. Reforms, in particular in contribution based welfare systems, might thus amount to a publicly endorsed breaking of commitments.\(^5\)

Paradoxically, governments that are most forthcoming as regards the implementation of

\(^5\) We are grateful to Elena Bechberger (LSE) for alerting us to this paradox. Her thesis will explore welfare state reforms from this angle in France and Germany.
Lisbon reforms could end up resembling governments that go for time-inconsistent policies.

This political macroeconomy perspective indicates just how challenging the dual agenda of the EU is for governments. In the worst case, they are not only asked to disappoint the confidence of their electorate in that successful welfare state reforms will break earlier commitments, but also the same reforms may also make income and employment less stable and/or fiscal stabilisation less effective. More economic volatility and less social insurance, or a mere shifting of rigidities and a weakening of stabilisation, hardly give the impression of effective government bolstered by the benign force of European integration. By contrast, government and the EU may be legitimised if it can be shown that the Lisbon reforms not only modernise EU welfare states but also make fiscal stabilisation more effective. Thus, it seems to us that the political economy of reform in the EU should turn the traditional question around: not what does fiscal consolidation do to structural reform but what do structural reforms do to the effective conduct of fiscal policy for macroeconomic stabilisation?

3 Conceptual framework: The channels through which structural reforms affect macroeconomic stability.

3.1 The need for stabilisation of employment, income and consumption

The stability of aggregate and individual household income depends both on how much volatility there is to begin with and how effectively the fiscal system deals with any given amount of volatility. In order to understand how Lisbon reforms may affect both, we need to clarify the different stages of income formation. Box 1 provides an overview.

<table>
<thead>
<tr>
<th>Box 1: Income concepts</th>
</tr>
</thead>
<tbody>
<tr>
<td>(. .) stands for ‘minus’)</td>
</tr>
</tbody>
</table>

**Gross Total Income**

\[
\text{. . value of home production} \\
\text{. . imputed rent from owner occupation} \\
\text{. . in-kind social benefits} \\
\]

= 

**Gross Domestic Product**

\[
\text{. . retained profits} \\
\text{. . corporate taxes} \\
\text{. . employer social insurance contributions} \\
\]

= 

**Household Market Income**

\[
\text{= Wage and Salary Income} \\
\text{+ Self-employment income} \\
\text{+ Property income} \\
\text{+ Other cash market income and occupational pensions} \\
\text{+ cash benefit payments} \\
\text{. . direct taxes and social insurance contributions} \\
\]
Household Disposable Income
= Household Savings
+ Household Final Consumption Expenditure

Total income before redistribution by taxes and benefits sets in, i.e. Gross Total Income, comprises both cash and non-cash or in-kind resources. The latter typically includes the value of in-kind home production, the imputed rent for owner-occupied accommodation and in-kind social benefits such as free education, health care or social housing. The in-kind components of income give a rough estimate of how much income risk households absorb and mitigate through hidden unemployment and home production. The Lisbon reforms aim to encourage female labour participation which would lower the value of home production and raise the cash component. The latter is likely to be more volatile than the former, so the volatility of total gross income would rise. However, the cash component of total gross income of households could become more stable with higher female labour force participation, since additional earnings capacity means additional self-insurance capacity. The net effect on volatility is therefore positive, but whether this raises the need for macrostabilisation is not clear since the self-insurance capacity of households increases at the same time.

If we subtract production in kind from total gross income, we get Gross Domestic Product (GDP). This is the value of market output that the residents of a country produce in a certain time period, i.e. the value added in production. Lisbon reforms have an ambiguous and fairly complex effect on the volatility of GDP. They give more prominence to price (real wage) adjustment in contrast to quantity (employment) adjustment by making labour supply more responsive and flexible. If this works out as intended, nominal GDP may become more volatile and real GDP less volatile simultaneously (Buti and van den Noord 2003). Yet, reforms also intend to reduce the share of ‘safe sectors’, such as public or otherwise protected employment, on efficiency grounds, which would make both nominal and real GDP more volatile (Rodrik 1998: 1019-1021). We will assess in section 4.2 how volatility of real GDP (as well as employment and consumption) has changed.

If we subtract from GDP retained profits, corporate taxes and employers’ social insurance contributions, we arrive at Household Market Income. The difference between the volatility of GDP and the volatility of household market income indicates the amount of income risk that is absorbed by the corporate sector over the cycle. The amount of stabilisation of household market income that the corporate sector generates depends on the extent of employment security provided by firms, the cyclical responsiveness of tax liabilities, and discretionary fiscal measures to induce counter-cyclical spending by firms. The Lisbon agenda calls for the lowering of corporate tax rates but it is unclear how this

---

6 The following deals with the major components of income only, see Sutherland (2001: 32-33) and Smeeding and Weinberg (2001: table 1) for more detailed definitions.
7 For these income smoothing strategies of households, to compensate for deficiencies or incompleteness of social insurance, see Murdoch (1998).
will affect stabilisation. Cyclical volatility of corporate tax payments does not necessarily translate into macroeconomic stabilisation because firms’ spending is not closely related to current income (Auerbach and Feenberg 2000: 18).

We obtain *Household Disposable Income* by adding cash benefits and subtracting direct taxes and social insurance contributions to and from market income, respectively. The Lisbon reforms have a direct impact on the stabilisers built into the tax–benefit systems of member states. But it is not clear a priori what the package of lower tax rates and activating the unemployed will do to the volatility of disposable income. The relationship between household market income and household disposable income is the focus of our analysis of the stabilisers in section 4.3 below.

The reason for focusing on the stabilisation of household disposable income is that this may smooth consumption spending, that is effective demand. To the extent that consumption does depend on current (in contrast to lifetime or ‘permanent’) income, this stabilisation mechanism is crucial. The extent depends, for example, on consumer confidence as regards future income. How does the Lisbon Agenda possibly affect households’ optimism as regards future employment opportunities and social security? There can be arguments for both optimism and pessimism, the Lisbon Agenda increasing trust in the long-term viability and competitiveness of social systems or, on the contrary, the Lisbon Agenda conveying the message that some lifetime risks will no longer be covered, thus raising volatility of consumption.

The hypotheses about how structural reforms impact on various stages of income formation depend very much on how one sees the economy operating, given its institutional or regulatory framework. While an exposition of the underlying macroeconomics is beyond the scope of this paper, a recent debate on the role of labour supply in automatic stabilisation allows us to contrast our line of reasoning with one prioritizing microeconomic flexibility. Buti and van den Noord (2003: 2 and passim) argue that automatic stabilisation of demand may easily become counterproductive because those features that make automatic stabilisers effective also create disincentives for labour supply. Progressive taxes or a large tax burden drive a wedge between producer wages and take-home pay. This means that a disproportionate part of the reward of additional labour supply is taxed away while less labour supply is rewarded by marginally lower taxation. Stabilisation is thus the problem rather than the solution and it is the welfare state that forces the economy into quantity adjustment via long-term unemployment.

Our objection to these propositions is that the pessimistic account of what stabilisers do to structural adjustment is built into Buti and van den Noord’s model *by assumption* in

---

8 This is also the definition that EUROMOD adopts (Sutherland 2001: 22).
9 The welfare state also enables households to engage less in income smoothing themselves and adopt riskier career paths with a higher expected return in terms of lifetime (market) income. Thus, the welfare state absorbs more risks than the observable income smoothing of disposable income indicates (Sinn 1995, Murdoch 1998).
10 In the extended version of this paper, we also discuss the more benign view of demand stabilisation and labour supply responses that Auerbach and Feenberg (2000) express.
that they conceptualise automatic stabilisation as rendering aggregate supply less responsive to changes in aggregate demand. The authors do not reconcile their assertion that distortions created by automatic stabilisers make labour supply less elastic and the Phillips Curve steeper, on the one hand, with the textbook representation of an atomistically competitive economy, on the other, which is characterised by a vertical Phillips Curve. There is no role for macroeconomic disequilibria in the model: all unemployment arises from labour market equilibria caused by imperfect competition. Moreover, the tension between stabilisation and adjustment arises in the model because unions have more wage-setting power than firms have price-setting power – which is at odds with empirical evidence that in the medium run firms pass higher taxes over in prices as the authors acknowledge (Buti and van den Noord 2003: fn.2). Moreover, it is not clear a priori, why social safety nets should make all households less responsive to market signals. After all, benefits provide a transitory income that enables individuals to find the best match for their skills or take rewarding risks that they would not without this social insurance (Sinn 1995). We will come back to this at the end of section 4.3.

In line with Auerbach and Feenberg (2000: 14), we consider the distinction between permanent or structural and temporary or cyclical changes to be highly relevant. If stabilisation is meant to provide temporary cushions to fluctuating incomes, it should not prevent adjustment to permanent changes in the economy. However, the rise in long-term unemployment and early retirement suggest that automatic stabilisers in particular have lost some of their effectiveness in this respect over time. This provides a macroeconomic rationale for the Lisbon Agenda that this paper is going to explore.

3.2 The size of automatic stabilisers

Even in less generous welfare states like the U.S., a large part of household income smoothing is done by the stabilisers built into tax and transfer systems. For wage dependent households tax/ transfer smoothing is more important than the smoothing that is provided by borrowing and lending in financial markets (Asdrubali et al 1996). The automatic or in-built stabilisers counteract the fall of disposable income and thus private demand in a recession, and dampen income and demand in a boom. They are ‘automatic’ in the sense that governments do not need to enact their operation in the particular stage of the business cycle since they vary with their base by design.

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

1. **Responsiveness**: A stabiliser must vary with the business cycle so as to trigger a counter-cyclical response. Those on the revenue side should be positively correlated with income changes (fall when income falls, rise when income rises) and those on the expenditure side should be correlated negatively (fall when income rises, rise when income falls). This responsiveness or cyclical sensitivity is measured by the elasticity of the particular budget item, for instance the percentage change of tax revenue, induced by a 1 per cent change of income, output or some component thereof. If tax revenues or transfer payments vary more than proportionally with the
change in the underlying base (elasticity larger than 1), they are considered responsive, contributing to the stabiliser’s effectiveness.

2. **Weight**: Obviously, the ability of a budget item to smooth aggregate private demand increases with the quantitative impact it has on personal income, be it via an important tax or via a sizeable benefit. If the focus is on household market income, the weight of a stabiliser is measured as its share in income. The share of taxes or transfers varies widely across different household income groups; this may be significant in determining their role in stabilising consumption.

The literature has identified a number of factors that determine the size of automatic stabilisers which can be attributed to operating on one or both of these determinants: First, a progressive tax and benefit structure reinforces quantitatively the counter-cyclical responsiveness of automatic stabilisers: in a boom, rising incomes will be taxed disproportionately more, in a recession, declining incomes will be taxed disproportionately less (Auerbach and Feenberg 2000: 1, 14-17; van den Noord 2000: 7, 16). Effective marginal tax rates may be raised by the withdrawal of benefits when income passes a certain threshold and vice versa for a declining income.-- Secondly, there seems to be a fairly robust negative relationship between the size of government more generally and the volatility of output (Fatás and Mihov 1999; van den Noord 2000: 7 and fig.1). The weight of automatic stabilisers is only one possible candidate for this relationship; it may also be that large governments provide ‘safe sectors’ of stable employment (Rodrik 1998). The relationship between government size and economic stability seems to be non-linear, however (Koskela and Viren 2003: 5): for small and large governments the negative relationship between size and output volatility seems to break down, that is small governments may be effectively stabilising (output volatility is less) while very big ones do not manage to have that stabilising impact any more (output volatility rises).-- Thirdly, smoothing the income of individuals with a high propensity to spend or households that are credit constrained will make stabilisation 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 stabilise to begin with (Auerbach and Feenberg 2000: 12). Thus, transfers and tax credits or exemptions that directly target low income earners will provide for that quality.11

This outline of what determines the size of automatic stabilisers indicates a potential for spillovers from the Lisbon Agenda on fiscal policy in member states that was not intended. The impact of the Lisbon reforms on the responsiveness of automatic stabilisers is likely to be positive on the benefit side while that on responsiveness on the tax side and on weight seems to be negative.

### 3.3 Relevant reform packages in the European Employment Strategy

As mentioned in the introduction, we focus on the European Employment Strategy (EES) as a core element of the Lisbon Strategy. The EES was launched at a special summit in Luxembourg in 1997 after a new title on employment was introduced in the Amsterdam

---

11 Auerbach and Feenberg (2000: 13-14) estimate, however, that a large share of automatic stabilisation benefits richer households where the multiplier effect is minimal.
Treaty. Since 1999, member states have to come up annually with NAPs that contain information on what measures they take to implement the Strategy.

The ‘Lisbon-type’ reforms (cf. EC 2005) we are going to look at are contained in member states’ National Action Plans (NAPs) on Employment for 2004:

• One imperative is to make fiscal revenue systems more ‘employment friendly’: The measures entail (a) reducing taxes and social insurance contributions for workers or companies; and (b) lowering effective marginal tax rates, often targeted at low-income or secondary earners, by flatter tax rates and/or by increasing tax credits for earned income. Obviously, these measures affect the size of government and the progressivity of financing the welfare state. The weight of the stabilisers is likely to fall while the effect on responsiveness is more ambiguous.

• Another recurrent theme, relevant to our study, is the declared intention to make benefit systems more ‘activating’ for the inactive, the precariously employed and the unemployed: The measures comprise above all elements of retrenchment, such as to lower replacement rates, to shorten benefit duration and to condition benefits on having a job or entering a training programme; they also entail increases in the minimum wage or the introduction of targeted tax credits. Again, all these measures are likely to have countervailing effects on the weight and cyclical sensitivity of the benefit system.

• Finally, many NAPs announce measures to flexibilise employment contracts: 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. These measures are likely to affect the need for stabilisation in a complex way. While there will be higher turnover in the labour market, exposing households to more risk, yet at the same time increasing their ability to manage risk.

We would like to stress that we do not take a view on whether these three reform imperatives as formulated are desirable or not. But we think they are a fair representation of what the Lisbon Agenda calls for while this regrouping makes them more manageable for empirical study.

Our analytical framework for the empirical study can be summarised as follows: Reforms under the Lisbon Agenda potentially affect the need for stabilisation by increasing the volatility of employment, income, and consumption (section 4.2). Reforms are also likely to change the size of the automatic stabilisers as determined by their responsiveness and their weight as well as by inducing labour supply responses that may weaken or support stabilisation and adjustment (section 4.3).
4 Empirical analysis: The potential impact of Lisbon reforms on stabilisation.

In this section, we try to provide evidence for what is so far a thought experiment: what would happen to stabilisation if Lisbon-type reforms, in particular the EES, were implemented? We ask, first, whether there is any evidence of these reforms at all happening and whether any pattern relevant to our study emerges. Then we ask whether and how these reforms possibly affected the need for stabilisation. Finally, we use EUROMOD to simulate the effects of stylized Lisbon reforms on the stabilising capacity of tax-benefit systems in EU-14.

4.1 Is there evidence of Lisbon-type reforms that might affect stabilisation?

The EU embarked on the Single Market Programme and the Maastricht strategy to the monetary union in the late 1980s and early 1990s, respectively. It was later followed up by the Amsterdam Treaty in 1997 that started the reform agenda which is the focus of this paper. Our empirical analysis thus distinguishes between two periods, to some extent also dictated by the availability of data. For the evaluation of how much reform has taken place, we divide into 1987-1994 and 1995-2002, a periodisation that is preceding the one for our subsequent evaluation of the need for stabilisation (1989-96 and 1997-2004), assuming that reforms need some time to show effect.

Table 1 provides some evidence for the reform activism of member states, using the social reforms database of the Fondazione Rodolfo Debenedetti. This database documents reforms in employment protection legislation, unemployment and non-employment benefits in the EU-14 countries, starting in 1987 up to 2002. The table synthesizes this 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 making systems ‘increasing flexibility’ (less protective or generous), and, vice versa, a minus if reforms are classified as making them ‘decreasing flexibility’ (more protective or generous). The intensity is measured by assigning a value of ±1 to ‘marginal’ and ±2 to ‘structural’ reform measures. Reform packages containing a series of measures get an intensity value of 2 if they contain 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).

---

12 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\(^b\), 1986-1994 and 1995-2002

<table>
<thead>
<tr>
<th>Country</th>
<th>Employment protection legislation</th>
<th>Non-employment/unemployment benefits</th>
<th>Number of reforms(^c) that decrease (-) or increase (+) flexibility of systems</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>-1</td>
<td>+3</td>
<td>0(^a)</td>
</tr>
<tr>
<td>Belgium</td>
<td>+1</td>
<td>+2</td>
<td>+4</td>
</tr>
<tr>
<td>Denmark</td>
<td>0(^a)</td>
<td>+1</td>
<td>+4</td>
</tr>
<tr>
<td>Finland</td>
<td>+2</td>
<td>+3</td>
<td>+2</td>
</tr>
<tr>
<td>France</td>
<td>-5</td>
<td>-6</td>
<td>+2</td>
</tr>
<tr>
<td>Germany</td>
<td>-1</td>
<td>+3</td>
<td>-1</td>
</tr>
<tr>
<td>Greece</td>
<td>+2</td>
<td>+4</td>
<td>-2</td>
</tr>
<tr>
<td>Ireland</td>
<td>-1</td>
<td>-5</td>
<td>+6</td>
</tr>
<tr>
<td>Italy</td>
<td>+1</td>
<td>+8</td>
<td>0(^a)</td>
</tr>
<tr>
<td>Netherlands</td>
<td>+1</td>
<td>+5</td>
<td>+1</td>
</tr>
<tr>
<td>Portugal</td>
<td>+2</td>
<td>-2</td>
<td>-2</td>
</tr>
<tr>
<td>Spain</td>
<td>+1</td>
<td>-2</td>
<td>+4</td>
</tr>
<tr>
<td>Sweden</td>
<td>+1</td>
<td>+3</td>
<td>+3</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>0(^a)</td>
<td>-6</td>
<td>+5</td>
</tr>
</tbody>
</table>

| Number of reforms\(^c\) | 15 (-); 16 (+) | 39 (-); 41 (+) | 15 (-); 31 (+) | 31 (-); 110 (+) | 30 (-); 47 (+) | 70 (-); 151 (+) |

\(\text{\(a\)}\) - for reducing, \(+\) for increasing the flexibility of the system or rewards from the labour market, according to the Fondazione RDB database.  
\(\text{\(b\)}\) ±1 for ‘marginal’ reforms, ±2 for ‘structural’ reform measures; one reform package can contain several (marginal) measures thus valued.  
\(\text{\(c\)}\) Number of (more or less flexibilising) reforms irrespective of intensity; the net value of a reform package containing countervailing measures determines classification as – or +.  


The main result is that member countries have become considerably more active in the second period as well as more inclined to go for deregulation and less generous benefits for people out of work. The country entries capture the fact that reforms are largely incremental and sometimes pointing in opposite directions: countervailing reforms are indicated where there are discrepancies between low net figures in the first four columns despite a high number of reforms in the last two columns. (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). This is also compatible with the findings of the IMF (2004a) study according to which governments are somewhat less forthcoming as regards reforms of employment protection – in fact some have increased rather than decreased EPL (‘less flexibility’ in FRDB terms). France, Ireland, Portugal, Spain and the UK all fall into this category. By contrast, benefit systems have become more favourable to employment everywhere – which does not always mean less generous but creating less distortionary incentives – except France and Portugal. There are also some surprises, namely the UK and Ireland tightening employment protection, starting
from low levels of course. Another surprise is Germany where a large number of (marginal) reforms in the second period tend to go exactly in a direction that the government is always accused of avoiding.

These results lead us to expect that volatility of employment and income before stabilisers start operating will rise because the turnover in labour markets increases. Moreover, we expect less consumption smoothing for two reasons: First, a large number of marginal rather than bold structural reforms with a restrictive overall thrust (except in France and Portugal) may have created more uncertainty and placed an increased burden of coping with risks on households, which we expect to make for less smooth consumption.

Secondly, the OECD (2003: 51-53) has presented an interesting finding which is conveyed as “unemployment benefits re-assure workers while EPL makes them worry”. They find a negative relationship between an index that measures the subjective feeling of job security among workers and the actual tightness of EPL; workers seem to feel less secure in more protective regimes. The study finds a positive correlation between subjective security and the level of unemployment benefits, i.e. in higher benefit systems, workers seem to feel more job security. These results must be interpreted cautiously as the study covers only a limited number of countries (e.g. neither Germany nor France) and the negative relationship for EPL is statistically not robust. Yet if it holds for some countries, it would imply that reform processes, focused on lowering (or tightening eligibility for) unemployment benefits but less keen on liberalising EPL, create more uncertainty than if the emphasis were the other way round. This implies that the attempts of governments to implement Lisbon-type reforms under tight fiscal constraints create maximum worry for average households.

4.2 How would the need for stabilisation change?

For the purpose of this section, we divide the period into 1989-1996 and 1997-2004 so as to account for the new phase of European integration that is marked by the Amsterdam Treaty and the initiation of the EES. We first present the results for quarterly, seasonally adjusted data on consumption because it is household spending that is ultimately the goal of stabilisation; to explain that pattern, we have a closer look at employment (where we also look at annual and non-adjusted data to capture a possible shift from long-term into short-term volatility).
Volatility is measured by coefficients of variation, which are the standard deviations around the country’s mean for the respective period relative to the period averages (dimension is fractions, 10% expressed as 0.10). These changes in standard deviations relative to the mean show us whether or to what extent a rise in standard deviations was compensated by the size and growth of the mean; higher average consumption may be interpreted as a rise in the potential capacity to self-insurance of households.

Chart 1: Need for stabilisation -- consumption

In EU-14 as a whole, consumption has become more volatile: only a few smaller economies experienced a decline.\textsuperscript{16} Denmark as a bold flexibiliser, yet a still generous welfare state does not allow us to discriminate between an interpretation that makes workfare reforms responsible for less volatility and another that points to an unbroken commitment to social risk management. By contrast, Finland is an equally relentless reformer sparked by a severe economic crisis in the early 1990s and thus a classic ‘back against the wall’-case. Yet, consumption volatility increased – despite the fact that volatility of employment has fallen dramatically after the crisis (see chart 2). To a lesser degree this holds for the Netherlands as well, namely a track record of microeconomic flexibilisation tends to raise volatility. -- France and Spain where governments went for opposite structural reforms in EPL are, along with the UK, the biggest contributors to rising volatility in EU-14. Spain and the UK fit the expectation that deregulation or an already deregulated labour market privatize part of social risk management which shows up in more volatile consumption. These two countries, as well as Finland and the Netherlands, apparently represent cases where reform comes at a price of higher volatility.

\textsuperscript{16} Moreover, the biggest decline was for Ireland for which the data actually start only in 1997 so that the periods are not really comparable (1997-2000 and 2001-2004). We show the results nevertheless because this may be interesting (and good) news for the enlarging EU.
in final household demand. France, however, does not fit that interpretation. Its reluctance to implement Lisbon-type reforms, notably in making EPL more stringent, has been accompanied by an increase in volatility. By contrast, Germany has remained stable in two periods that were fairly stormy in socio-economic terms and has slowly but steadily engaged in reforms.

What these differences in country experiences also indicate is that reforms cannot account for the entire rise in consumption volatility. We would not want to suggest they do. Yet, our first stab at the link between structural reforms and stabilisation does not contradict the following three conclusions: at a time, when member states have stepped up their reform efforts, volatility has gone up; thus the need for stabilisation has not decreased if we look at household spending, on the contrary; finally, countries that pursue the Lisbon Agenda according to table 2 are not immune to rising volatility; the only exception is Denmark that has a most generous activating welfare state and is thus a case that cannot discriminate between the two hypotheses outlined in section 2.

A reason for reforms contributing to less consumption smoothing\(^{17}\) could be higher volatility of employment. Mounting anxieties about job security and lower benefits once out of work could make households more inclined to pro-cyclical spending behaviour. This is particularly relevant for countries that have suffered for some time from low growth and rising unemployment, such as Germany or Italy. However, table 2 indicated that governments were less forthcoming as regards EPL liberalisation, some even tightened regulations – Germany and Italy, however, were not among them. The following chart illustrates this ambiguous picture.

\(^{17}\) We also find less income smoothing. only in smaller member states does volatility of GDP decline, it stays fairly constant in Germany but rises in all other bigger member states (see the CEPS working paper, forthcoming).
Chart 2: Need for stabilisation – employment (quarterly data)

Volatility of employment (quarterly data, standard deviation relative to period average)

As with consumption (and income), we find that volatility has more or less increased in all countries except Ireland and Finland (and Germany if seasonally adjusted) and thus in EU-14.\(^\text{18}\) Germany is surprising from our point of view, both because of a lacklustre growth performance and a persistent strategy of piece-meal flexibilisation – which should all have raised consumption volatility (chart 1). Instead we get the picture of stable stagnation on all accounts. France is a different case but equally surprising given our expectations; the attempt to contain employment volatility by more stringent EPL seems not to have worked. Perhaps the OECD’s (2003) finding that more employment protection may come with feelings of less job security, reflects such failures, although that study did not include France. -- It follows from comparing the charts 1 and 2 that the rise of employment volatility in relative or percentage terms is less than that of consumption. This suggests to us that employment protection, income smoothing by taxes and benefits and voluntary (skilled) labour hoarding of firms effectively smooth consumption. Yet these compensating mechanisms do not absorb all the additional fluctuation in employment as the overall rise indicates. This affirms once more a persistent need for stabilisation.

As mentioned above, research on EPL has repeatedly found that liberalisation shifts long-term unemployment into short-term unemployment (Young 2003: 20 and passim). This could make stabilisation indeed more effective and is simultaneously compatible with our finding that households vary their spending decisions more in line with the ups and downs of the business cycle, presumably because they face less job or transfer security. A

\(^\text{18}\) The charts show seasonally non-adjusted figures so as to cover more countries. For those where Eurostat provides both series it does not make a noticeable difference, except Germany, where the small increase in volatility of employment (quarterly data) disappears if seasonally adjusted.
comparison of volatilities in annual and quarterly employment throws some light on that question: if this shift from long-term (defined as one year or longer) to short-term takes place, we should see less volatility in the annual data.\(^\text{19}\)

Chart 3: Need for stabilisation – employment (annual data)

![Volatility of employment chart]

Source: Eurostat, own calculations

Obviously, in most countries, employment volatility decreases if we look at the annual data. The somewhat surprising exceptions are, individually and as a group, Italy, the Netherlands and Sweden. This is reassuring for the proponents of Lisbon-type reforms in that it might be that higher short-term fluctuations contribute to more stability in the long-term (accepting the administrative definition of long-term unemployment as minimum one year out of work; annual data captures that only imperfectly, of course).

This is certainly the interpretation that the European Commission favours. In EC (2002), the authors find that (un)employment has become more responsive to a change in output gaps when the economy in member states was below potential. This “suggests that a break occurred in the 1990s in the cyclical behaviour of employment participation and unemployment rates” (EC 2002: 54) While the authors welcome this break, they also find that this gain in flexibility is largely due to a rise in temporary employment contracts and that in some countries the expansion of temporary employment was at the expense of permanent jobs. Thus, the welcome increase in self-insurance capacity is matched by an additional need for stabilisation in those latter economies, as the authors duly notice (EC 2002: 60, 69).

\(^{19}\) We have also checked for unemployment which does not change the results qualitatively.
Moreover, it is noteworthy that the volatility of annual employment is about ten times as high as that of quarterly employment, between 5% and 20% around the mean (in the case of Finland as high as 50% in 1989-96). This makes for considerable uncertainty among households, even if declining. Finland, with a drop of employment volatility by 40% but an increase in volatility of consumption (and of income), is an admittedly extreme case, yet telling as regards the need for stabilisation. Anxieties of households may not go away and make the economy as volatile as ever, even if long-term prospects of employment improve.

At the same time, it seems unlikely that either more or less stringent EPL can substitute for fiscal stabilisation. This is suggested, on the one hand, by cases like France which fits the OECD (2003) finding that more stringent or ‘inflexible’ EPL correlates with feelings of less job security; on the other hand, cases like Finland or the Netherlands do not support the hypothesis that more flexible EPL makes macroeconomic stabilisation redundant either.

To sum up, the evidence on reform activism and fiscal consolidation in EU-14 as well as on the volatility of consumption and employment suggests, first, that the need for stabilisation has not decreased for most countries. There is also no evidence, secondly, that more Lisbon-type reforms will generate a double dividend of more microeconomic flexibility and more macroeconomic stability. Thus, it should be of interest and concern to policymakers what Lisbon-type reforms do to the stabilising qualities of tax-benefit systems in member states specifically.

4.3 How is the size of automatic stabilisers likely to be affected?

We outlined in section 3.3 how Lisbon reforms may affect stabilisation. Having dealt with employment protection above, we now turn to the reduction of benefits and of average and marginal tax rates. For this evaluation, we use EUROMOD, a tax-benefit simulation model based on micro-data for individual households in each of the EU member states (Immervoll et al 1999, Atkinson 2005). 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. Yet, this limitation is actually preferable for the conduct of our thought experiment: ‘What would happen to fiscal stabilisation if the Lisbon reforms were boldly implemented?’. They keep the results tractable and transparent for interpretation, focusing on the question what would happen if policy changes were made an administrative reality (Atkinson 2002: 8-9).

What are, ex ante, the effects of macroeconomically relevant reforms on the responsiveness and weight of automatic stabilisers? Our research hypotheses follow from the reasoning outlined in sections 3.1 and 3.3:

- Tax reforms that nearly all member states consider to be warranted and duly announce in their NAPs, namely lowering average and marginal effective taxation (including social insurance contributions), are bound to have a negative impact on the
effectiveness of disposable income smoothing. They reduce their weight and responsiveness, respectively. There is an offsetting effect on the responsiveness of automatic stabilisers if governments introduce simultaneously tax credits for low-income earners, as many do, making automatic stabilisers more responsive to fluctuations in these low incomes. However, it is unlikely that this is noticeable in the macroeconomy, given their negligible weight.

- Reforms of the benefit system that try to shift a share of welfare transfers to in-work benefits have ex ante an ambiguous overall impact on the size as determined by the two components under scrutiny. Transfers may become cyclically more sensitive since permanent transfers such as early retirement, disability or assistance to long-term unemployed become temporary, potentially responding to the business cycle. The same measure such as lowering replacement rates and shortening benefit duration tends to have exactly the opposite effect on the two components: it reduces the weight of this automatic stabiliser, yet is positive for responsiveness as it replaces permanent transfers by temporary unemployment benefits. 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 stabilisers.

Our empirical assessment thus seeks to establish how much the size of automatic stabilisers would be affected by reforms: by changing the responsiveness, measured as the (marginal) income elasticity of the affected automatic stabiliser, and the weight which is its share in disposable household income. Finally, we try to assess the net impact of these two determinants by calculating for each member state a coefficient of cyclical stabilisation which is the ratio of changes in benefits and taxes in relation to the change in gross market income. Box 2 gives some background on the empirical approach.

---

**Box 2: Estimating the size of automatic stabilisers and their determinants**

The stabilisation coefficient relates household market income $y^m$ to disposable income $y^d$.

By treating transfer payments to households (benefits) as negative taxation, we get:

1. $y^d = (1-\sigma)y^m$
2. $\sigma = \sigma(t_p, t_s, b; y^m)$

The stabilisation coefficient $\sigma$ incorporates (is a function of) automatic stabilisers on the revenue side (personal income taxes $t_p$, social insurance contributions (SIC) $t_s$) and transfers on the expenditure side (benefits $b$) that determine disposable household income. For the analysis of cyclical stabilisation, we need to estimate $\sigma$ in the vicinity of trend or equilibrium income $y^*$. However, a simulation model like EUROMOD examines changes in income, benefits and taxation relative to the model baseline of 1998, rather than being able to estimate equilibrium income. Therefore, we have to assume that, over

---

20 The following is based on Mabbett (2004). We are grateful to the EUROMOD research team (Immervoll et al 2004), coordinated by Holly Sutherland, for giving us permission to use these results here.
21 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
a period of years, changes in $y^m$ represent fluctuations of current income around $y^*$, so that the coefficient of cyclical stabilisation can be measured as

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

where $\Delta$ signifies ‘arithmetic change’ in the respective variable.

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

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

where $\beta_i$ 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 stabilisation coefficient (with $t_p$ for income tax, $t_s$ for employee SIC and $b$ for benefits):

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

where $\Delta$ signifies ‘arithmetic change’ in the respective variable.

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

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

Table 2 presents estimates of $\sigma$ generated by simulating a 10% increase in earnings. The model calculates for each household the effect of higher earnings on taxes, SICs and benefit entitlement. As noted above, the simulation does not include any status changes for household members (e.g. from unemployment to employment) so the effect on benefits is slight (only benefits such as working tax credits or social assistance which are related to earnings are affected). It can be seen that, for all countries except France, income tax rises by more than 10% (elasticity with respect to earnings is greater than 1), while the converse is true for SICs in all countries except Ireland.

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: Baseline estimates of responsiveness, weight and income stabilisation in EU-14

<table>
<thead>
<tr>
<th></th>
<th>Responsiveness(^a) of automatic stabilisers ((\beta_i))</th>
<th>Weight(^b) of automatic stabiliser ((s_i))</th>
<th>Stab. coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Income tax ((\beta_p))</td>
<td>Employee SIC(^c) ((\beta_s))</td>
<td>Benefits ((\beta_b))</td>
</tr>
<tr>
<td>AT</td>
<td>16.4</td>
<td>7.7</td>
<td>0.0</td>
</tr>
<tr>
<td>BE</td>
<td>13.7</td>
<td>8.5</td>
<td>-0.3</td>
</tr>
<tr>
<td>DK</td>
<td>11.4</td>
<td>8.1</td>
<td>-0.6</td>
</tr>
<tr>
<td>FI</td>
<td>11.3</td>
<td>8.3</td>
<td>-0.2</td>
</tr>
<tr>
<td>FR</td>
<td>9.1</td>
<td>8.1</td>
<td>-0.6</td>
</tr>
<tr>
<td>GE</td>
<td>17.5</td>
<td>7.5</td>
<td>-0.6</td>
</tr>
<tr>
<td>GR</td>
<td>14.5</td>
<td>5.3</td>
<td>0.0</td>
</tr>
<tr>
<td>IR</td>
<td>18.8</td>
<td>10.9</td>
<td>-0.5</td>
</tr>
<tr>
<td>IT</td>
<td>11.2</td>
<td>8.4</td>
<td>-0.3</td>
</tr>
<tr>
<td>NL</td>
<td>19.0</td>
<td>5.8</td>
<td>-0.4</td>
</tr>
<tr>
<td>PT</td>
<td>14.4</td>
<td>8.5</td>
<td>-0.4</td>
</tr>
<tr>
<td>SP</td>
<td>16.4</td>
<td>3.8</td>
<td>0.0</td>
</tr>
<tr>
<td>SW</td>
<td>10.7</td>
<td>4.7</td>
<td>-0.5</td>
</tr>
<tr>
<td>UK</td>
<td>12.0</td>
<td>9.0</td>
<td>-0.5</td>
</tr>
</tbody>
</table>

\(a\) Percentage change from baseline value due to a 10% change in earnings (marginal income elasticity)

\(b\) Percentage share in gross household income

\(c\) Social Insurance Contributions

Source: EUROMOD, own calculations based on Mabbett (2004)

The first three columns tell us, to take the example of Austria (AT), that for a 10% increase in earnings, income taxes respond strongly in that they increase by 16.4%. By contrast, SIC rise a less than proportional 7.7%; and benefits decrease hardly at all.\(^{22}\) It can be seen that, for all countries except France, income tax rises by more than 10% (elasticity with respect to earnings is greater than 1), while the converse is true for SICs in all countries except Ireland. The values for the stabilisation 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 volatility of disposable income by one-third to one-half. This is consistent with the estimates of other authors (Cohen and Follette 2000, van den Noord 2000).

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 stabilisation coefficients in our set of countries. As table 2 reveals and chart 4 (disregarding benefits) illustrates, we have at one end of the spectrum Ireland with fairly responsive automatic stabilisers (the pink-square and yellow-triangle data points are in the upper band of the two data series), yet their low weight in household income makes the country still end up with a stabilisation coefficient below

\(^{22}\) As already mentioned, this is because the EUROMOD simulations did not specify a change in (un)employment status related to the rise in earnings. This could be area of further research since it is, in principle, possible to simulate such changes based on Okun’s Law (cf. Mabbett 2004: 10, table 3).
average (as measured along the horizontal axis). At the other end of the spectrum, there are Denmark and Finland with relatively unresponsive stabilisers, yet their weight compensates this and makes for a high stabilising impact as measured by the stabilisation coefficient.

Chart 4: Determinants of the size of automatic stabilisers

That weight is the dominant determinant is also indicated by the fact that stabilisation coefficients are positively correlated with weight (the blue diamonds follow a rising trend) while no such relationship is discernible for responsiveness (the pink-square and yellow-triangle data points do not follow a rising or declining trend). This implies that benefit reforms are likely to weaken automatic stabilisers because their positive effect on responsiveness does not compensate for the weakening effect through the weight channel.

The immediate conclusion for tax reforms is, first, that income tax and SIC reforms are central to what is going to happen to automatic stabilisers, 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 some to indirect taxes, is likely to have a stronger weakening impact on automatic stabilisers than flattening marginal tax rates that diminishes responsiveness. These conclusions are borne by the fact that there is no low-weight (small government) country with an above-average stabilisation coefficient of more than 0.45. The reverse does not hold, however. There are fairly ‘weighty’ tax-benefit systems that do not achieve a corresponding stabilising effect (cf. France and Italy). And there is Ireland with the smallest weight of all, yet the best stabilisation coefficient among the smaller tax-benefit systems due to its progressive, ie. responsive tax and contribution structure. Therefore weight helps but does not guarantee effective stabilisation.
Obviously, these simulations cannot but give a very rough indication of what Lisbon-type reforms – making tax and benefit systems ‘more employment-friendly’ – would do to macroeconomic stabilisation. Yet these results shed some light on the debate whether the link between structural reforms and fiscal consolidation entails a double dividend (consolidation fosters reforms through ‘back against the wall’ pressures) or a double whammy (consolidation hinders or even perverses reforms since it denies ‘bribes’). First, Lisbon-type reforms decrease the weight of stabilisers which corresponds to fiscal consolidation only insofar as benefits are concerned while lower taxes make consolidation harder. Second, even if desired, this success has to be set against the negative side-effect of weakening fiscal stabilisation. In other words, if we look at the causal link from another direction than the political economy literature has done so far, we seem to find a policy tradeoff between structural reform and automatic stabilisation.

This assessment must address a possible objection that Buti and van den Noord (2003) formulate most forcefully: is this weakening of conventional demand stabilisation really a loss, once we take labour supply adjustments into account? The answer of Buti and van den Noord (2003) is a resounding “No”. They claim that automatic stabilisers 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 (microeconomic) stabilisation.

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 stabilisation coefficients according to our EUROMOD simulations (table 2) should have both high levels of unemployment and low volatility of unemployment, the latter now to be interpreted as persistence of unemployment. To test for the robustness of our results, we replace our estimates of the stabilisation coefficient by the OECD standard measure of benefit entitlements and plot it against the same measures of unemployment. Again, we should observe a positive correlation with levels of unemployment and a negative with volatility. We first look at the levels of unemployment (charts 5a-b).

---

23 Thus, welfare state reform cannot be treated synonymously with fiscal consolidation as in Buti et al (2002) and Buti and van den Noord (2003).
24 The OECD summary measure is defined as the average of the gross unemployment benefit replacement rates for two earnings levels, three family situations and three durations of unemployment. It is available for download at URL: [www.oecd.org/els/social/workincentives](http://www.oecd.org/els/social/workincentives) (accessed 5 April 2005).
As regards levels of unemployment, we find not a positive but a negative correlation: tax-benefit systems with stronger stabilising qualities or more generous unemployment benefits, respectively, had lower average unemployment rates in the period 1997-2004.\textsuperscript{25}

\textsuperscript{25} The Pearson correlation coefficient, assuming a value between 1 and -1, is -0.28 for the EUROMOD estimates of the stabilisation coefficient and would be even higher if the outlier Finland were disregarded. The finding for the OECD indicator is particularly impressive with a Pearson correlation coefficient of -0.4. We have not tested for statistical significance, however.
This contradicts Buti and van den Noord (2003). – How about the persistence or low volatility of unemployment?

Charts 5c-d: Demand stabilisation and unemployment persistence

The evidence on volatility is similarly unsupportive of the proposition that strong stabilisers weaken adjustment capacity: there is virtually no relationship discernible and if the outlier Netherlands were taken into account, the OECD indicator of a stabiliser on the benefit side would even indicate a positive relationship, again contrary to what we should find if the Buti and van den Noord (2003) hypothesis holds.26

We see this as evidence that, for the time being, it is safe to assume that conventional demand stabilisation is responsible for these results. To recall them: Stabilisers, be it in the form of structural features like progressivity, aggregate impact or specific effect of certain budget items, show discernible effects on volatility of household spending and even employment. They are ‘quietly doing their thing’ (Cohen and Follette 2000). At least for our set of countries, they seem not to have adverse effects on employment and adjustment. Nor do these results suggest that, in practice, they can be replaced by flexible responses of labour supply.

5 Conclusions and suggestions for further research

Our exploratory study suggests that Lisbon-type reforms, such as lowering the average tax burden and removing unemployment traps of high marginal tax rates, are problematic from the point of view of fiscal stabilisation. This is because they would lower the weight and the responsiveness of member states’ tax systems to shocks and business cycle fluctuations while their potentially positive effects on the benefit side are too small to

26 The Pearson coefficient is +0.35 but this is largely driven by the outlier Netherlands.
compensate. This is worrying, first, because we found evidence that the need for
stabilisation as indicated by the volatility in consumption has not decreased in an era
when governments have stepped up their efforts to reform labour markets and welfare
systems. Negative spillovers from structural reforms on the stabilising qualities of tax-
benefit systems are particularly worrying for EMU members since they have little scope
for discretionary fiscal policy. The current fiscal rules emphasise the role of the automatic
stabilisers in the conduct of country-specific macroeconomic 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 health benefits will be
honoured, but also to cope with the resulting increase in aggregate volatility. This cannot
but undermine the trust in effective government.

Our findings on the size of stabilisers, as summarized in table 2 and chart 4, 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 substituting targeted progressivity for weight, eg.
by raising the progressivity of taxes while lowering the overall tax burden and vice versa.
This is a distinct possibility for countries where the size of stabilisers is largely
determined by one determinant; either strong progressivity combined with low weight
(such as Ireland, or to a lesser degree, Portugal and the UK), or high weight combined
with little progressivity (such as France, Italy, Sweden, Finland and Denmark). This
conclusion should not be misunderstood as offering a continuous tradeoff between
responsiveness and weight; progressivity cannot vary that much and has to be limited as
government gets bigger. But we found evidence that there are more or less effective
combinations of both so that tax-benefit systems that exhibit similar stabilisation
coefficients as others, yet with considerably higher tax burdens, may improve by making
them more responsive and leaner. Furthermore, Lisbon-type reforms on the benefit side
may actually be constructive since their overall thrust is ‘activation’ which in the context
of our study means to replace permanent transfers by temporary ones. Even in such a
win-win situation of structural reforms and fiscal stabilisation, our framework reminds
us, however, that this would simultaneously raise the need for stabilisation since
activation makes incomes more volatile.

These last remarks entail directions for future research. We have only made a start in
exploiting the opportunities provided by EUROMOD to answer questions about what the
effects of policy changes on tax-benefit systems would be if the Lisbon Agenda where
realised. This is not quite as hypothetical a question as the negative press or the
Commission’s own mid-term review on the progress of the Lisbon process may lead one
to expect (CEC 2005a). Lisbon-type reforms have been considerably stepped up, if not
under that name. We intend using EUROMOD to explore the incidence on different
deciles of the income distribution as well as more specific policy changes such as the
introduction of tax credits for low income earners along the lines of Sutherland (2005).
One could also try to assess the impact of entire reform packages with contradictory
effects on the size of automatic stabilisers by clearly differentiating between the two components of size, ie. their responsiveness and their weight.

Another important area of further research, at which we only made a first attempt, is to shed more light on the determinants of the need for stabilisation. Why is it that we find a rise in the volatility of household spending since 1997, sometimes even in countries such as Finland or the UK where the volatility of employment (and income) has actually fallen or not risen very much, respectively? In the same vein, one might ask why we find lower volatility in annual employment data in 1997-2004 than in 1989-1996, while if measured in quarterly data volatility goes up. Higher turnover in labour markets (perhaps reflecting reductions in employment protection) could account for that, yet more research is needed to confirm the underlying causes for this pattern. The overarching interest would be to find out how much of these patterns in volatility are due to externalities of specific welfare state reforms in contrast to secular changes such as increased openness (‘globalisation’), the introduction of the Euro, socio-economic changes in families etc.

Finally, we would like to stress that whatever we will find out about the underlying causes, it is unlikely that fiscal stabilisation can be substituted by more flexible supply-side adjustment. As our discussion of Buti and van den Noord’s (2003) arguments indicated, privatizing social risk management does not appear to yield a double dividend of flexibilisation and stabilisation. Nor, however, do we have reason to simply confirm the double whammy hypothesis that welfare reforms in conditions of fiscal austerity may take perverse directions as well as contributing to macroeconomic instability. Rather, there seems to be a tradeoff between structural reforms that entail some degree of fiscal consolidation and the effectiveness of fiscal stabilisation. This clearly calls for creating some links between the coordination of fiscal policy and welfare state reforms in EU member states.
References:


