

Improving Economic Stability in Europe: What the Euro Area can learn from the United States' Unemployment Insurance

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Abstract

This paper analyses in how far fiscal policy acts as an optimal stabilization tool in the European Monetary Union and how it could be improved. It is econometrically shown that even though sizeable automatic stabilizers exist in EMU, discretionary fiscal policy has counteracted these institutions in a way that the overall fiscal policy stance has been a-cyclical or even pro-cyclical. As a remedy, the paper proposes a EMU-wide unemployment scheme which could be easily blended into existing systems as to make it politically acceptable to all countries. In order to design such a system with optimal stabilization properties, structures and experiences of the United States unemployment insurance are analysed. Finally, the paper presents some estimates on required financial flows for an unemployment insurance for the euro area.

1 Introduction

With the Eurozone approaching its 10th birthday, a new discussion about its stability has gained traction. After an extremely dismal growth performance in some countries since the turn of the century (namely in Italy, Portugal and Germany) and increasing

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signs of some countries losing competitiveness in a degree not known in other currency unions (Dullien/Fritsche 2006), academic economists and bank analysts have increasingly voiced concerns whether some countries might at some point leave EMU (Gros 2006, Roubini 2006, Munchau 2006, Riches-Flores, Mayer). The debate was further fueled when some obscure minister in the cabinet of Silvio Berlusconi demanded to re-introduce the old lira in order to improve Italy's economic plight. While some of this debate can be dismissed as populist noise, the general impression among economists seems to be that adjustment in EMU is working less well than what was originally hoped for.

Especially adjustment to asymmetric shocks (or to a misaligned real exchange rate at the beginning of EMU) seem to have taken much longer than anticipated. Moreover, the lack of monetary policy on the national level seems to have led to self-enforcing boom and bust periods in some countries, effectively prolonging the business cycle (Lane 2006, Dullien/Schwarzer 2005, 2006; Enderlein 2004). As the European Commission (2006, p. 5) puts it in a conclusion of an extensive analysis: “[While] the adjustment process in the euro area is indeed dynamically stable, [...] this channel can operate slowly, and it is not exempt from some overshooting”.

Given this background, economists have started to rethink the dominating opinion of the past years, namely that EMU will work well with the existing low degree of centralization and coordination in fiscal policy making. As it is increasingly becoming consensus that the stability and growth pact together with the broad economic policy guidelines does not actually help to co-ordinate fiscal policy in a matter constructive towards overcoming asymmetric shocks (Buitter 2006), there are increasing demands for a stronger centralization of economic and fiscal policies (de Grauwe 2006). Even the European Commission (2006) now states in its analysis of adjustment in the euro zone: “[Our] analysis suggests that policies may need to help ensure that overshooting is dampened and problematic spillover effects are contained, including by avoiding a pro-cyclical fiscal stance or rapidly addressing undue developments at the sectoral or microeconomic level.” While in contrast to de Grauwe, the commission economists do not propose any move towards a full-fledged political union or to introduce fiscal transfer mechanisms (but further reforms to make labor and product markets more

flexible), the statement underlines the changing stance towards un-coordinated economic and fiscal policy in Brussels.

However, politically, a move towards a significantly larger centralized budget or even a full-fledged political union seems to be rather remote. With the referendum votes against the Constitution Treaty in France and the Netherlands, the political will for grand integration schemes in Europe seems to be amiss.

To overcome this discrepancy, this paper proposes a new element in the EU fiscal policy set-up which could help to alleviate the problems of a missing political union without requiring the national governments to cede a large part of their sovereignty to a European center: The idea is to introduce an unemployment insurance for the euro-countries which would be financed by some EMU wide payroll tax and would pay out benefits to short-term unemployed, thereby cushioning the effect from an economic downturn. In contrast to redistribution or stabilization schemes proposed before (i.e. Italianer/Vanheukelen 1993), this scheme could rather easily be explained to the general voter, as it adheres to easily understandable rules. As the individual jobless person and not national governments were the subjects of this system (and potential recipients of benefits), it might be more acceptable to critics which see a lack of proximity to common people in the working of EMU. Moreover, in contrast to complicated stabilization regimes such as simulated in von Hagen and Hammond (1995), unemployment systems have a number of well working precedents in other federal systems and add to stabilization there.

This paper uses the unemployment insurance of the United States as a starting point. The US system has been chosen as it has been running for almost a century and has a genuine federal-state structure in which single states have retained a lot of discretion over details such as benefit generosity. It is shown that – by combining some ideas of the US system with a more unified financing approach – a significant degree of business cycle stabilization could be achieved with relatively small financing requirements. This proposal would also satisfy what de Grauwe (2006, p. 722ff) calls the “pitfalls” of moral hazard in federal redistribution as it does not reduce the incentive of a single country to adjust to an asymmetric shock.

The rest of the paper is structured as follows: Section 2 reviews the case for fiscal stabilization policy and describes how recent economic research has reinforced the traditional argument on why stabilization matters. It is shown that against the background of New Growth Theory, there is actually more reason to stabilize the business cycle than before. In subsection 2.2 econometric analysis is then applied in order to see whether fiscal policy in EMU has actually been used to actively stabilize business cycle fluctuations. As it is found that fiscal policy in EMU countries has at best been acting a-cyclical (and at worst pro-cyclical), in a way that discretionary policies actually counteracted automatic stabilizers, subsection 2.3 then tries to explain the suboptimal fiscal policy in Europe by the special governance structure of EMU. Subsection 2.4 explains how a EMU unemployment insurance could overcome these political economy problems.

Section 3 describes in detail how the unemployment insurance in the United States of America with its peculiar federal-state structure works. After a short review of its history (subsection 3.1), it describes the flow of funds and benefits of the system (subsections 3.2 and 3.3), analyses which elements actually improve its stabilization properties and assesses the overall stabilization achieved by the system (subsection 3.4 and 3.5). Finally, a short overview over recent reform debate is presented (subsection 3.6).

Section 4 presents a detailed proposal for an unemployment insurance for the euro area. After describing a possible structure which would blend in easily with existing national systems (subsection 4.1), some considerations about revenues and benefit levels are presented (subsection 4.2). Finally, in subsection 4.3, some estimates on the financial volume of the system, payroll taxes required and possible stabilization properties of the system are given for three different set-ups of the system. Section 5 concludes.

2 Stabilization Policy in Europe²

In the theory of monetary integration, it has long been argued that Europe might need a stronger centralization of fiscal policy (see for textbook expositions Baldwin/Wyplosz 2006, p. 358; de Grauwe 2005). Early discussions on European monetary integration such as the MacDougall (1977) report consequently proposed to increase the European Community's budget to 5 to 7 percent in order to be able to provide a meaningful stabilization by fiscal policy in a European monetary union.

According to the arguments deduced from the theory of optimum currency areas (OCA), handing over autonomy over monetary policy requires alternative adjustment mechanisms for asymmetric macroeconomic shocks. According to the classic Mundell (1961) OCA criteria, one possible adjustment mechanism can be the mobility of the factors of production, especially labor. If one region is hit by a negative shock, workers would quickly migrate to other regions, keeping unemployment in the adversely affected region low. An alternative adjustment mechanism could be a high flexibility of wages and prices. If one region is hit by an adverse shock, wages and prices for that region's goods would fall quickly, thus increasing demand again.

However, if a high degree of labor mobility or wage flexibility cannot be attained, alternative mechanisms might be necessary. One of these mechanisms can be fiscal policy, trying to bolster regional demand by increased expenditure, higher transfers or lower taxes if a region is hit by a transitory asymmetric negative demand shock and trying to dampen demand in an exuberant regional boom. Against this background, one could even make the argument that stabilization requirements for fiscal policy are actually bigger in EMU than in other federal entities as the United States of America. First, labor mobility in Europe is lower than the US, not least because there are almost a dozen different languages in EMU and customs still differ more than between regions of the US. Second, wages are usually assumed to be less flexible in Europe, again strengthening the case for more national stabilization policies.

² This section builds heavily on the companion paper, Dullien/Schwarzer (2007).

While this argument has been solidly founded in traditional old Keynesian-style macroeconomic textbook models such as the Mundell-Fleming model and has been widely debated early in the debate on how to structure economic governance for a monetary union,³ it fell into disregard afterwards. This shift in the debate probably had two reasons: First, among academic economists, the belief in the effectiveness of fiscal policy faded with the ascent of New Classical Economics in the late 1980s. Intellectually, some authors claimed that market integration would increase endogenously with EMU, making labor markets more flexible and thus reducing the need for stabilization policy (von Hagen 1992; see also Bertola and Boeri 2002, Blanchard and Giavazzi 2003). Second, political realities of the early 1990s made any closer political union with a larger budget virtually unthinkable.

While the political argument has lost power given the problems encountered with real world EMU, also academic opinions on fiscal policies have altered. One central proposition of the New Classics was the idea of Ricardian Equivalence, the notion that an increase in budget deficits via tax increases or expanded expenditure would be without effect as economic subjects would rationally expect higher taxes as a pay-back in the future and would accordingly already cut their expenditure in the present. In the meanwhile, this argument has lost power. First, there are a number of empirical indications that Ricardian equivalence does not hold in its absolute form (see survey by Riciutti 2003). Second, extensions of modern micro-founded models have provided new rationale for the effectiveness of fiscal policies. There are now a number of models which show that fiscal stabilization policy can be effective if there are households which are liquidity-constrained and have limited access to unsecured loans, as well as models which provide microeconomic rationale for consumers' rule-of-thumb behavior which also renders fiscal policy effective again.⁴

In addition to these revived traditional arguments, recent research both from the field of New Growth Theory as well as from dynamic general equilibrium models has

³ See the special Reports and Studies Issue No. 5/1993 of the European Economy, especially Goodhart/Smith (1993), Majocchi/Rey (1993), Papaspyrou (1993), Italianer/Vanheukelen (1993) and Pisani-Ferry/Italianaer/Lescure (1993).

⁴ See for a survey Andersen (2005).

increased the case for counter-cyclical fiscal policy not only on a regional, but also on an aggregate level. Galí, Gertler and López-Salido (2005) find that business cycle fluctuations distort the efficiency of an economy in a dynamic general equilibrium model if price and/or wage rigidities or other types of market frictions exist to such an extent that the costs can be quite substantial. According to them, major recessionary episodes as the ones experienced in the US in the 1970s or in the early 1980s are related with welfare losses in the magnitude of up to 8 percent of one year's consumption, depending on assumptions of different parameters – a figure well above that quoted by Lucas (2003) in his critique of stabilization policies. In a further paper, Galí (2005) argues that these results reinstate the old Keynesian proposition that it might be “require[d] that appropriate fiscal and monetary policies are undertaken to guarantee that a higher level of activity is attained.”

In a New Growth Theory framework, Aghion and Howitt (2006) go even further. They argue that excessive macroeconomic fluctuation might hinder companies from conducting an optimum level of research and developments, especially if financial markets are underdeveloped and firms may thus not be able to bridge periods of low earnings with fresh credit.

Both the Galí/Gertler/López-Salido as well as the Aghion/Howitt arguments would call for a strong counter-cyclical fiscal policy: Not only are labour and product markets in Europe generally perceived to be more inflexible than in the United States (thus increasing price and wage stickiness which would lead to higher welfare costs of recessions), financial markets are also generally seen as less developed than on the other side of the Atlantic. In this framework, stabilization policy would move from an old-Keynesian policy of mere counteracting of business cycles toward a complement to the Lisbon process aiming at improving the long-run productivity, efficiency and competitiveness of the European economy.

Finally, in the context with the Lisbon agenda of structural reforms to improve market efficiency, there might also be a political economy argument for an improved stabilization policy. In recent years, even organizations such as the OECD which usually focus on supply-side reforms have argued that a sensible macroeconomic management might help to secure support for structural reforms and that “more robust domestic demand may [...] help avert a stalling of economic reforms, in a context

where their potential deflationary impact raises apprehensions in many segments of public opinion.” (OECD 2005, p. viii).

2.1 The case for automatic stabilizers

However, while the acceptance for fiscal policy as a stabilization tool has grown, there remain strong reservations against discretionary fiscal stabilization policy.⁵ The problems start with the information problem. In order to enact appropriate expansionary policies, a macroeconomic shock needs to be detected early and the type of the shock analyzed accordingly. As most economic data is only available with a significant time lag (in most European countries, GDP data is only published 6 weeks after the end of a quarter) and is subject to large volatility and revisions, there is a danger that a lot of fluctuations are only detected with a significant delay. However, by itself, this should not necessarily be an argument against discretionary fiscal policies. After all, monetary policy does aim at stabilizing fluctuations as well even though central banks are faced with the same information dilemma as governments. A second argument against discretionary fiscal policy is that budgetary processes in most industrialized countries can result in a long lag between the first idea of conducting a counter-cyclical: Usually, a budget is decided on once a year, even though recent evidence as the tax cuts in the USA after September 11, 2001 (in which tax return checks were sent to households were quickly after Congress agreed on tax cuts as a stabilization tool) show that the process can in principle be sped up.

Finally, economic considerations in modern models hint that stabilization policy is most effective when it is limited to a short period of time (Andersen 2005). The argument behind this conclusion is that a permanent increase in deficits will lead to an adjustment of the public sector towards the expected higher tax rates in the future, while a temporary increase might just provide additional income to households of which a part is liquidity constraint. If fiscal policy is set in a discretionary manner, there might be a reluctance to cut back public spending or increase taxes again even after the need for stabilization has ceased just because the rolling back of these

⁵ See for a recent survey Andersen (2005).

measures is unpopular. Thus, there is a broad consensus that fiscal stabilization works best via automatic stabilizers.

2.2 Experience in the first years of EMU

In principle, one should think that Western Europe's welfare states (and thus the EMU countries) are well positioned to have their fiscal policies working automatically as a stabilizing tool. With relatively high government-revenue-to-GDP ratios and progressive tax systems as well as rather generous social security system, automatic stabilizers should be strong. This is also the result of recent estimates of the stabilization properties of tax and benefit system. In a detailed analysis of tax and benefit systems, van Den Noord (2000) finds that in most EMU countries, a change in GDP by 1 percent actually changes the general government's budget balance by 0.5 percent of GDP, compared to only 0.25 percent for the US. In a simulation with the cyclical fluctuation of the 1990s, he finds that these automatic stabilizers have thus erased roughly 25 percent of the fluctuations in GDP in the larger EMU countries (the argument being that an increase of the deficit of 1 percent in the deficit actually increases GDP by 0.5 percent).

However, as Van Den Noord notes, it is important to look beyond the automatic stabilizers to evaluate the overall stabilization outcome from fiscal policy. After all, it is possible that one country manages to counteract cyclical fluctuations with discretionary fiscal policy, even if automatic stabilizers are rather small. Similarly, it is possible that a government counteracts the effects from the automatic stabilizers with a pro-cyclical discretionary fiscal policy, thus dampening or even completely eliminating the positive effects from the automatic stabilizers. This was exactly what some critics of the European Stability and Growth Pact had warned about: According to them, if countries with a budget deficit close to the limit of 3 percent of GDP were hit by a recession, they would be forced to cut back spending or increase taxes in the downturn, thus eliminating the stabilization effect from the automatic stabilizers.

So far, most authors who empirically tried to model the effect of EMU on fiscal policy concluded that fiscal policy has not become more pro-cyclical after the beginning of European Monetary Union, noting however that overall fiscal policy in Europe was acyclical to pro-cyclical even before the start of EMU (i.e. Galí/Perotti

2003). Using time series which include also the long period of sub-par growth in many European countries after 2001 as well as the first period in which the excessive deficit procedure was used against countries in EMU,⁶ this paper comes to different conclusions.

Table 1 shows the results from an econometric analysis of discretionary fiscal policy following the approach used by Galí/Perotti (2003), but using a time series up to the year 2006 (instead of up to 2002 as it has been done in the original work) and comparing the time before the start of EMU in 1999 with the period since (Galí/Perotti had compared the period up to the adoption of the Maastricht Treaty with the time afterwards). The equations estimated are thus:⁷

$$d_t^* = c + \phi_{BEMU} E_{t-1} x_t + \phi_{EMU} E_{t-1} x_t + \phi_{lag} d_{t-1}^* + \phi_{debt} b_{t-1} + u_t$$

With d_t^* denoting the cyclically adjusted primary government balance, d_{t-1}^* denoting the lagged government balance, x_t denoting the output gap and b denoting the debt to GDP level. The two coefficients ϕ_{BEMU} and ϕ_{EMU} allow for different reactions for the time before EMU and in EMU, with the first one being applied for the years until 1998 and the second one for the period starting in 1999. The idea behind this analysis is as follows: The cyclically adjusted primary budget balance is the current balance adjusted for the workings of the automatic stabilizers and the debt service. As the deficit beyond the automatic stabilizers and beyond the interest service can be seen as the discretionary fiscal policy variable, its reaction to the output gap shows in how far policy makers are reacting to the business cycle. Including the debt level into the equation just mirrors the assumption that policy makers are nevertheless concerned about the overall level of public debt and aim at attaining a certain debt-to-GDP-ratio.

⁶ The Commission started the Excessive Deficit Procedure against Portugal with its report in September 2002 and against Germany in November 2002.

⁷ For details of the estimations as well as instruments applied, please refer to the appendix.

Country	c	(t)	Φ_{lag}	(t)	Φ_{BEMU}	(t)	Φ_{EMU}	(t)	Φ_{debt}	(t)
aut	-8.44	(-0.75)	0.54	(1.93)	0.47	(0.56)	0.04	(0.09)	0.14	(0.80)
bel	1.76	(0.61)	0.48	(1.86)	-1.04	(-1.71)	0.71	(0.88)	0.01	(0.26)
deu	2.09	(0.80)	2.07	(2.43)	1.01	(1.31)	-1.52	(-1.91)	-0.04	(-0.97)
e12	-17.35	(-3.20)	0.31	(1.48)	-0.30	(-1.63)	-0.04	(-0.35)	0.26	(3.20)
esp	7.58	(2.85)	-0.06	(-0.17)	-0.17	(-0.52)	-0.38	(-0.99)	-0.09	(-2.38)
fin	-1.04	(-0.39)	0.58	(2.22)	0.21	(0.87)	0.85	(2.27)	0.05	(1.43)
fra	-1.23	(-0.87)	0.74	(3.13)	-0.38	(-0.93)	-0.08	(-0.17)	0.02	(0.74)
gbr	-7.36	(-4.13)	0.76	(6.48)	0.20	(0.57)	0.74	(0.79)	0.17	(4.32)
irl	1.14	(0.75)	0.65	(2.08)	0.32	(0.97)	-0.49	(-1.84)	0.02	(0.64)
ita	-2.74	(-0.32)	0.36	(0.97)	-1.02	(-1.52)	-0.02	(-0.05)	0.04	(0.48)
lux	-0.87	(-0.05)	0.50	(1.22)	-0.18	(-0.12)	0.06	(0.05)	0.29	(0.10)
nld	-1.63	(-0.46)	1.11	(1.27)	1.47	(1.03)	-0.88	(-1.14)	0.03	(0.60)
prt	17.00	(0.69)	0.14	(0.23)	0.39	(0.73)	-1.25	(-0.95)	-0.29	(-0.69)
swe	-1.71	(-0.28)	0.67	(2.97)	-0.68	(-0.45)	0.20	(0.28)	0.05	(0.53)
jpn	-3.16	(-2.60)	0.64	(4.35)	0.59	(1.88)	0.09	(0.32)	0.01	(1.10)
che	-2.10	(-0.82)	0.26	(0.81)	0.59	(1.75)	0.14	(0.29)	0.06	(1.11)
can	-5.54	(-1.90)	0.88	(5.08)	0.16	(0.46)	-0.94	(-1.67)	0.08	(1.89)
usa	-11.39	(-3.34)	0.73	(8.71)	0.60	(1.84)	0.67	(2.34)	0.19	(3.36)

Table 1: Reaction of discretionary fiscal policy to changes in the output gap

A number of the results mirror those of Galí/Perotti: Overall, discretionary fiscal policy in the run-up of EMU seems to have been slightly pro-cyclical, especially in Belgium and Italy, but also (albeit not statistically significant) in France and Spain.⁸ This probably reflects the governments' resolve to get their budget deficits down to meet the Maastricht criteria for joining EMU and in the case of Belgium and Italy the already high debt level. After the beginning of EMU, discretionary fiscal policy seems to be acyclical overall, just as Galí and Perotti have found.

However, the details on the time after EMU differ from the Galí/Perotti-results in an important manner: In the two countries which were first subject to the excessive deficit procedure, Germany and Portugal, fiscal policy turned strongly (albeit in the case of Portugal the coefficient is not statistically significant at the 10-percent level) pro-cyclical after the introduction of the euro. This result actually shows that the concerns of those that have warned that the Stability and Growth Pact might have hindered the working of the automatic stabilizers have some relevance and that this might thus have prolonged the economic downturn in these two countries (a period which was not included in the Galí/Perotti analysis). In fact, in Germany, the Schröder

⁸ Note that negative coefficients denote pro-cyclical fiscal policies while positive coefficients show counter-cyclical fiscal policies.

government with its *Hartz* labour market reforms actually cut unemployment benefit duration and benefit levels for the long-term unemployed in the downturn, thus actively reducing the scope of the automatic stabilizers. In Portugal, the VAT was increased in a midst of an economic slump in order to lower the budget deficit, even though the country has not been subject to the corrective arm of the Stability and Growth pact. Interestingly, fiscal policy in Ireland also turned pro-cyclical (the coefficient is highly significant).

The developments in the euro-area are even more interesting if one compares them with those in other major OECD economies. Among the world's largest four economies (US, Japan, Euro-Zone and Great Britain), the euro-zone is the entity for which there is the fewest evidence for a counter-cyclical discretionary fiscal policy both prior to 1999 and after the creation of the euro. In the US, discretionary fiscal policy has always been strongly (and in a statistically significant manner) counter-cyclical. Japan ran a strongly counter-cyclical fiscal policy prior to 1999, but no systematic reaction to the cycle can be detected since. In Britain, the degree of counter-cyclicity seems actually to have increased after 1999, even if the coefficients are not statistically significant.

However, even though discretionary fiscal policy has been pro-cyclical in some EMU countries, this does not necessarily mean that overall fiscal policy has not been counter-cyclical. In order to check whether the overall policy stance has been counter-cyclical, a number of simple regression of the actual deficit on the output gap have been estimated. Table 2 shows the results from an estimation of equations like:

$$d_t = c + \phi_{lag} d_{t-1} + \phi_{gap} x_t + \phi_{debt} b_{t-1} + u_t$$

With d_t denoting the headline deficit and all other variables defined as above.

Regarding both discretionary fiscal policy and automatic stabilizers together, over the whole period from 1991 to 2006, only for two small countries in EMU, namely Austria and Finland, a statistically significant reaction of fiscal policy towards the output gap can be detected. In these countries, fiscal policy has thus actually systematically stabilized cyclical fluctuations. In all the other EMU countries, the coefficients are mostly small and all not statistically significant.

Again, this contrasts with the US and Japan:⁹ In these countries, overall fiscal policy reacts strongly counter-cyclically towards the output gap, with coefficients as high as 0.9 in the US and 0.6 in Japan. Thus, discretionary fiscal policy in EMU obviously counteracted the automatic stabilizers to a degree that no significant stabilizing effect of overall fiscal policy has remained.

Country	C	(t)	Φ_{lag}	(t)	Φ_{gap}	(t)	Φ_{debt}	(t)
Aut	-14.08	(-2.63)	0.59	(2.81)	0.46	(1.78)	0.21	(2.46)
Bel	-5.26	(-1.22)	1.17	(5.83)	-0.18	(-0.59)	0.05	(1.28)
Deu	-0.38	(-0.12)	1.05	(1.72)	-0.06	(-0.18)	0.01	(0.27)
e12	-18.52	(-4.38)	1.02	(3.88)	-0.19	(-0.80)	0.27	(4.15)
Esp	9.04	(1.09)	-0.03	(-0.04)	0.67	(0.85)	-0.18	(-1.03)
Fin	-3.61	(-1.51)	0.57	(2.81)	0.75	(2.95)	0.10	(2.02)
Fra	-8.98	(-1.47)	-0.09	(-0.09)	0.76	(0.83)	0.10	(1.85)
Gbr	-8.29	(-5.07)	0.82	(6.03)	0.45	(1.23)	0.19	(4.50)
Irl	-1.34	(-0.52)	2.16	(2.20)	-0.62	(-1.25)	0.03	(0.66)
Ita	-9.81	(-2.79)	0.79	(9.96)	-0.14	(-0.60)	0.08	(2.74)
Lux	-7.74	(-1.74)	0.40	(1.40)	0.37	(1.34)	1.37	(1.83)
Nld	-1.90	(-0.52)	1.07	(1.60)	-0.10	(-0.26)	0.04	(0.50)
Prt	-14.60	(-2.20)	0.80	(2.74)	0.31	(1.62)	0.24	(1.93)
Swe	-11.87	(-1.32)	1.30	(2.37)	-0.66	(-0.66)	0.21	(1.42)
Jpn	-4.14	(-4.41)	0.69	(5.15)	0.57	(2.74)	0.02	(2.30)
che	-3.78	(-2.79)	0.33	(1.36)	0.73	(3.05)	0.08	(3.01)
can	-8.39	(-2.13)	1.43	(3.82)	-0.70	(-0.98)	0.10	(2.27)
usa	-11.75	(-6.09)	0.75	(7.40)	0.91	(5.31)	0.19	(5.83)

Table 2: Reaction of overall fiscal policy to the output gap

2.3 Explaining Europe's failure to stabilize

So even though European countries might need a stronger counter-cyclical fiscal policy than Japan or the United States, in fact the empirical outcome is the opposite. One explanation for this outcome might be the actual level on which stabilization policy in Europe is conducted. With the European budget extremely small in relation to GDP and focused on structural not cyclical expenditure, stabilization policy is left to the single nation states. As Goodhart/Smith (1993, p. 423ff) note, the smaller and the more open a country, the less incentive a local government will have to use fiscal stabilization policies: In a very open economy, a large part of the stabilization effort

⁹ It should be noted here, however, that the Durbin-Watson test statistics for some EMU countries point towards misspecifications in the equation. However, as respecifying the equation for each country would lead to a loss in comparability, they are reported nevertheless.

can be expected to result in higher imports and thus beneficial effects for the trading partners, not for the home economy. Thus, fiscal stabilization policy has positive external effects. To a certain degree, stabilization policy thus has public goods character for a currency union. The costs of stabilization policy in the form of higher government debt, however, has to be borne completely by the national government which undertakes such a policy. If a single government weights its own benefits from stabilization against its own costs for such a policy, it will rationally decide for a degree of stabilization which is significantly lower than it would be optimal for the currency union as a whole.¹⁰ This argument would also explain why other studies such as Lane (2003) or Aghion/Marinescu (2006) find that open economies usually run a more pro-cyclical fiscal policy than more closed countries. As a remedy for this collective action problem, Goodhart/Smith (1993) propose to place stabilization policy at the center of a monetary union.

The extent to which the special structure of the European Union might hinder fiscal stabilization policy is thereby not trivial: According to OECD data, the average EMU country has an import penetration (measured as imports as share of final expenditure) of roughly 35 percent, compared to 15 percent in the US and only 10 percent in Japan.¹¹ In addition, this problem is likely to get worse over time: With an increasing economic integration of goods and service markets in EU, the import penetration of the member countries can still be expected to grow. Especially the Southern European countries are still only relatively little integrated, with import penetration in Italy running as low as 20 percent, significantly below of the figure for Germany (30 percent) or the Netherlands (40 percent).

2.4 Unemployment Insurance as a stabilizer

Thus, the degree of counter-cyclical fiscal policy in EMU seems to be suboptimal: Theory suggests that EMU and its member countries should have a more counter-cyclical fiscal policy than the US (given both the less integrated labour and product markets as well as less developed capital markets). In contrast, empirical evidence

¹⁰ This is nothing else than Samuelson's (1954) seminal analysis, that the private provision of goods with positive externalities leads to an under-provision of these goods.

¹¹ Data from OECD Economic Outlook Autumn 2006.

suggest that fiscal policy is much less counter-cyclical than in the US. Consequently, the important question is: How can fiscal policy in EMU be reformed so that it plays a more constructive role in stabilizing business cycle fluctuations?

An obvious solution would be to put more of the responsibility for stabilization to the central European level. However, this approach poses a number of problems in the current institutional set-up. First, the EU budget is very small with a size of little more than 1 percent of GDP. Second, for a meaningful stabilization policy, the EU would need to be able to run deficits and surpluses in its central budget. Under current rules, borrowing by the EU in the capital market is not allowed, and budget rules prevent the build-up of large reserves. Third, a large share of the budget is allocated to expenditures which by their nature have no or very little stabilizing effects: A large share of EU expenditure is still paid in agricultural subsidies which many farmers rely on for the current income and which is paid out regardless to a country's position in the economic cycle. Moreover, money for infrastructure construction from the cohesion funds as well as money for transport, energy and telecommunication networks is spent regardless of the cyclical position and might in some cases even have contributed to the boom and bust cycle (in the financial framework until 2006, significant amounts of money were spent for infrastructure investment in Spain at a time where the construction sector was already booming, thus further fueling the boom). While there might be some possibilities to disburse the money in a less destabilizing way,¹² it would be an illusion to hope to actually do much cyclical stabilization with this kind of budget framework.

One way forward to counter this problem would be a move towards a full-fledged federal Europe. Examples of other federal governments (i.e. USA, Germany, Brazil) show that these political structures usually are able to conduct a significant amount of economic stabilisation, both over a federal tax system as well as their federal expenditure. In these cases, the federal governments have much more powers and responsibilities, the power to borrow in international capital markets and – most importantly – revenues which amount to a much larger share in the economy. However, such a move towards a federal Europe seems highly unlikely in the near

¹² For some proposals, see Dullien/Schwarzer (2007).

future. The proposed constitution treaty does not increase the scope for the EU budget nor does it propose any taxes on the EU level. Finally, the interest in a federal budgetary system might be highly asymmetric among EU member states: It is only the members of EMU that really have an economic rationale to push for a stronger fiscal center, while states which are only member of EU (such as Britain or Sweden) do not have much interest to yield any further fiscal power to Brussels (given that they still have their national monetary policy to stabilize economic fluctuations).

One alternative could be the construction of a system that is specifically designed to stabilize economic fluctuations. Even before EMU started, such proposals have been discussed. Italianer/Vanheukelen (1993) propose a system in which member states receive a specific payment from the EU government depending on the relative unemployment rate in that member state. According to their computations, only 0.2 percent of GDP would be needed to achieve a stabilization of the regional business cycle of the magnitude seen in the US. However, the proposal has a number of drawbacks. The first problem is that such a scheme would not change the political economy of stabilization in a monetary union of a number of very open economies. Even after receiving the transfer, a national government of a very open economy in EMU might still decide not to use the money for stabilization purposes (but for paying back its debt) as not all of the benefits from stabilization would reach its own constituency. Second, it is not at all obvious how the national government receiving the transfer can use it quickly to stabilize GDP and employment. Many of the discretionary expenditures of national governments are planned for in advance. In principle, many of the objections against discretionary fiscal stabilization policy raised above would also apply to the spending of special EU transfers by the national governments.

Another alternative both to a move towards full-fledged federalism and to a transfer system which sends money to national governments would be the introduction of a pan-European unemployment insurance at least for the EMU states. Financed with a European payroll-tax and paying out benefits to those who become unemployed in a downturn, it would act as an automatic stabilizer outside the reach of national governments so that the political economy arguments which hinder stabilization would not apply: As the benefits go directly to the unemployed, and the unemployed

can be expected to spend the transfers quickly (see i.e. Gruber 1997), the payments can be expected to end up as stabilizing demand. Yet, instead of giving the EU broad power to taxation, only a very limited power to levy a small (limited) payroll tax would be necessary, possibly making the acceptance of the system easier for those governments which are sceptical towards a federal Europe.

For construction such a system, important lessons can be drawn from the unemployment insurance system of other federal countries. One especially interesting model could be the unemployment insurance of the United States as it is a unique combination of federal and state elements which in principle might suit the European Union with its strong national governments well. The next sections are thus analyzing the workings of the American unemployment insurance in detail.

3 Set-up of the US unemployment insurance system

The United States unemployment insurance has a number of particularities which only can be understood when looking at them in the historical and institutional context of the US. In the following sections, I will thus first give a very brief overview of the origins of the US system.

3.1 History

Discussions about unemployment insurance in the United States started as early as the second decade of the 20th century.¹³ There was a very limited number of voluntary unemployment plans, either set up by trade unions, agreed upon between employers and employees or company plans, some of them even introduced before 1900. After the introduction of a government-supported unemployment insurance in Britain in 1911 and the depression of 1914/15, interest in unemployment legislation grew. A first bill proposing unemployment insurance was introduced in the Massachusetts legislature in 1916, but did not become law. As an economic boom followed the dire economic performance after 1915, interest in unemployment insurance at first declined, though a number of bills were introduced in different state legislatures over the decade.

¹³ This section borrows heavily from Blaustein (1993) and Baicker et al. (1998).

When the great depression hit in the early 1930s and unemployment surged, interest in an unemployment system greatly increased again as it became clear that the voluntary schemes were greatly insufficient for the number and hardship of the displaced workers. A number of state legislators formed commissions to probe into the idea of forming state-sponsored unemployment insurances. In 1931 alone, 52 bills were introduced in 17 states. Wisconsin was the first state to pass a bill on unemployment insurance in 1931 which was signed into law on January 29, 1932. The law had provisions for contribution payments starting on July 1, 1934 and benefits starting on July 1, 1936. Though this system had a number of particularities (the system was set-up with different reserve accounts for each employer from which benefits were only paid out and reductions in contributions for those firm which had not drawn from their reserve account), it can be seen as the first forerunner of today's unemployment insurance in the US. Intense discussion followed in other states with a dispute growing between those who wanted to use unemployment insurance to provide a relief to the workers' distress and those who focused more strongly on prevent unemployment by confronting the employers with some additional costs for laying off workers (as it was implicit in the Wisconsin set-up). However, no other state followed suite to introduce an unemployment insurance of its own until the end of 1933.

One of the main concerns among state legislators was the warning of businesses that they would be faced with a comparative disadvantage compared to competitors from states without an UI. Thus the states were faced with a classical coordination problem: While many might have been happier with unemployment insurance, the danger was that their regional economies would be hurt should they move first. Thus, it became increasingly clear that federal legislation would be necessary in order coordinate the states' legislative processes.

A first attempt to form a federal unemployment insurance legislation, the Wagner-Lewis act, failed to pass in Congress in 1934 due to a number of unresolved issues. Among others, there were concerns whether the Supreme Court would uphold the law as it could be seen as an over-extension of federal powers with regard of the 10th

amendment to the US constitution.¹⁴ Moreover, the experts questioned by the subcommittee of the House Committee on Ways and Means could not agree whether the funds of the unemployment insurance should be pooled or should be administered in employer-specific accounts, as it had been the provision of the Wisconsin law. President Roosevelt thus informed a number of supporters of the bill that he would favor a delay and present a comprehensive program to be presented to the newly elected Congress early in 1935.

The final provisions that were passed in 1935 as part of the “Social Security Act” (which also provided for the old-age retirement system) included a number of compromises which have to be seen in the context of both the potential conflict with constitutional law as well as the wish to leave room for experimentation as there was only very limited practical experience with unemployment insurance in the United States at that moment and different schools disagreed on important details of the system. Three elements of the US unemployment insurance system thus stick out as being unique in OECD perspective:

- States kept almost complete discretion in defining eligibility and benefits paid under their respective UI system
- Federal regulation of unemployment insurance was brought about in a very indirect way: The Federal government legislated a national payroll tax to be paid by employers for which was given a significant tax credit if the single state had created a state unemployment insurance which met specific criteria, thus not forcing states to set-up an UI, but leaving them in principle the choice not to obey and go different legislative ways
- States are asked to set up their own systems of experience rating by which they could experiment with different formulas how to calculate contribution

¹⁴ The 10th amendment states that “[t]he powers not delegated to the United States by the Constitution, nor prohibited by it to the states, are reserved to the states respectively, or to the people”. As there is no provision in the constitution to regulate state unemployment insurances, this was seen as an obstacle for an outright regulation.

rates as a function of the employer's employment record, in order to "stabilize employment".

After the passage of the Social Security Act in Congress, a number of states remained at first reluctant to pass their own legislation to set up their own unemployment insurance. Many were unsure about the constitutionality of the SSA¹⁵, did not want to get into introduction of a state unemployment insurance in the election campaign of 1936, and only passed bills in the last moment to have their laws certified before the federal unemployment tax became first due on January 31, 1937. As many states rushed towards passing laws in the late days of 1936, they resorted to use model provisions provided for by the newly created Social Security Board. As Blaustein (1993, p. 160f) puts it: "Since most states made use of the model draft bills and other technical assistance provided by the Social Security Board in developing their legislation, the laws enacted at the outset were probably more alike than at any other time."

Over the following decades, the system expanded the scope of workers covered by the payroll tax. Both tax rates and the taxable wage base was increased, albeit the increase in the latter did not keep pace with the increase in wages. Today, almost all workers in the US are covered by the unemployment insurance system, with the exception of agricultural workers, household workers and self-employed. However, over the decades, eligibility criteria were tightened, so that today, a much smaller percentage of the unemployed actually draws benefits from the system than in the past. According to Blaustein (1993, p. 33), almost 50 percent of total unemployment was actually insured, a rate that rose to more than 60 percent in the mid-1970s, but has since declined and hit a low of only 30 percent in 1984.

In spite of these changes, in principle, the main elements of the 1935 unemployment insurance remain in place until today. The US unemployment insurance system thus still remains a hybrid state/government program with no comparable structure elsewhere in the world. While it has a federal umbrella, many of its details are left to the states. Moreover, the system is designed in a way that allows the states to create

¹⁵ The federal provisions of the UI system were upheld in the Supreme Court on May 24, 1937.

their own unemployment insurance, but creates very strong incentives that they follow some basic federal guidelines.

3.2 Finances

According to the Social Security Act (SSA) and the Federal Unemployment Tax Act (FUTA) in its current form, each employer has to pay a payroll tax of 6.2 percent of taxable wages (wages of up to \$7000 per worker annually) into the Federal unemployment insurance. From this FUTA, the federal government reimburses the states both for the administration costs of their state unemployment system as well as for extended benefits. However, as soon as the state in which the employer is located has a federal approved state unemployment insurance in place¹⁶ in which an employer pays into, his federal payroll tax for UI is reduced to 0.8 percent of taxable wages.¹⁷

By this way, the federal government has created an immense incentive for the states to set up their own unemployment insurance. As benefits are only paid out by the state unemployment insurance, a decision by a single state not to have an unemployment insurance of its own would result in the employers in that state still having to pay 6.2 percent of taxable wages into the federal unemployment insurance while no money from the federal system would flow back to that state.

In fact, all of the US states have now state unemployment insurances in place which reduce the companies' payments to the federal unemployment insurance to only 0.8 percent of taxable wages. The major part of benefits and revenues in the UI is thus collected and paid by the state governments. The maximum state payroll taxes for financing the state unemployment insurance thereby vary from 5.4 percent in a number of states (among them California, New Jersey and Florida) to as much as 10.96 percent in Maine with the taxable base (the wage per worker up to which the

¹⁶ For details on the requirement for federal approval, see Department of Labour (2006a).

¹⁷ Originally, the rate was even only 0.6 percent. However, there was a 0.2 percentage point surcharge legislated in 19xx, a provision that was extended in 19xx and is now set to expire at the end of 2007.

payroll tax is payable) varies from the federal minimum of \$7000 in a number of states (among them again California, Florida) up to \$30,900 in Washington.¹⁸

However, since all of the states are required by federal legislation to have some kind of experience rating in place (by which the payroll tax rate varies with the single firms' firing record), only a small share of the employers actually pay the top rate. In addition to the payroll tax, employees in Alaska, New Jersey and Pennsylvania have to pay an additional UI tax (Department of Labor 2006a).

All revenue from the federal and the state unemployment taxes goes into the federal unemployment trust fund, which is divided into 59 accounts and is administered by the US Treasury. The 59 accounts have the following purposes and financial relationships (Figure 1 shows the relationships graphically):¹⁹

- **53 accounts for the 50 states plus the District of Columbia, Puerto Rico and the Virgin Islands** (which are considered as states for unemployment matters): The states' unemployment tax revenues are placed into these accounts. The states are authorized to use these funds for paying out unemployment benefits, both regular and extended (see below). Moreover, federal reimbursements of the states' administrative costs for running their UI. The states are not allowed to use the funds for general budgetary purposes.
- **The Employment Security Administration Account (ESAA)**: All federal unemployment taxes first go into this account. From this account, the states are reimbursed the costs for running their UI administration. Moreover, 20 percent of the monthly ESAA activity goes into the Extended Unemployment Compensation Account.
- **The Extended Unemployment Compensation Account (EUCA)**: From this account, the federal government supplements extended unemployment benefits (see below). The account is filled by the 20-percent-share of the

¹⁸ Kletzer/Rosen(2006) put the weighted average taxable wage base for 2006 at \$11,305. For details on the single states, see also Department of Labor (2006a, 2006b).

¹⁹ This exposition follows Scott/Whittaker (2005).

ESAA activity. However, if the balance in this account is above 0.5 percent of insured wages (this ceiling was \$18.98 billion in 2004, see Scott/Whittaker 2006), the excess amount flows into the Federal Unemployment Account.

- **The Federal Unemployment Account (FUA):** From this account, states can get loans for their own state unemployment accounts, should they run low on funds. The system thus prevents states from having to cut their benefits in a downturn. Moreover, if both the EUCA and the FUA hold funds of more than 0.5 percent of insured wages each, the excess of this amount in the FUA is distributed to the single states' accounts by a process called "Reed Act".²⁰
- **Federal Employees' Compensation Account:** This account finances benefit payments to former federal and military employees. It is financed by contribution from US agencies.
- **2 accounts related to the Railroad Retirement Board**²¹

The money in the trust fund is "invested" in Treasury papers, thus reducing net borrowing requirements of the federal government when the funds are increased and increasing net federal borrowing requirements when money is paid out of the accounts. Interests on these loans are credited to the trust funds. Thus, from a cash-flow perspective, the set-up is equivalent to a system in which the whole insurance is run by the federal level.

If a state UI account runs low on funds, it can get a loan from the Federal Unemployment account, which is repayable with interest. However, over the long run, no state is allowed to run deficits in its unemployment trust fund account. If a state

²⁰ Note that regular Reed Acts are a very rare occurrence. In fact, only in six years (three in the 1950s and three from 1999 to 2001), regular Reed Act distributions have occurred. In addition, the distribution of \$8 billion from the EUCA to the states' unemployment trust funds in 2002 has also been labeled "Reed Act Distribution" even though the EUCA/FUCA accounts were not at their limit and the extra distribution was discretionally legislated by Congress.

²¹ The special funds for the Railroad Retirement Board will not be covered in more detail in this paper.

fails to repay its loans in time, the system automatically increases the payroll tax on that state's employers. A number of states have thus provisions which increase payroll taxes automatically should their unemployment account run out of funds.

In addition to the financial flows described above, the unemployment insurance occasionally receives additional funds from the general federal budget in dire economic times. Special extended benefits programs (described in 3.4.2 under the term "emergency unemployment compensation") have been legislated in all of the most recent recessions. Since the mid-1970s, most of these programs have (at least partly) been paid for by general tax revenue (the notable exception was the 2001 recession when the temporary emergency unemployment compensation was completely funded from the EUCA).

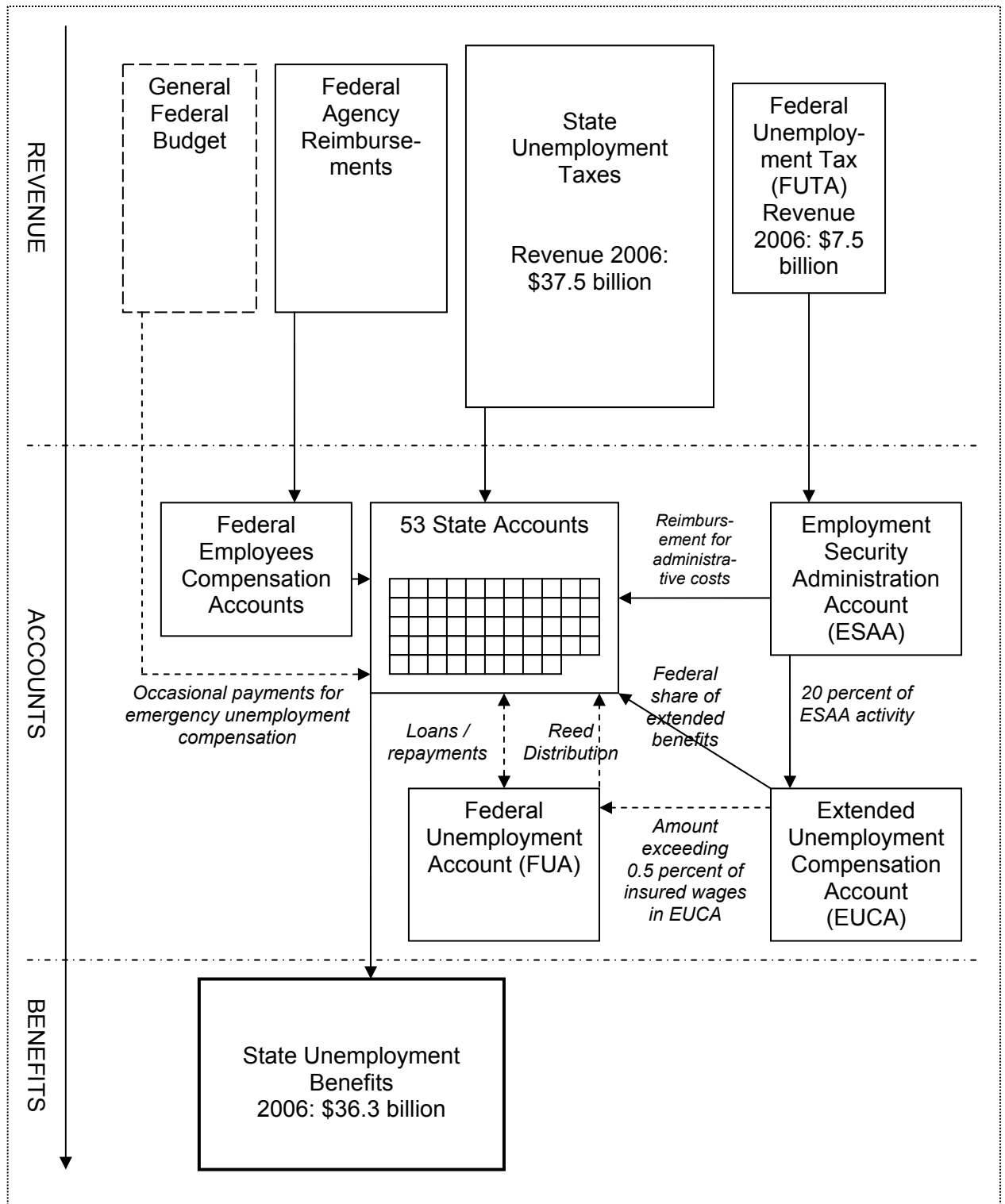


Figure 1: Financial Flows in the US unemployment insurance

3.3 Benefits

Benefits and eligibility criteria are set by the states and therefore vary widely. All states have rules in place how much a worker has to have earned in taxable wages in a base period prior to getting unemployed as well as the length of job tenure in order to qualify for UI benefits. Moreover, all states require the unemployed to have lost the former job involuntarily due to a reason found on a list of acceptable causes (which albeit varies from state to state) as well as being available to acceptable employment.²² In all states, basically all workers except agricultural workers, household workers and self-employed are included.

The benefit amount is usually calculated on a weekly basis and again varies widely across states, both in absolute amounts and relative to the state's average weekly earnings. Most states strive at replacing half the lost wages, but some are more generous. Usually benefits are capped around half of 50 percent of the state's average wage, though some states try to replace half the wages lost up to two thirds of the average wage. Some states pay extra benefits if the unemployed has any dependents. Puerto Rico has the lowest maximum weekly benefits with \$133, while Massachusetts (\$551 to \$826), Minnesota (\$350 to \$515), New Jersey (\$521) and Rhode Island (\$492 to \$615) figure among the most generous states (Department of Labor). According to the Council of Economic Advisers (2006), the average weekly benefit for the entire country was \$262.5.

As the amount, also the duration of benefits varies widely. Some states have a uniform duration of benefits of 26 weeks (6 months), while others vary their benefits according to the previous job history of the unemployed. Only a very small number of states (Massachusetts, Montana and Washington) have a provision for regular unemployment insurance benefits beyond 26 weeks. So, in conclusion, one can say that the US unemployment insurance helps bolstering short term unemployment for those who used to hold a regular job, while it does not provide relief for long-term unemployed. In an economic slowdown, this is exactly the group of workers in which the deterioration of incomes becomes most visible. By providing these people with

²² See for a more in-depth analysis Kletzer/Rosen (2006)

replacement income, consumption can be stabilized quite efficiently as has been nicely shown by Gruber (1997).

3.4 Additional stabilization elements

In addition to these regular benefits, there are a number of elements in the US unemployment insurance which can be expected to work in a way that additionally stabilize aggregate demand.

3.4.1 Federal-State Extended Benefits

One of the elements which increase the stabilization properties of the system are the extended benefits (EB). Since 1970, federal law has provided for the extension of the duration of benefits in periods of economic difficulties.²³ When unemployment reaches certain levels, states are required to extend the benefit duration by 50 percent up to a combined maximum of 39 weeks. The amount of benefits equals that of the original unemployment benefit. In addition, there are additional provisions under which states *may* chose to extend their regular benefit duration. In both cases, half of the extended benefits paid out are covered by the federal government out of the Extended Unemployment Benefit Account, thus shifting a larger part of the burden to the federal level than in the case of the regular benefits.

The trigger for a mandatory extension of unemployment benefits by 13 weeks is that the insured unemployment rate (IUR) for the previous 13 has been at least 5 percent and 120 percent of the rate for the same 13-week period in the previous two years.²⁴

Additionally, the states may extend benefits by 13 weeks if the IUR for the previous 13 weeks has at least been 6 percent, regardless of the experience of the previous year. An alternative trigger for optional extension of benefits by 13 weeks is if the headline

²³ This section builds on Department of Labor (2006).

²⁴ Note that the insured unemployment rate is much lower than the usually reported headline figure, as a number of unemployed such as newcomers to the labor market are not insured. In December 2006, the insured unemployment rate was only at 1.8 percent while the headline figure was 4.5 percent. An insured unemployment rate of 5 percent is therefore at the moment (in contrast to the early 1980s) a rare occurrence.

unemployment rate (as opposed to the IUR) has been at least 6.5 percent over the past three month and has been 110 percent of the rate for the same 3-month period in either of the two previous years. If the unemployment rate has been at least 8 percent and the 110-percent-criteria is fulfilled, benefits are by this provision even extended by 20 weeks.

By these provisions, in principle, the system has the possibility to react automatically in an expansionary matter to serious economic downturns, thus improving the stabilization properties without jeopardizing economic incentives for the unemployed. However, as the overall rate of unemployment and the rate of insured unemployment has fallen strongly since the 1970s and the trigger values have been increased by legislation in the early 1980s, the triggers nowadays only seldom go into effect.

3.4.2 Emergency benefits

Another mechanism by which the stabilization property of the UI system is enhanced are special extended benefit programs. This term covers specially legislated extensions of unemployment benefits in the case of a recession. Different from the regular benefits (which are paid for completely by the states) and the extended benefits (the costs of which are shared between the states and the federal level), these benefits are paid for completely by the federal level. In all of the past recessions since the early 1970s with the single exception of the very short recession in early 1980, US Congress has passed laws enacting such extended benefits (for an overview, see tTable 3).

In contrast to other discretionary fiscal policy measures, the special extended benefits programs have the advantage that there is practically no time lag between enacting of the program and its economic impulse: As the structure of the UI is already in place, money can be disbursed quickly. As the measure is usually only enacted for a limited time and the affected unemployed can be expected to find a new job at the end of the downturn anyway, there are only minor long term fiscal issues connected with this kind of stabilization policy.

Recession dates (NBER)	Program name and period	Max. Extension in weeks	Financing	Expenditure "Special Unemployment Benefits" over the period
Nov. 1973 – March 1975	Temporary Compensation (TC): 01/72-03/73	13	EUCA	\$2.6 bn
	Federal Supplemental Benefits (FSB): 01/75-01/78	26	EUCA/ General revenue	
January 1980 – July 1980	--			
July 1981 – November 1982	Federal Supplemental Compensation (FSC): 06/82-06/85	16	General Revenue	\$9.7 bn
July 1990 – March 1991	Emergency Unemployment Compensation	33	EUCA/ General Revenue	\$27.9 bn
March 2001 – November 2001	Temporary Extended Unemployment Compensation (TEUC)	26	EUCA	\$23.0 bn
Source: NBER; Department of Labor; BEA				

Table 3: Emergency benefits in the recessions since 1973

3.4.3 Experience Ratings

A final element of UI which might increase the macroeconomic stability is the experience rating. This term denotes a mechanism by which the payroll tax rate an employer has to pay varies with his record of firing workers.

The experience rating can contribute in principle to stabilizing economic fluctuations in two ways: First, the tax rates are only changed with a significant lag. Second, due to the fact that firing employees leads to higher UI contribution for a company in later years, they might be more reluctant to lay off workers in periods of temporarily weak demand.

Federal regulation sets the broad framework of experience ratings, stating, that at least 3 years of "experience with respect to unemployment or other factors bearing a direct relation to unemployment risk" (Section 3303(a), FUTA). All states have thus today experience ratings for their UI with a base period of at least three years in place. However, the applicable payroll tax for single companies is computed by different formulas, relying on ratios between benefits for the single employer's former employees and the IU payroll taxes paid, the number of workers or the overall wage

sum paid. Some states use a combination of these formulas. The states also vary with regard whether an unemployed person's benefits are charged only to his/her last employer or to other past employers as well.²⁵

Tax rates are usually adjusted annually. Federal regulation requires that there are at most 27 weeks between the computation of the new rates and them coming into effect, and most states leave six months between the computation date and the date of new rates becoming effective. Given the fact that the full amounts of benefits drawn by former employees from the UI system are only debited 26 weeks after their redundancy (as this is only the moment at which their eligibility runs out), the fact that benefits only have a limited weight compared to the long employment record going into the experience rating and given that it takes another 6 months before these benefits actually influence the single firms' tax rate, there is a significant lag between the increase in unemployment and the subsequent increase in tax rates. At least in the case of a relatively short-lived recession, this should in principle enhance the counter-cyclical effect of the UI system as the economy might well again be at the beginning of an upswing when the rise in contributions kicks in.²⁶

Another often cited mechanism for employment stabilization is the fact that it might keep employers from quickly firing workers in a downturn. As firms internalize parts of the costs of unemployment, they will be more reluctant to lay off parts of their workforce in difficult times. This might keep incomes to consumers flowing and might thus stabilize aggregate demand. However, it is open to debate in how far the threat of higher payroll taxes actually influences the employers' behavior. According to Blaustein (1993), a number of older interview studies (from the 1930s to 1960s) find that most employers indicated no effect of the experience rating on their firing decisions. Only around a quarter of those questioned reported that the experience rating element had an appreciable degree of influence on their decisions. Moreover, in some states, the positive effect on employer behavior seems to have worn off, a fact that Blaustein contributes to insufficient differentiation of the payroll tax rates and the

²⁵ For more details, see Department of Labor (2006a).

²⁶ See also the discussion in Graser (1999).

fact that the taxable wage base has not kept up with general wage growth, making costs of unemployment insurance increasingly less relevant for employers.

3.5 Appraisal: How important is the UI as stabilizer?

There is quite some disagreement among economists as how big the role of the unemployment insurance is in economic stabilization – and what the federal-state setup of the system contributes to the stabilization properties.

3.5.1 Stabilization of the national business cycle

While a detailed simulation analysis with a macroeconometric model conducted for the Department of Labor by Chimerine et al. (1999) estimates that the US unemployment insurance stabilizes 15 percent of the business cycle fluctuations in the whole US economy, Auerbach and Feenberg (2000) claim that the unemployment insurance only stabilizes 2 percent of a nation-wide economic downturn.

However, there seem to be some problems with Auerbach and Feenberg's analysis. First, they only look at UI outlays, not at the difference between revenue and outlays. As UI contribution usually fall in a recession due to workers becoming unemployed, the insurance act as an automatic stabilizer both on the expenditure as well as the revenue side, a fact which is neglected by Auerbach and Feenberg. According to the data of Chimerine et al. (1999), the swing in deficits of the regular unemployment insurance was \$13.6 billion from 1989 to 1991, roughly 20 percent more than the swing in outlays of \$11.8 billion reported by Auerbach and Feenberg. Moreover, Auerbach and Feenberg do not make any reference to the discretionarily legislated emergency unemployment compensation which has played a significant role in each of the past recessions. According to BEA figures, special unemployment assistance amounted to an additional total of \$27.9 billion in the recession starting 1991, amounting to an additional swing of \$13.5 billion from 1990 to 1992. In the recession starting 2001, special unemployment benefits added up to \$24 billion with a spending of slightly more than \$10 billion in both 2002 and 2002.

Finally, Auerbach and Feenberg multiply their UI transfer figures with a stabilizing effect of only 0.5, attributing this parameter to Gruber (1997). However, this claim cannot be found in Gruber's paper. Gruber only recommends replacement payments

not to rise above 50 percent – something that is completely independent from the stabilizing effect. With regard to stabilization, he concludes that without UI, consumption of the unemployed would fall more than three times as much as under the current system. His arguments rather hint that UI benefits actually mostly end up in an increase in consumption relative to a situation in which no UI benefits are paid. Thus, the stabilization effect from UI can be concluded to be significantly higher than estimated by Auerbach and Feenberg.

A quick back-of-the envelope calculation puts the stabilization property of the total UI for both the 1990 and the 2001 recession in the magnitude of about 10 percent, slightly less than that found in the simulation of Chimerine et al. (1999), but significantly more than computed by Auerbach and Feenberg. According to the data from the bureau of economic analysis, the swing in the surplus/deficit position of the US unemployment insurance system from 1989 to 1992 added up to roughly 0.4 percent of GDP. According to OECD data, during the same time, the output gap of the US economy went from plus 2.0 percent to minus 1.6 percent. Assuming that most of the UI benefits actually went into consumption (following Gruber 1997), this would mean that the UI has stabilized $0.4/3.6=11.1$ percent of the recessionary shock. In the 2001 recession, the UI balance went from 0.08 percent surplus in 2000 to a deficit of 0.23 percent in 2002, a net shift of 0.31 percent of GDP. At the same time, the output gap fell from plus 1.8 to minus 1.5 percent, a swing of 3.3 percent. This would mean that UI in the last recession stabilized $0.31/3.3=9.4$ percent of GDP fluctuations in the first round. As this does not include positive second-round effects on investment which are included in simulations such as Chimerine et al. (1999), this means that the magnitude of their simulation might still be realistic today.

3.5.2 Regional stabilization

A more difficult question is in how far the US unemployment system actually helps cushion regional shocks. An in-depth analysis here is complicated by the limited availability of data. First, in the data for the states' GDP, there are several structural breaks, with the different time series obviously add odd with each other (there seem to be systematic deviations between the 1997 figures both for GDP in current prices as well as for GDP in 2000 prices between the BEA's series for 1963 to 1997 and its series for 1997 to 2005). Second, the regional measurement of GDP figures is not

always without problems. Especially profit incomes are not necessarily earned in the US state in which a company is incorporated and might – for publicly listed companies – not always influence locally available incomes. Especially for smaller states, changes in the profitability of single large companies might therefore cause the mirage of large fluctuations in the local economy. As data problems like this would make any formal econometric analysis highly questionable, this section will use only an informal look at the most recent downturn and the reaction of the unemployment insurance.

Figure 2 shows a scatter plot between the change in the 50 states' output gaps from 2000 to 2002 (covering the most recent recession) on the horizontal axis and the change in the balance (payouts minus revenues) of the single states' unemployment insurance in percent of GDP on the vertical axis. As can easily be seen, there is a significant correlation between the degree of the downturn in a single state and the swing in the balance of the respective state unemployment insurance. However, for the states overall, the slope of the trend line is rather low: While for all states, net payouts of the unemployment insurance increased during the recession (which stabilized overall business conditions), especially dire (that is worse than average) regional conditions have only been cushioned to a very limited degree.

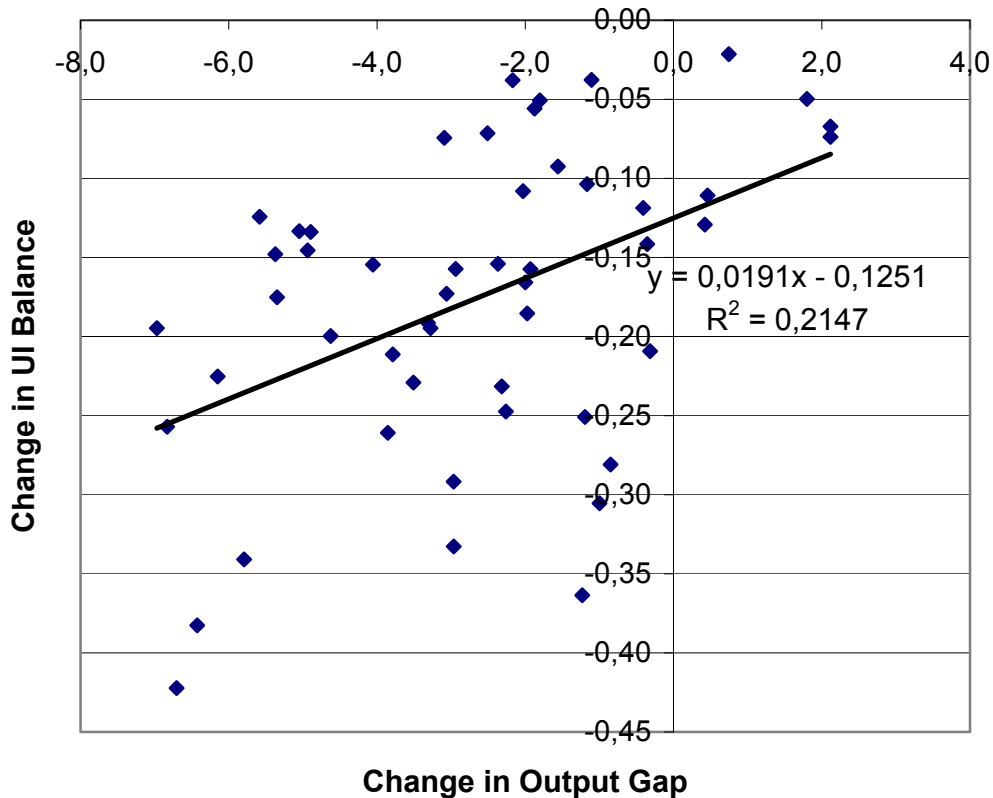


Figure 2: Change in the balance of US state unemployment insurances and change in output gap; 200 to 2002; in percent of GDP

3.5.3 The role of the Federal-State setup

In the debate on fiscal federalism in different monetary unions, it has often been argued following von Hagen (1992) that in the US, the federal level plays no significant role in stabilizing the business cycle with an unemployment insurance. Two features seem to support this view. First, the single US states' unemployment insurances are based on self-insurance. Over the cycle, each state is supposed to raise its own revenue for running the state unemployment insurance, even if the money is administered by the Unemployment Trust Fund at the US Treasury. Second, the states have wide discretion in designing the details of their unemployment insurance, pointing to limited interference from the center.

However, the question is whether this view is complete. First, von Hagen argues that only a very limited share of the cost of the unemployment insurance is paid by the US national government and that only in the case of extended benefits and emergency

benefits the federal government picks up a larger share of the bill, two programs that “[b]ecause of their discretionary nature [...] stand apart from the regular unemployment insurance system”. However, for the stabilization effect of the unemployment insurance, the share of overall payments of benefits is of rather secondary significance. Most of the expenditure of the unemployment insurance in normal (that is non-recession) years covers benefits to workers who change their jobs in the normal course of economic growth, financed with local contributions to the system. There is no need – not even from a stabilization perspective – to have these flows financed from a higher level of government in a monetary union. It is rather the financing of the marginal cost of the increasing outlays of unemployment insurance in an economic downturn which determines who actually contributes how much to stabilization. As has been described above (section 3.5.1), emergency unemployment benefits alone (financed from federal sources) have accounted for between one third and one half of the swing in the unemployment insurances’ finances in the past two recessions, with extended benefits from the federal extended unemployment compensation account coming on top.

Second, while there is no completely federal system of unemployment insurance in the US, the federal level has created very strong incentives for individual states to set up an automatically stabilizing unemployment insurance. By separating the unemployment trust funds from the general state budget, it manages to get around the collective action problem of low-level governments counteracting fiscal policy the automatic stabilization of the economy with its discrete as it seems to be the case in EMU (see section 2.2). Obviously, this results not only in an overall stabilization, but also in some regional stabilization.

While von Hagen is thus certainly right by stating that there is only comparatively little redistribution between states over the unemployment insurance in the US, the special federal elements in the setup of the system seem to contribute significantly to stabilization of the business cycle – albeit not necessarily in an obvious way.

3.6 *Proposals for Enhancing Stabilization Properties of the US Unemployment Insurance*

The fact that the American unemployment insurance has only limited power in cushioning macroeconomic shocks has led to a lively debate in the US on how the stabilization properties of the UI could be enhanced. A number of authors have criticized that the stabilization properties of the system have decreased over the time. One of the problems with the system is that since the 1980s, when states tightened eligibility criteria, only a relatively small part of the unemployed receives benefits (Kletzer and Rosen 2006 put that figure at below 40 percent for 2004). While it has always been the case that new entrants into the labor market were excluded from getting benefits, minimum earning requirements in the base period before becoming unemployed increasingly have excluded low-wage earners from receiving unemployment benefits.

This development has also blocked the working of the automatic triggers for extended benefits: As most of these triggers refer to thresholds for the insured unemployment rate, a lower rate of eligibility makes it less likely for extended benefit programs to go into effect. Consequently, Orszag (2001, p. 5) concludes that the triggers “are no longer relevant in anything but a severe economic recession”. Consequently, extended benefits played a much smaller role in the 2001 recession than in former recessions. Finally, in some states, benefits are so low that they are not sufficient to stabilize a larger part of aggregate demand. Here again, a problem might be that states with structurally dire economic conditions do not dare increasing their UI benefit level, fearing that potential investors are deterred by a higher benefit level and a consequently higher payroll tax level.

Kletzer and Rosen (2006) consequently argue for a stronger role of the federal level in the unemployment insurance. Especially, they ask for:

- a harmonization of eligibility standards: this would increase the part of unemployment insured under the system
- an inclusion of part-time-workers into the unemployment insurance: this would also increase the part of unemployment insured under the system

- a harmonization of minimum benefit standards to at least half of the lost earnings with a maximum benefit equal to two-thirds of state average earnings: this would increase the benefits in many states, increasing the volume of funds moved through the system
- improve the automatic triggers for extended benefits so there is again an automatic enactment of longer benefit durations in a recession rather the more discretionary one experienced in the past recessions when special programs enacted by Congress took over the role of the extended benefits.
- increasing the taxable wage base: While Kletzer and Rosen do not explicitly make this argument, by using a higher wage base, the stabilization effect could be improved as the revenue effect is increased: As incomes rise quicker in an upswing, a higher taxable base would increase revenue more strongly than the current system which basically is a flat payment for all workers earning more than the current taxable wage base of \$7000 annually.

4 Lessons for Europe: A proposal for a Eurozone Unemployment Insurance

In conclusion, one can say that the US unemployment insurance might not be the optimal mechanism to stabilize fluctuation in the aggregate or regional business cycle. However, it has contributed significantly towards stabilization in a federal system in which states keep wide powers to tax and spend money. Moreover, in principle, the unemployment insurance could be even more effective were certain reforms enacted. As a part of a federal system, it helps solve the collective action problem that single states might be reluctant to use their own money for stabilization purposes and it introduces a strong automatic stabilizer element into the states' fiscal policies by almost forcing the states to set up their own counter-cyclical unemployment insurance.

If Europe wanted to adopt an unemployment insurance system with macroeconomic stabilization properties, it would not need to follow closely the US example which has some historical roots and is not in all respects ideal for the stabilization. Instead, it could try to design its system from scratch. Especially the complicated federal-state set-up of the US system with a large number of trust accounts need not to be copied. Moreover, it could learn from the current debate on improvements in the US unemployment insurance.

A more centralized set-up would also be a step towards constructing an unemployment insurance that has better stabilization properties than the US system. First, it would allow to counter even very strong downturns which might deplete a single state's trust account under the US system. Second, it would prevent single countries from counteract anti-cyclical stabilization policy in order to limit national government deficits, as the funds redistributed come from a common source of funding.

However, there are some elements in the US unemployment insurance which might be worth transferring to a European approach. Especially, the idea of having “extended benefits” with automatic triggers which increase the benefit duration in an economic downturn seems extremely sensible. From a European perspective aiming at a high degree of stabilization, these triggers should rather be constructed more generous than they are now in the US. Moreover, the tradition of “emergency benefits” (a temporary extension of benefit duration by fiat) allows a discretionary fiscal policy which is very efficient as it targets those with a high propensity to consume and can be enacted practically overnight.

4.1 Basic structure for the European unemployment insurance

In addition, there are some political requirements for any European unemployment insurance: First, any such scheme should aim at not changing the individual incentives not to seek new employment (or to delay re-entrance into the labour market) beyond the incentives already arising from the national UI systems nor should it lower the overall generosity of social transfers in the member states. While the first requisite results from economic theory, according to which less incentives to work might

increase unemployment, the second requisite is necessary in order to win public support for any European unemployment insurance scheme. A European solution that would mean overall less generous transfer payments to the unemployed would probably not be accepted by those countries which now have a rather generous payments such as Finland, France or the Netherlands.

Second, any such scheme should be constructed with a minimum of new EU officials involved, as the population in many countries already is sceptical against growing “euro- bureaucratism”. Moreover, as working administrations for unemployment insurances exist in all EMU countries, building a parallel structure would be economically wasteful. Third, given the growing resistance in some countries towards paying large sums for redistributive purposes towards poorer EU countries, the new insurance scheme should be strictly non-redistributive over the medium and long term. While in any given year, of course a country experiencing an economic downturn would receive more from the system than it pays in, the system should not add an additional channel of redistribution between European countries. Thus, over the economic cycle, the expected net benefits (benefits minus revenues) from the scheme should be zero.

Given these requirements, a European unemployment insurance should have a structure that on the one hand blends well into the existing benefit systems of the different states, on the other hand makes use of the existing administrations. One possibility would be to introduce a basic unemployment insurance on the European (or Eurozone) level, which would build on existing national administrations both for revenue collection and benefit distribution. Such a European unemployment benefit would provide a basic benefit level and would to that extent replace a similar payment from the current national unemployment administration. In addition, each national government could still decide to top-up the European benefit level with an additional national insurance system which would collect additional revenue and distribute additional benefits.

The preconditions for introducing such a basic unemployment insurance for the Eurozone as a whole are much better than it has been the case in the United States in the 1930s. Especially, almost all EMU countries already have some kind of unemployment insurance in place in which some kind of benefits relative to prior

earnings are paid out to the unemployed. According to the OECD, of the 12 countries that have been EMU member at the end of 2005,²⁷ all but Ireland and Greece had unemployment insurances in place that pay out some unemployment benefits over some time that is related to prior earnings. Ireland is the only country that has a flat unemployment insurance in place with weekly payments of only €134.80. Greece has in principle an insurance that pays benefits according to prior earnings. However, as benefits are capped at a very low level, the insurance rather resembles a flat benefit system that that of the other EMU countries.

Moreover, with the exception of Luxembourg (which finances its unemployment insurance from a 2.5 percent surcharge on the income tax), all countries finance their respective system with a contribution on wages, either paid by the workers or by both employers and employees.

It would thus be easy to introduce a European payroll tax financing a European basic unemployment insurance. As both the financing source *and* the equivalent benefit payouts would be shifted to Brussels, national governments would be able to cut their national payroll tax exactly by the amount charged by the EU level. Such a move would make the introduction of a European unemployment insurance neutral both for companies' and national governments' financial balances.

4.2 Benefit Levels and Revenues

Given the prerequisite that the new European unemployment insurance should not change the individual unemployed person's incentives, the benefit level would need to be roughly equivalent to the lowest level now existing in the EMU. However, if one would just apply the lowest *absolute* level to all of EMU, the amount would be too low to have a meaningful stabilization impact, especially for the higher-income countries.

A reasonable compromise would be to set benefit levels at 50 percent of the earnings over the last twelve months in employment, capping the benefits in each country at 50

²⁷ Unfortunately, the OECD does not cover Slovenia, so the small country is excluded from the survey in this paper.

percent of the average wage income. This would fall short of what Kletzer and Rosen propose for the US unemployment insurance (who propose benefits of up to two-thirds of lost earnings). However, setting the maximum benefit level at two-thirds of earnings lost in the European context would mean to increase the generosity of the system for a number of countries such as Austria and Italy.

The proposed benefit formula would also be compatible with the benefits principle stated above (implying a rough equivalence between payments and potential payouts): If the system would be financed on a payroll tax with a maximum tax base for each country at the level of the average wage income, there would be a direct link between the payroll tax paid and the benefits potentially received.

The benefit duration and the eligibility criteria would have to take into account that the system is not supposed to become a permanent redistribution from any single country or to any other single country. Thus, the system would need to be designed in a way that costs for structural long-term unemployment are not financed over this scheme. In addition, as patterns of seasonal unemployment vary widely across Europe, the insurance should be designed in a way that seasonal unemployment is excluded.²⁸ A benefit duration of up to a year (depending on prior job tenure) would be compatible with this goal and guarantee that long-term unemployment is not included. For the eligibility criteria, a period of 12 consecutive months of employment over the past 24 months would prevent seasonal unemployment to be financed over the scheme, while not excluding those who became unemployed twice in a short period of time. Applying these rules would also help to ensure that the scheme provides a high degree of cyclical stabilization: In a downturn, short-term unemployment usually rises more quickly and much more strongly than long-term unemployment. Linking payment flows to the number of short-term unemployed thus helps buffering the effects of short-term economic fluctuations while not rewarding long-term unemployment.

As there might be the possibility that EMU countries experience a severe downturn longer than the standard 12 months of benefit payments, especially given the fact that

²⁸ Of course, both long-term unemployment and seasonal unemployment could still be covered by national unemployment insurance systems.

EMU might increase the length of the business cycle and thus the lengths of a regional cyclical downturn²⁹, the proposed system could be enhanced by something similar to the American “extended benefits”: An automatic trigger could be introduced that automatically (but temporarily) increases the benefit duration in the case of either a strong increase of unemployment in EMU as a whole or of a strong increase in the rate of unemployment relative to the rest of the euro area. In the first case, the benefit duration would increase for all of EMU, while in the second case, benefit duration would only be increased for the country with the strong increase in unemployment.

4.3 Financing volume and stabilization properties

An interesting question would be how much money or what kind of payroll tax would be necessary to finance such a scheme. The ideal approach to this question would be to set up a simulation such as the one by Italianer and Vanheukelen (1993) for their proposed stabilization scheme or a full-blown macroeconomic simulation such as the one conducted by Chimerine et al. (1999) for the U.S. economy. The problem is that the data for such an exercise is not easily available. What would be necessary for such a simulation is detailed data not only on earning structures in the EMU countries (as the revenue in the form of the payroll tax is a percentage of wages up to the average wage), but also on the job tenure of the short-term unemployed and the structure of their former earnings (as the eligibility is tied to work history and the benefit level to former wage income). As patterns for seasonal unemployment as well as the rate of new entrants into the labour market (which are not eligible for benefits) vary widely across countries, even a country-by-country approximation by some common-sense estimations seems very hard. For simulating the effects of more elaborated elements such as extended benefits triggered by dire economic conditions, one would also need detailed information on the number of those unemployed for a little more than a year. Most of this data is either not available at all, or only available on the national level and not comparable to data from other EMU countries.

However, one could make some educated guesses about the volume of transfers being necessary by a European unemployment scheme as proposed in this paper. Using

²⁹ See Enderlein (2004); Lane (2006); Dullien/Schwarzer (2005) or Dullien/Fritsche (2007).

aggregate figures from Eurostat on short-term unemployment, as well as data for average compensation of employees and the number of employees from the AMECO database, one can get a rough estimate of financing flows and tax rates necessary as well as the possible stabilization properties of such a system. The following subsections will provide such estimates for three kind of unemployment schemes: One baseline scenario without extended benefits; one scenario in which extended benefits can be enacted on the EMU level and one scenario in which extended benefits can be triggered on a country-basis, but not for EMU as a whole.

For this exercise, a few additional assumptions have to be made: First, it is assumed that 50 percent of the short-term unemployed (those which are unemployed between 1 and 11 months) are eligible for benefits. While such a uniform rate across countries most likely is not realistic (as the rate of new entrants into the labour market differs as well as the degree of seasonal unemployment), there is very little alternative for an ad-hoc estimate. Second, the benefits and payouts will be based on the estimate that the average insured worker has a taxable wage base of 80 percent of the average wage in his or her country. Finally, the payroll taxes are calibrated so that the unemployment insurance is in balance over the cycle (beginning of EMU in 1999 until 2005).³⁰ According to the considerations made above, the system is assumed to pay out 50 percent of the last unemployed wage. The estimations are made using annual data. The Netherlands had to be excluded as Eurostat did not provide data on unemployment by duration for 2000 and 2001. Greece had to be excluded as AMECO did not provide data on the number of employees for that country.

4.3.1 A baseline unemployment insurance

In the baseline scenario, there are no extended benefits. In this case, the system would have had an average annual financial volume over the period 1999 to 2005 of € 54 bn, which would make a payroll tax of 1.75 percent on the insured wage sum necessary. This would amount to roughly 0.75 percent of euro area GDP. Table 6 in the annex provides details of the financing flows for this scenario.

³⁰ Note that interest payments on surpluses and deficits of the schemes have been neglected.

However, the stabilization properties of this basic scheme are also quite limited: Table 9 gives an overview of the stabilization properties of the three scenarios analysed. Column (1) shows the swing in the output gap³¹ for the most important EMU countries in the last downturn as well as the years of the peak and the through in the output gap. Column (2) shows the swing in the single countries' balance of payments to and from a hypothetical European unemployment insurance in percent of the country's GDP. The swing in the payments from the unemployment insurance relative to the swing in the output gap can be seen as a rough estimate for the degree of stabilization the insurance scheme can provide. As we see, the baseline unemployment insurance would have provided a swing in its balance only equivalent to 5 percent of the downturn.³² For single countries, the effect would have been a little bigger: Germany would have cushioned 8 percent of the downturn, while Spain could have covered even slightly more than 10 percent. Thus, this basic scheme would not be able to deliver a contribution to macroeconomic stability anywhere close to the United States unemployment insurance.

4.3.2 Unemployment insurance with individual country triggers for extended benefits

In a second scenario, the basic scheme has been extended with an option for extended benefits. For this scenario, it has been assumed that extended benefits come into effect if the ratio of short-term unemployed to employees (roughly equivalent to the insured unemployment rate) increases by more than 0.5 percentage points above the average of the three prior years. In this case, the duration for unemployment benefits could be doubled. Due to data limitations, this was simulated as a 75 percent pick-up-rate of unemployment benefits by short-term unemployed (in contrast to the standard

³¹ Measured as the deviation from trend in % as provided by the EU commission.

³² Note that the figures in this section cannot be read as additional stabilization of the business cycle relative to the status quo: As the proposed UI system would replace part of the national systems, the direct stabilisation impact of introducing such a scheme might be negligible. However, the indirect effect might well reach the magnitudes presented here: As the financing for this system has been taking away from national governments (and thus out of their budget figures for fulfilling the stability and growth pact), it might reduce the incentive to counteract the automatic stabilizers by discretionary national fiscal policy.

assumption of 50 percent). Table 1 shows the ratio of short-term unemployed to employees and the periods in which the trigger would have been in effect from 1999 to 2005. Years in which the trigger would be in force are highlighted.

	1998	1999	2000	2001	2002	2003	2004	2005
Euro area	7,7	6,9	6,1	5,6	6,5	6,9	7,0	6,5
Belgium	5,1	4,8	4,1	4,0	4,9	5,9	5,6	5,8
Germany	6,1	5,4	4,8	4,8	5,6	6,6	6,7	7,0
Ireland	5,6	4,5	3,7	3,2	4,2	4,2	4,1	3,9
Spain	14,2	12,2	11,4	8,9	10,3	10,7	10,2	8,1
France	8,4	8,1	6,9	6,4	6,6	6,6	7,3	6,5
Italy	8,7	7,7	7,3	5,9	6,3	5,9	5,6	5,3
Austria	5,1	4,5	4,5	3,9	5,2	4,7	4,5	4,7
Portugal	4,3	4,6	3,5	3,8	4,6	7,0	6,2	6,6
Finland	11,3	10,7	10,2	9,3	9,9	10,2	9,7	7,1

Table shows ratio of short-term unemployed of the active potentially insured labour force (employees + short-term unemployed) in %; Shaded cells are years in which this ratio is more than 0.5 percentage points above average of the three prior years; Luxembourg and the Netherlands have been omitted due to lacking data points

Table 4: Share of short-term unemployed of the active labour force (without long-term unemployed) and years in which hypothetical extended benefit trigger would have worked

The corresponding financing tableau for this scenario (Table 7 in the appendix) shows that the extended benefits come at a relatively low price: In contrast to the baseline scenario, the average financial volume would have been slightly higher at an average € 61.5 bn with a payroll tax of 2.0 percent. This would equal 0.85 percent of GDP. However, the small change in the system greatly improves the stabilization properties. As can be seen in table one, especially countries in dire economic conditions would have profited. Germany, Belgium and Portugal would have profited most from such a system: They would have received extended benefits for the period of 2002 to 2005. Austria and France would have received extended benefits for one year, while the Netherlands and Luxembourg would have received EB payments for three year periods. In total, an additional € 51 bn would have been disbursed over the past recession, or an average of € 7.3 bn annually over the past cycle. While an estimation for the stabilization properties for EMU as a whole cannot be given due to missing data from the Netherlands, the data for single countries in column (3) of tTable 9 show that for a number of countries, the new scheme would have stabilized the downturn to a significant extent: For Germany, this number now approaches 20 percent, with Belgium, France and Austria trailing closely behind. Only for Italy and Finland, stabilization properties are disappointing: In these cases, the ratio of the

swing in unemployment insurance net payments and the change in the output gap are still in the low single digits.³³

4.3.3 Unemployment insurance with EMU trigger for extended benefits

A last scenario assumes that the trigger for extended benefits is enacted not for individual countries, but for EMU as a whole. As soon as the ratio of short-term unemployed to employees rises by more than 0.5 percentage points above the average of the three prior years for the euro area as a whole, extended unemployment benefits are paid for all of EMU. Parallel to the scenario above, it is assumed that this works as an increased pick-up-rate of unemployment benefits. As is shown in Table 8 in the appendix, this scenario is only marginally more expensive than the individual country triggers. The average financial volume would have reached € 62.6 bn, with a payroll tax marginally higher than in the individual-trigger-scenario (2.04 percent instead of 2.02 percent). The ratio of financing for this scheme in relation to GDP would climb from 0.85 to 0.87 percent.

In this scenario, extended unemployment benefits would have been paid in the years 2003 and 2004. Extended benefit payouts would have amounted to a total of € 61 bn or an average of € 8.7 bn annually over the whole period. Overall, the net shift in payments in the unemployment system would have reached 16 percent of the swing in the output gap. This would have been roughly 70 percent more than in the case of the United States unemployment insurance in the past recession. Among the single countries, the system would have cushioned more than 40 percent of the effect of the downturn in Spain, 18 percent for Germany and roughly 17 percent for France and Belgium. Even in Italy and Finland, the shift in transfers would have amounted to more than 10 percent of the shift in the output gap.

³³ The reason for this is the fall in registered Italian unemployment during the time period. While economists have been puzzled about this development, one possible explanation has been that labour market reforms enacted by the Berlusconi government have actually kept recorded unemployment low.

5 Conclusion

In conclusion, one can say that an unemployment insurance for the euro area would provide a rather sensible and straightforward way to improve economic governance of EMU. As has been shown, in contrast to other G7 countries, members of the currency union have not used their fiscal policies for stabilizing the economic cycle over the past years. While automatic stabilizers in principle should have provided some stabilization, European governments have counteracted this effect with their discretionary fiscal policies to an extent that overall fiscal policy has been a-cyclical at best. Against recent developments in growth theory, it can be clearly stated that this is a sub-optimal policy outcome. First, new growth theory suggests that excessive economic fluctuations might lower the long-term growth rate, thus undermining the Lisbon strategy. Second, excessive economic fluctuations might also undermine the political case for structural economic reforms as the OECD has noted.

As there is good reason to conclude that the a-cyclicity or even pro-cyclicity of fiscal policy in much of continental Europe results from the special governance structure of EMU as a monetary union in which the governments of rather small, economically very open entities are responsible for all fiscal stabilization policy, there is a case for more centralization of economic stabilization. One rather elegant way to do this is the introduction of an unemployment insurance for short term unemployment for the euro area. By combining elements from the US unemployment insurance such as automatic triggers for extended benefits with a central fund for basic benefits, such a system could be constructed in a way that would not alter individual incentives to seek employment and would preserve different levels of benefits in EMU, yet provide transfers to single countries amounting to almost 20 percent of the short-term fluctuation in a recession. While this would surely only a first step towards resolving the problems of regional divergence and sub-optimal EMU economic governance, this amount of stabilization would already top the stabilization achieved by the American system of unemployment insurance.

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7 Appendix: Data

7.1 *Econometric Evaluation of European Stabilization Policy*

Data for the econometric estimations is taken from the EU commission's AMECO database (Fall 2006) for all EU countries and from the OECD Economic Outlook (Fall 2006) for Japan, the US, Canada and Switzerland. Budget deficits for EU countries are corrected for proceeds of the sale of UMTS mobile phone network licenses as they can be seen as one-off-events that did not figure into the general consideration for discretionary fiscal policy (in fact, the EU finance ministers had agreed in advance to pay back public debt with the windfall revenue) and can also be assumed to have rather limited immediate effect on the business cycle. For most countries, the time series runs from 1991 to 2006. However, for a small number of countries (i.e. Spain, Euro-12), the time series only starts in 1996.

7.2 *Estimations on Financial Flows of European UI system*

Data for the estimations in section x comes from Eurostat and the EU commission. The number of short-term unemployed is defined as the number of people unemployed 1 to 11 months (adding the three categories supplied by Eurostat). The data on the number of employees (data series 1.0.0.0.NWTN) as well as nominal compensation per employee (1.0.0.0.HWCDW) comes from the AMECO database as does the data on the output gap. For scenario A (baseline scenario) and scenario C (extended benefit trigger for EMU as a whole), payouts and revenues for the unemployment insurance were estimated from the aggregate numbers for EMU. For scenario B (extended benefit triggers for individual countries), payouts and revenues were estimated on a per-country basis. For scenario B, the Netherlands had to be neglected as data for unemployment by duration has not been available for the years 2000 and 2001. In addition, for scenario A and B individual country payouts and revenues have been computed in order to estimate the country balance of payments vis-à-vis the European unemployment insurance. However, this country data do not completely add up to the European figure as no payouts could be computed for the Netherlands (again, due to data limitations).

Country	Maximum Benefit Duration	Benefit Duration after 2 years of work	Benefits in % of last earning	Maximum Benefits in Euro (annual rate) ^a	Income Average Production Worker (APW) in Euro, (annual)	Benefits Taxable	Net Replacement Rate APW, according to OECD, in % ^c	Financing of UI
Austria	52 weeks	20 weeks	55	13500	24946	No	55/71	Employer/employee contribution
Belgium	12 months	12 months	55/60, depending on family situation	NA	32281	Partly	63/59	Employer/employee contribution
Finland	500 days	500 days	Up to 90 percent, depending on income	NA	29152	Yes	60/79	Employer/employee contribution
France	42 months	23 months	58-75, depending on income	68694	23087	Yes	73/77	Employer/employee contribution
Germany	12 months ^b	12 months	60/67, depending on family situation	25332	34088	No	61/77	Employer/employee contribution
Greece	12 months	12 months	50	3573	12525	No	48/55	Employer/employee contribution
Ireland	15 months	15 months	Flat rate: €134,80 per week	7009	30170	Partly	30/59	Employee contribution
Italy	12 months	6 months	40	11636	23044	Yes	54/62	Employee contribution
Luxembourg	365 days	365 days	80/85, depending on family situation	42350	32586	Yes	85/89	Surcharge on income tax
Netherlands	60 months	6 months	70	30521	32457	Yes	71/80	Employee contribution
Portugal	30 months	12 months	65	13162	9372	No	78/86	Employer/employee contribution
Spain	720 days	240 days	70 (for 180 days), 60 thereafter	12433	17913	Yes	69/75	Employee contribution
All values are for 2004. ^a Assumption: Married with two children, maximum benefits for singles may vary; ^b New value after reform, phasing in in 2006; ^c OECD Data; first number applies to single persons, second number to married person (one earner) couple with two children; assumption: wage equals average production worker wage. Source: OECD (2006)								

Table 5: Characteristics of current national unemployment insurance systems in EMU countries

	1999	2000	2001	2002	2003	2004	2005
Payouts:							
(1) Short-Term Unemployed (in thousand)	8049	7216	6727	7849	8454	8661	8140
(2) Assumed Insured Unemployed (in thousand)	4025	3608	3363	3925	4227	4331	4070
(3) Nominal Compensation per Employee (in 1000 €/year)	31,5	32,4	33,3	34,2	35,1	36,0	36,7
(4) Assumed Average Benefits (in 1000 €/year)	12,6	12,9	13,3	13,7	14,1	14,4	14,7
(5) Total Payouts (Mio. €)	50727	46714	44733	53643	59394	62394	59760
Revenue: (1.75 % payroll tax)							
(6) Employees (in thousand)	107817	110687	112459	113506	114307	115079	116155
(7) Assumed Average Tax Base (in 1000 €)	25,2	25,9	26,6	27,3	28,1	28,8	29,4
(8) Total Revenue (in Mio. €)	47442	50035	52218	54162	56077	57885	59546
Total Balance (in Mio. €)	-3284	3320	7485	519	-3318	-4508	-214
Assumptions: Average Insured Wage equals 80 percent of maximum tax base; maximum tax base equals average wage; 50 percent of short term unemployed are eligible for payments from the system							

Table 6: Financial Flows EMU unemployment insurance; scenario A

		1999	2000	2001	2002	2003	2004	2005
Payouts (country sum)								
(1)	Standard Payouts (Mio. €)	47986	45247	42159	49399	54643	56997	55226
(2)	Extended Benefit Payout (Mio. €)	0	0	0	10015	11304	18520	11305
(3) = (1)+(2)	Total Payouts (Mio. €)	47986	45247	42159	59415	65947	75517	66531
Revenue (2.02 % payroll tax)								
(4)	Total Revenue (Mio. €)	50890	53642	55845	57760	59730	61597	63338
(5)=(4)-(3)	Total Balance (Mio. €)	2904	8395	13686	-1655	-6217	-13920	-3193
Assumptions: As in scenario A + extended benefits are payable when ratio of short-term unemployed to the number of employees plus short-term unemployed rises by more than 0,5 percentage points; in the extended benefits case, 75 percent of short-term unemployed are eligible for payment; trigger and payments are computed for individual countries								

Table 7: Financial Flows EMU unemployment insurance; scenario B (individual country triggers for extended benefits)

		1999	2000	2001	2002	2003	2004	2005
	Payouts							
(1)	Short-Term Unemployed (in thousand)	8049	7216	6727	7849	8454	8661	8140
(2)	Assumed Insured Unemployed (in thousand)	4025	3608	3363	3925	4227	4331	4070
(3)	Nominal Compensation per Employee (in 1000 €/year)	31,5	32,4	33,3	34,2	35,1	36,0	36,7
(4)	Assumed Average Benefits (in 1000 €/year)	12,6	12,9	13,3	13,7	14,1	14,4	14,7
	Regular Payouts (Mio. €)	50727	46714	44733	53643	59394	62394	59760
(5)	Extended Benefit Payout (Mio. €)	0	0	0	0	27322	28499	0
(6)	Total Payouts (Mio. €)	50727	46714	44733	53643	89091	93591	59760
	Revenue (payroll tax 2.04 percent)							
(7)	Employees	107817	110687	112459	113506	114307	115079	116155
(8)	Assumed Average Tax Base	25,2	25,9	26,6	27,3	28,1	28,8	29,4
(9)	Total Revenue (Mio. €)	55500	58532	61086	63361	65601	67717	69659
(10)=(9)-(6)	Total Balance	4773	11818	16354	9718	-23491	-25874	9899
Assumptions: As in scenario A + extended benefits are payable when ratio of short-term unemployed to the number of employees plus short-term unemployed rises by more than 0,5 percentage points; in the extended benefits case, 75 percent of short-term unemployed are eligible for payment; trigger and payments are computed for EMU as a whole								

Table 8: Financial Flows EMU unemployment insurance, scenario C (EMU wide trigger for extended benefits)

Country	(1)	(2)	(3)	(4)	(2) in % of (1)	(3) as % of (1)	(4) as % of (1)
	Δ Output GAP in % of GDP (time period)	Δ UI Balance in % of GDP (time period)			Change in transfers as share of change in output gap (proxy for degree of stabilisation)		
		No extended benefits	Individual country trigger for extended benefits	EMU wide trigger for extended benefits	No extended benefits	Individual country trigger for extended benefits	EMU wide trigger for extended benefits
Euro-Zone	-3,5 (2000-2005)	-0,17 (2001-2004)		-0,56 (2001-2004)	4,9%		16,0%
Belgium	-3,3 (2000-2005)	-0,23 (2001-2003)	-0,56 (2001-2003)	-0,56 (2001-2003)	7,0%	17,0%	17,0%
Germany	-4 (2000-2005)	-0,32 (2001-2005)	-0,8 (2001-2005)	-0,73 (2001-2004)	8,0%	20,0%	18,3%
Spain	-2 (2000-2005)	-0,21 (2001-2003)	-0,22 (2001-2003)	-0,83 (2001-2003)	10,5%	11,0%	41,5%
France	-3,2 (2000-2005)	-0,11 (2001-2004)	-0,53 (2001-2004)	-0,53 (2001-2004)	3,4%	16,6%	16,6%
Italy	-3,5 (2001-2005)	-0,04 (2001-2002)	-0,04 (2001-2002)	-0,25 (2001-2003)	1,1%	1,1%	7,1%
Netherlands	-5,6 (2000-2005)						
Austria	-3,5 (2000-2005)	-0,16 (2001-2002)	-0,47 (2001-2002)	-0,37 (2001-2003)	4,6%	13,4%	10,6%
Portugal	-5,7 (2000-2006)	-0,37 (2000-2003)	-0,66 (2000-2005)	-0,73 (2000-2003)	6,5%	11,6%	12,8%
Finland	-4,3 (2000-2004)	-0,1 (2000-2001)	-0,11 (2000-2001)	-0,56 (2000-2003)	2,3%	2,6%	13,0%

Source: Own simulations based on AMECO/Eurostat data

Table 9: Output Gaps and Hypothetical Transfers by EMU unemployment insurance in the most recent recession