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The Stabilising Effect of Social Policies in the Financial Crisis

Social policy measures contributed substantially to stabilising the economy in the EU during the most recent recession. In this context the automatic stabilisers of a progressive tax system and a well-developed transfer system have played a particular role. Discretionary measures were important, but their effects on GDP and employment remained weak due to wide-spread uncertainty and the high share of tax cuts in their overall volume. The stabilising impact of the welfare state on expectations is difficult to quantify, but it is assumed to be substantial.

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In 2009 and 2010, the effects of the severe financial and economic crisis on GDP and employment in the EU were mitigated markedly by anti-cyclical economic policy measures. In this context, social policy interventions played an important role, both in the form of automatic stabilisers of public finances and discretionary changes in taxes and transfers as well as via the stabilisation of private households' expectations. Social policy measures in a broad sense comprise all those interventions, which address the incomes and employment of the population or of particular social groups.

The major advantage of automatic stabilisers consists in their short-term effect: among social expenditures unemployment benefits constitute the most important component. Their stabilising impact is the larger, the higher the replacement ratio in relation to the net income and the longer, the unemployment benefit is paid. Pension and health expenditures also work as automatic stabilisers. The tax system is the more stabilising, the higher its progressivity. Within the EU the automatic stabilisation effects of the welfare state differ substantially: they are highest in Denmark, followed by Belgium, Germany, Sweden and Austria. In Southern and Eastern Europe they are relatively low. The resulting overall stabilisation effect in the EU as a whole exceeds that in the USA by far. The stabilising effects of the welfare state during a crisis could be expanded by making some discretionary policy elements automatic: for instance, Denmark has had a positive experience with the automatic expansion of funds for active labour market policies in the case of an increase of the unemployment rate. A similar approach would be conceivable for the adjustment of the level and duration of unemployment benefits or the means-tested minimum benefit (Mindestsicherung).

In the most recent recession, active discretionary fiscal policy played an important part, also because monetary policy effects were only limited already at an early stage and the crisis was exceptionally deep. In this situation social policy measures, too, were vital. In the EU they amounted to about 1.1 percent of GDP in 2009 and 2010 and largely consisted in tax cuts for private households. Only Denmark, Sweden, Belgium, Portugal, and Spain stimulated their economies by raising expenditures by more than 0.5 percent of GDP. These measures helped to spur both domestic economic activity and that of the trade partners. Thus, the Austrian GDP in-

creased by roughly 1 percent in 2009 and 2010 owing to domestic discretionary social policy measures (ranging from income tax cuts to the expansion of transfers and short-time work). This was complemented by an effect of ½ percent of GDP owing to the measures of other EU member countries. For the euro area this resulted in an increase of GDP of 0.9 percent. In the EU 330,000 jobs were created by discretionary social policy efforts to stimulate the economy. If the EU member countries had coordinated their action in a better way, and if they had concentrated more on expanding temporary transfers to households with a high propensity to consume as well as on direct job creation, the positive impact would have been stronger.

Beyond the effects of the automatic stabilisers and the discretionary measures the welfare state also exerts anti-cyclical effects by stabilising private households' expectations and by preventing precautionary saving. This influence is difficult to quantify empirically, but can be assumed to be comparable, in terms of growth and employment, to that of the discretionary measures that were implemented during the most recent crisis.

Anti-cyclical policies during the recession

The severe economic downturn in the wake of the financial and economic crisis prompted a return to active anti-cyclical stabilisation policies. In addition to the immediate effects of the automatic stabilisers on government revenues and expenditures, discretionary fiscal policy was applied, too. In this context social policy measures played an essential role.

Beginning in spring 2008 the global financial crisis hit the real economy: in 2009 the EU real GDP contracted by 4.2 percent. The seasonally adjusted number of unemployed persons increased by 7 million to 23 million, the unemployment rate surged to 9.6 percent of the labour force in 2010. The stabilisation mechanisms implemented in the social security system and the use of expansionary social policies helped to limit both the duration and the magnitude of the recession. This applies both to the automatic stabilisers on the revenue and expenditures sides of public finances and to discretionary social policy measures that were part of the stimulus packages implemented in most EU countries. In this situation the effects of social policy proved particularly favourable, because social policies tend to support especially those social groups that are hit hardest and have a relatively strong impact on demand.

During a recession incomes and employment decrease. This causes a decline in tax revenues and an increase in transfer payments of the government, resulting in an automatic contribution to the stabilisation of private households' disposable income and consumption demand. The effectiveness of these automatic stabilisers is the greater, the higher the progressivity of the respective tax system (*van den Noord,* 2000). The advantage of the automatic stabilisers is their immediate effectiveness: as soon as GDP declines, effects on disposable income are induced.

In addition to the automatic stabilisers, discretionary stabilisation measures were implemented. Their advantages consist in their potentially large volume and their public perception, which can serve to stabilise expectations. Their drawback is the long delay of their effect, because problem diagnosis, decision-making and the implementation are time-consuming. Further, discretionary measures are sometimes affected by the political decision-making process and vested interests.

In the academic debate and in practical economic policy, active fiscal policies were marginalised in the past decades. During the global financial and economic crisis, however, discretionary stabilisation policy was used intensively for several reasons: firstly, conventional monetary policy had largely exhausted its room for manoeuvre at an early stage of the crisis, and the effects of a low-interest policy on demand are usually relatively low in a situation of underutilised capacity and muted expectations. Secondly, it soon became obvious that the downturn would be severe and the effects in the labour market would be persistent. As empirical studies show, recessions following financial crises impair growth and employment particularly strongly and for an extended period (*Reinhart – Rogoff,* 2008). An active fiscal policy intervention was therefore well-justified (*Blanchard – Dell' Ariccia – Mauro,* 2010).

The active use of discretionary stabilisation policies in the current crisis is also warranted by past experience. Studies on fiscal policy during the Great Depression of the 1930s and during the "lost decades" in Japan emphasise the relevance of a large-scale long-term fiscal policy intervention. Both in the USA in 1937 and in Japan

in 1997, the premature consolidation efforts that curbed demand, resulted in a relapse into recession (*Fatás – Mihov,* 2009, *Romer,* 1991, *Spilimbergo et al.,* 2008).

In the context of stabilisation policy, social security systems can be of particular importance also because they affect the expectations of economic agents (*Tichy,* 1999). In a recession they contribute essentially to the prevention of uncertainty and precautionary saving, thus stabilising consumption expenditure. In 2009, real consumption expenditures in the EU declined only moderately, compared to the depth of the recession (euro area –1.1 percent, EU –1.7 percent). Automatic stabilisers are assumed to have contributed substantially to stabilising expectations in the private sector and to reducing macroeconomic uncertainty.

Social policy as an automatic stabiliser

The progressivity of the income tax and social security contributions as well as the level and duration of unemployment benefits determine the effectiveness of the automatic stabilisers. In countries with a high government expenditure ratio the stabilising effect of the social security system is particularly strong.

Among social expenditures, unemployment benefits constitute the most important element for automatic stabilisation. Their stabilising effect is the stronger, the higher the replacement ratio as a share of net income and the longer the duration. There are substantial differences between the EU countries with respect to both criteria. In the Scandinavian countries social security is particularly favourable for lower income groups. In Denmark, the maximum duration of benefit payments is 48 months, the replacement ratio is 90 percent of the latest income. In Sweden, unemployment benefits are paid for up to 14 months, the replacement ratio ranges between 70 percent and 80 percent. Social insurance is also relatively generous in the Netherlands, in France, in Belgium and, partly, in Portugal. The replacement ratios of Germany and Austria are in the lower midrange of EU countries[1]. Social conditions and the stabilisation effects of the systems are by far less favourable in the Anglo-Saxon countries and in some Southern and Eastern European countries.

In addition to spending on unemployment benefits, government expenditures on pensions, disability benefits, sick leave and the health sector also rise in a downturn (*Darby – Melitz,* 2008). Empirical research shows a strong relationship between the number of early retirements and the business cycle (*Darby – Hart – Vecchi,* 2001). In a recession the number of new disability benefit recipients also increases, because employees with health problems consider retirement an alternative to unemployment (*Fahr – Frick,* 2007).

According to all studies on the effectiveness of automatic stabilisers the size of the public sector measured by the ratios of taxes and of government spending to GDP is of primary importance: the higher the share of the public sector, the stronger the income smoothing effect (*Galí,* 1994, *Fatás – Mihov,* 2001, *Furceri,* 2009). Further, the structure of the budget and institutional factors play an important part for the variation in the stabilisation effects. Revenues from direct taxes react more strongly to cyclical fluctuations than those from social security contributions or consumption taxes (*Baunsgaard – Symansky,* 2009) and, consequently, have a stronger stabilisation effect.

Provisions of minimum income support also exert a stabilising effect. The minimum level of social protection differs substantially between EU member countries. In most countries the level of minimum income benefits is below the poverty line (*Frazer – Marlier,* 2009), only Denmark, Ireland and the Netherlands being exceptions. The strong increase in unemployment during the course of the crisis shows that households are affected asymmetrically by the crisis. This social policy challenge is exacerbated by the phenomenon of the working poor. As an OECD study of 21 European countries shows, almost 80 percent of the working poor are in part-time employment (*OECD,* 2009A). A worsening situation in the labour market due to the crisis thus has far-reaching consequences in terms of the risk of poverty, which active social policies can counter in the long term.

[1] In addition to the replacement ratio immediately at the beginning of unemployment, social security in the case of long-term unemployment, i.e., the replacement ratio for the long-term unemployed is also important. In this respect Austria scores high compared to other European countries (*Eichhorst et al.,* 2010).

The design of the system of taxes and transfers determines to what extent a negative income or employment shock diminishes households' disposable income and, consequently, harms the macroeconomy. The stabilising effect of the welfare state is markedly higher in the EU than in the USA (*Dolls – Fuest – Peichl,* 2009, *Eichhorst et al.,* 2010). The size of the automatic stabiliser effects varies considerably within the EU: in the case of a decline of gross incomes due to a crisis, the maximum stabilisation effect is strongest in Denmark, followed by Belgium, Germany, Hungary, Austria and Sweden (*Eichhorst et al.,* 2010) and lowest in Estonia, Spain and Greece. It is essentially determined by the level and progressivity of the income tax and social security contributions.

Likewise the stabilisation effect caused by an increase in unemployment is highest in Denmark, followed by Sweden, Germany, Belgium, Luxembourg and Austria. In this case the size of the automatic stabilisation effect is determined by the level and duration of unemployment benefits. In most cases the stabilising effect of the welfare state is particularly strong in open economies (measured in terms of the share of exports and imports). Indeed, the import ratio is high in these countries and the multiplier effect of expansionary fiscal policy measures is therefore relatively small. At the same time, however, they usually exhibit a high share of government in GDP, which entails a pronounced automatic stabilisation effect (*Rodrik,* 1998).

Social policy via fiscal policy intervention

The level of the propensity to save and import as well as monetary policy determine the effectiveness of discretionary fiscal policy measures. Particularly high employment effects result from direct public employment and targeted subsidies, as in the case of short-time working schemes.

Economic policy makers in the EU did not make up their minds to engage in active anti-cyclical monetary and fiscal policies before the end of 2008, i.e., in the middle of the recession. The International Monetary Fund recommended comprehensive stimulus packages, which should be "timely, large, lasting, diversified, contingent, collective and sustainable" (*Spilimbergo – Symansky – Blanchard,* 2008, p. 3).

The effects of discretionary stabilisation measures on GDP depend on three factors:

- The savings ratio of the households supported by the measures: households with a low income exhibit a low propensity to save, thus contributing to a high multiplier effect. In a severe crisis the propensity to save can increase, so that the expansionary effects of tax cuts are very limited.
- The international integration of the economy: if the import share is high, a significant part of the additional demand becomes effective abroad. In a European context this points to the great importance of supra-national fiscal policy coordination.
- The behaviour of the central bank: in the case of an accommodating monetary policy with low interest rates stronger expansionary effects can be expected. A low interest policy and the expansion of liquidity noticeably supported the effectiveness of the stimulus programmes during the financial crisis.

The macroeconomic effects of stimulus packages also vary depending on the type of measures. The strongest effects originate from direct spending, such as public investment. However, implementation lags have to be taken into account. The effects of tax cuts and higher transfers are smaller, because, initially, they raise only disposable income and only indirectly affect aggregate demand. Discretionary social policy is a highly effective instrument, which provides particular support to low-income households with a low savings ratio that are hit by the crisis. Empirical analyses of international organisations confirm the multiplier effects of stimulus programmes as expected from a theoretical point of view (*Freedman et al.,* 2009, *OECD,* 2009B, *Spilimbergo – Symansky – Schindler,* 2009).

Employment multipliers of discretionary stabilisation policies are similar to those for GDP. The employment effects of direct public employment and targeted subsidies to companies, e.g., for short-time working schemes, are substantially higher than the effects on GDP. As part of their stimulus programmes the Scandinavian countries increased employment in public services. Short-time work played a crucial role in a number of countries: in Belgium, for instance, more than 5 percent of all employees participated in such measures. In Italy and Germany this share was 3 percent, in Austria it was 1 percent (*OECD,* 2010).

Direct interventions of employment policy have strongly positive effects in the short run. In the long term there is a risk that they delay structural change by potentially keeping employees in declining sectors for too long. At the same time, however, employment policy interventions often envisage measures to counter impending losses of qualification and thus have a positive long-term effect. In the most recent economic crisis, training and qualification measures were enhanced in a number of countries and job placement was intensified. Measures that increase individual productivity improve the chances in the labour market. As there is a lack of demand for labour during the crisis, success is limited in the short term, but maybe substantial in the medium term. Particularly for adolescents, training and qualification measures are important, when the labour market situation is unfavourable, because they promise high returns in the long term.

Discretionary social policy measures during the crisis

In 2009 and in 2010, social policy measures in a broad sense amounting to 1.1 percent of GDP were implemented in the EU. Policies were particularly forceful in the Scandinavian countries, in Spain, in Germany and in Austria.

In this analysis of the social policy part of the EU countries' stimulus packages social policy activities are defined in a broad sense. Thus, social policy measures in a broad sense include all measures that aim to improve the income and the employment situation of the population or of particular groups of the population. As the estimation of the effects on growth and employment[2] shows, a coordinated policy approach within the EU has noticeable advantages compared to individual states' initiatives.

At the end of 2008 and in early 2009 most EU countries enacted discretionary stimulus measures, which came into effect in the course of 2009[3]. In this context social policy measures in a broad sense played an important role (Table 1). In the euro area as a whole discretionary expansionary measures amounting to 2 percent of the GDP of 2008 were implemented. 59 percent of these concerned social policy measures in a broad sense. This is equivalent to roughly € 100 billion (1.1 percent of GDP). However, the stimulus packages had a strong focus on tax cuts to relieve private household: measures equivalent to 0.78 percent of GDP concerned decreases of government revenue, 0.32 percent of GDP were effective on the expenditure side. Only Denmark, Sweden, Belgium, Portugal and Spain injected a public expenditure stimulus of more than 0.5 percent of GDP. The measures in Germany and Spain accounted for two thirds of the total social policy impulse in the euro area.

In Germany, discretionary social policy measures consisted in an increase of the tax free income allowance as well as a reduction of the starting income tax rate and social security contributions. Transfers to private households and businesses as well as government consumption expenditures were increased. In total these measures amounted to € 39 billion (1.5 percent of GDP; *OECD,* 2009C). In addition to the traditionally strong employment protection, the high internal working time flexibility at the industry and company level was most important for the stabilisation of employment and the prevention of unemployment. During the crisis working time was reduced by collective agreements, withdrawals from working time accounts and the extensive use of short-time work (*Herzog-Stein et al.,* 2010). At the peak in spring 2009 more than 1.5 million employees were in short-time working schemes, especially in the export-oriented industry which was hit particularly hard by the recession.

In relation to GDP the social policy measures to stimulate economic activity in the three Scandinavian countries, in Belgium, the Netherlands, Austria, Slovakia and the Czech Republic, also had a high importance. In Austria this category comprises the substantial reduction of income taxes in 2009, the increase of social transfers (family, nursing care, pensions) in the autumn of 2008 and the subsidisation of short-time work. The Scandinavian countries not only exhibited high automatic stabilisers because of their high government spending ratios, but also implemented extensive discretionary measures during the crisis, which affected the expenditure side of the

[2] The analysis also includes measures that had been planned before the economic crisis, possibly with a different background, but became effective during the crisis (such as the Austrian tax reform).

[3] Because of the sharp decline of the real estate sector fiscal policy in the UK and in Spain was already on an expansionary course in 2008.

budget to a larger extent than in other countries. In Denmark private households had the opportunity during the crisis to withdraw savings from the compulsory private pension scheme. An income tax reform provided particular relief to families with children. Further, the funds for active labour market policies were (automatically) raised, as unemployment increased.

Table 1: Discretionary social policies in the EU

	Total measures		Measures on the revenue side 2008	Measures on the expenditure side	Share in the stimulus package
	Billion €		As a percentage of GDP		
Euro area	99.18	1.10	0.78	0.32	0.61
Belgium	5.29	1.53	1.03	0.50	0.96
Germany	39.07	1.57	1.24	0.33	0.53
Greece	1.04	0.43	0.00	0.43	0.69
Spain	26.42	2.43	1.66	0.77	0.68
France	5.50	0.28	0.13	0.15	0.43
Italy	3.31	0.21	0.00	0.21	0.65
Netherlands	7.34	1.23	1.12	0.11	0.80
Austria	4.54	1.61	1.35	0.26	0.90
Portugal	1.02	0.61	0.00	0.61	0.77
Slovakia	0.72	1.10	0.61	0.49	0.95
Finland	4.93	2.68	2.39	0.29	0.84
Czech Republic	2.98	2.14	2.01	0.14	0.66
Denmark	3.98	1.71	0.68	1.02	0.67
Poland	1.18	0.40	0.31	0.09	0.22
Sweden	7.35	2.47	1.73	0.74	0.88
UK	12.34	0.76	0.59	0.17	0.45
Average of 16 countries		1.10	0.78	0.32	0.59

Source: *OECD* (2009C).

Macroeconomic effects of discretionary social policies

Expansionary discretionary social policies raised euro area GDP by 0.9 percent in 2009 and 2010. All EU countries benefitted not only from their own measures, but also from their trade partners' activities. This confirms the enormous importance of a coordinated approach to anti-cyclical fiscal policy.

The WIFO has analysed the effects of social policy measures as part of the EU countries' stimulus packages using Oxford Economics' Global Macro Model (*Oxford Economic Forecasting,* 2005). This model of the world economy facilitates an estimation not only of the domestic effects of the measures, but also of the expansionary impulses which result from the close economic relations within the EU[4]. In this context only the effects of the expansionary measures during the crisis are analysed, but not the restrictive measures to consolidate the budget, which have become effective already in 2010 in Greece, Spain, Portugal and Ireland and in 2011 in most other EU countries and which affect social policy to a substantial extent.

In the large EU countries mainly the domestically implemented measures took effect (Table 2). In Germany, for instance, expansionary social policy measures raised GDP by 0.3 percent already in 2010. Until 2012 their effect will amount to an accumulated 1.4 percent compared to the baseline without expansionary social policies. Three quarters of the effect result from domestic measures, one quarter of the beneficial effect for the German economy originate from the measures of the trade partners within the EU. The income multiplier of discretionary social policy measures is about 0.9. These results are consistent with the results of other research institutes (*Projektgruppe Gemeinschaftsdiagnose,* 2010). In Spain, the welfare gains amounted to 1.8 percent of GDP, which implies a multiplier of 0.75.

[4] The fiscal policy impulses were implemented in the model on a quarterly basis. Additional transfers of € 1 billion were modelled as additional government consumption of € 250 million in each quarter. According to these simulations the stimulus packages do not fully come into effect before the end of 2010. The expansionary effects materialise with a time lag, starting in 2010, and do not reach their peak until in 2012. The quarterly implementation was chosen, to limit the complexity of the analysis. In the simulations with Oxford Economics' Global Macro Model an accommodating monetary policy was assumed.

Table 2: Macroeconomic effects of discretionary social policy measures

	Individual country level	Coordinated across EU	Individual country level	Coordinated across EU	Individual country level	Coordinated across EU	Individual country level	Coordinated across EU	Coordinated across EU
	2010		2011		2012		2012 accumulated		
	As a percentage of GDP								Multiplier
Euro area		+ 0.20		+ 0.30		+ 0.40		+ 0.90	+ 0.84
Germany	+ 0.30	+ 0.30	+ 0.40	+ 0.50	+ 0.40	+ 0.60	+ 1.10	+ 1.40	+ 0.89
Ireland	–	+ 0.10	–	+ 0.20	–	+ 0.40	–	+ 0.70	–
Greece	+ 0.10	+ 0.10	+ 0.00	+ 0.10	+ 0.00	+ 0.10	+ 0.10	+ 0.30	+ 0.69
Spain	+ 0.30	+ 0.40	+ 0.50	+ 0.60	+ 0.70	+ 0.80	+ 1.50	+ 1.80	+ 0.74
France	+ 0.00	+ 0.00	+ 0.00	+ 0.10	+ 0.00	+ 0.10	+ 0.00	+ 0.20	+ 0.71
Italy	+ 0.00	+ 0.10	+ 0.00	+ 0.10	+ 0.00	+ 0.10	+ 0.00	+ 0.30	+ 1.43
Netherlands	+ 0.10	+ 0.30	+ 0.30	+ 0.50	+ 0.30	+ 0.60	+ 0.70	+ 1.40	+ 1.14
Austria	+ 0.30	+ 0.40	+ 0.30	+ 0.50	+ 0.40	+ 0.60	+ 1.00	+ 1.50	+ 0.93
Portugal	+ 0.10	+ 0.20	+ 0.20	+ 0.30	+ 0.10	+ 0.40	+ 0.40	+ 0.90	+ 1.46
Slovakia	+ 0.00	+ 0.10	+ 0.00	+ 0.10	+ 0.00	+ 0.20	+ 0.00	+ 0.40	+ 0.36
Finland	+ 0.70	+ 0.90	+ 0.60	+ 0.90	+ 0.70	+ 1.20	+ 2.00	+ 3.00	+ 1.12
Bulgaria	–	+ 0.00	–	+ 0.00	–	+ 0.10	–	+ 0.10	–
Czech Republic	+ 0.10	+ 0.20	+ 0.20	+ 0.60	+ 0.10	+ 0.30	+ 0.40	+ 1.10	+ 0.51
Denmark	+ 0.50	+ 0.50	+ 0.60	+ 0.70	+ 0.60	+ 0.90	+ 1.70	+ 2.10	+ 1.23
Hungary	–	+ 0.20	–	+ 0.50	–	+ 0.20	–	+ 0.90	–
Poland	+ 0.00	+ 0.10	+ 0.00	+ 0.20	+ 0.10	+ 0.20	+ 0.10	+ 0.50	+ 1.24
Romania	–	+ 0.00	–	+ 0.00	–	+ 0.00	–	+ 0.00	–
Sweden	+ 0.20	+ 0.30	+ 0.50	+ 0.70	+ 0.70	+ 1.00	+ 1.40	+ 2.00	+ 0.81
UK	+ 0.00	+ 0.10	+ 0.10	+ 0.20	+ 0.20	+ 0.30	+ 0.30	+ 0.60	+ 0.79

Source: Oxford Economic Forecasting, WIFO calculations.

A number of smaller countries implemented extensive domestic measures. However, as open economies, they benefitted substantially from the size of the stimulus packages of neighbouring countries. For instance, Finland's GDP will be 3 percent higher than in the baseline scenario owing to expansionary social policy measures, a third of the effect being due to other countries' measures. The same holds for Sweden and Denmark. In Austria the social policy measures to stimulate economic activity will raise GDP by 1.5 percent in 2012, a third being due to measures of the trade partners. The multiplier is about 0.9. Comparable simulations with the WIFO's macro model yield similar results (*Breuss – Kaniovski – Schratzenstaller,* 2009).

Table 3: Effects of discretionary social policy measures on consumption

	Individual country level	Coordinated across EU	Individual country level	Coordinated across EU	Individual country level	Coordinated across EU
	2010		2011		2012	
	Percentage changes of private households' consumption expenditure compared to the baseline excluding expansionary social policies					
Euro area		+ 0.40		+ 0.50		+ 0.60
Belgium	+ 1.20	+ 1.20	+ 1.30	+ 1.40	+ 1.30	+ 1.40
Germany	+ 0.60	+ 0.70	+ 0.80	+ 0.80	+ 0.70	+ 0.80
Ireland	–	+ 0.00	–	+ 0.10	–	+ 0.10
Greece	+ 0.10	+ 0.10	+ 0.00	+ 0.10	+ 0.00	+ 0.10
Spain	+ 0.70	+ 0.80	+ 1.40	+ 1.40	+ 1.70	+ 1.80
France	+ 0.00	+ 0.00	– 0.10	– 0.10	– 0.10	– 0.10
Italy	+ 0.00	+ 0.00	+ 0.00	+ 0.00	+ 0.00	+ 0.00
Netherlands	+ 0.40	+ 0.40	+ 0.70	+ 0.80	+ 0.90	+ 1.10
Austria	+ 1.00	+ 1.10	+ 1.40	+ 1.50	+ 1.60	+ 1.70
Portugal	+ 0.30	+ 0.40	+ 0.50	+ 0.60	+ 0.50	+ 0.60
Slovakia	+ 0.00	+ 0.00	+ 0.00	+ 0.00	+ 0.00	+ 0.10
Finland	+ 1.40	+ 1.70	+ 2.00	+ 2.60	+ 2.20	+ 2.90
Bulgaria	–	+ 0.00	–	+ 0.00	–	+ 0.00
Czech Republic	+ 0.40	+ 0.40	+ 0.50	+ 0.80	+ 0.10	+ 0.40
Denmark	+ 1.20	+ 1.10	+ 2.00	+ 2.00	+ 2.20	+ 2.40
Hungary	–	+ 0.00	–	+ 0.40	–	+ 0.40
Poland	+ 0.00	+ 0.00	+ 0.10	+ 0.20	+ 0.10	+ 0.30
Romania	–	+ 0.00	–	– 0.10	–	– 0.20
Sweden	+ 0.70	+ 0.70	+ 1.50	+ 1.70	+ 2.20	+ 2.70
UK	+ 0.10	+ 0.10	+ 0.20	+ 0.20	+ 0.30	+ 0.40

Source: Oxford Economic Forecasting, WIFO calculations.

Some EU countries hardly applied discretionary measures during the crisis. Nevertheless, they benefitted from their trade partners' expansionary policies. This is true for France and Italy, but also for Ireland or Hungary. For the euro area as a whole the accumulated growth effects of discretionary social policies will amount to 0.9 percent in 2012.

Social policy measures increase the disposable income of private households. Thus, they affect GDP via an increase of consumption expenditure. In some countries the stimulus packages have supported domestic demand to a substantial extent (Table 3). The euro area average of private households' consumption demand will be 0.6 percent higher in 2012 than without social policy measures. In the Scandinavian countries the increase is 2½ percent to 3 percent, in Austria it amounts to 1.7 percent.

Employment effects of discretionary social policies

Measures of discretionary social policy created or saved about 330,000 jobs during the latest economic crisis.

The expansionary effects of the social policy elements in the stimulus packages on GDP also entail noticeable employment effects (Table 4), the estimation using the macroeconomic model taking only the employment effects of the GDP increase into account. The impact of particularly efficient employment policy measures such as the creation of jobs in public services or working time reductions, e.g., by subsidising short-time work, are not fully reflected in the simulation.

In 2010, social policy measures created an additional 112,000 jobs in the EU, until 2012 this number will rise further to about 330,000. Social policy measures of individual countries generate a total of 190,000 additional jobs within these countries. An additional 140,000 jobs result from EU trade partners' measures.

However, the employment effects are small compared to the expenditures. This is due to several reasons: firstly, in a recession companies have high productivity reserves. Consequently additional employment is generated with a substantial time lag. Secondly, uncertainty is particularly pronounced in a severe economic crisis. For this reason the demand for consumer durables and investment goods is particularly low. Thirdly, the share of tax cuts among overall measures was particularly high. Due to the high marginal propensity to save of those who benefit (which rose further during the crisis), tax cuts exhibit a low impact on demand and muted employment effects.

Table 4: Job creation due to discretionary social policy measures

	Individual country level	Coordinated across EU	Individual country level	Coordinated across EU	Individual country level	Coordinated across EU
	2010		2011		2012	
	In 1,000					
Euro area		+ 85,251		+ 152,298		+ 218,604
Belgium	+ 3,399	+ 4,240	+ 4,132	+ 6,355	+ 4,844	+ 8,912
Germany	+ 21,410	+ 27,060	+ 47,550	+ 67,000	+ 59,790	+ 91,950
Ireland	+ 0	+ 783	± 0	+ 1,451	± 0	+ 2,649
Greece	+ 1,560	+ 2,199	+ 687	+ 2,216	± 0	+ 2,853
Spain	+ 20,910	+ 24,980	+ 29,380	+ 34,250	+ 43,480	+ 52,440
France	– 869	+ 2,070	– 1,489	+ 3,970	– 1,959	+ 5,910
Italy	+ 870	+ 4,620	+ 1,300	+ 7,950	+ 1,470	+ 13,060
Netherlands	+ 1,451	+ 2,637	+ 4,323	+ 8,008	+ 6,102	+ 11,770
Austria	+ 4,432	+ 5,287	+ 4,475	+ 6,158	+ 5,565	+ 8,069
Portugal	+ 2,694	+ 3,630	+ 4,047	+ 7,070	+ 4,580	+ 9,757
Slovakia	± 0	+ 443	± 0	+ 939	± 0	+ 1,295
Finland	+ 5,307	+ 7,302	+ 4,847	+ 6,931	+ 6,117	+ 9,939
Bulgaria	± 0	+ 191	± 0	+ 381	± 0	+ 308
Czech Republic	+ 1,653	+ 3,074	+ 2,945	+ 9,235	+ 2,330	+ 4,549
Denmark	+ 4,581	+ 5,012	+ 6,121	+ 7,690	+ 7,738	+ 10,975
Hungary	+ 0	+ 1,461	± 0	+ 6,406	± 0	+ 2,303
Poland	+ 1,230	+ 3,480	+ 2,830	+ 14,260	+ 4,660	+ 17,610
Romania	± 0	+ 646	± 0	+ 603	± 0	– 2,215
Sweden	+ 3,724	+ 5,372	+ 9,150	+ 13,424	+ 15,826	+ 23,264
UK	+ 3,849	+ 7,560	+ 17,100	+ 32,730	+ 30,260	+ 54,990
Total	+ 76,201	+ 112,047	+ 137,398	+ 237,027	+ 190,803	+ 330,388

Source: Oxford Economic Forecasting, WIFO calculations.

Discretionary social policies and uncertainty

The social security system contributes substantially to a stabilisation particularly of private households' expectations. Thus, discretionary social policy measures can smooth consumer demand over the business cycle and prevent the increase of precautionary saving in a recession, which has detrimental effects on economic activity.

Via the automatic stabilisers and discretionary measures, the social system entails a stabilising effect on economic activity. Furthermore, it helps to reduce uncertainty both at the individual and at the social level. In a crisis, discretionary social policy measures mitigate income losses. As a consequence, expectations are stabilised, the propensity to save is dampened and consumption behaviour is smoothed.

The positive macroeconomic effects of reduced uncertainty and stabilised expectations cannot be quantified directly. However, there are indicators, which can be used for an estimation of these effects. As a rule, households react to rising uncertainty by expanding their savings ("precautionary saving"). Households' savings ratio relative to disposable income can therefore be interpreted as a measure of the prevailing uncertainty. In the current crisis savings increased in many EU countries, but also in the USA. The increase of the savings ratio was mainly due to two factors: the marked increase in unemployment and the problems in the real estate markets of some countries. For severe past financial crises, the International Monetary Fund estimated the average increase of the savings ratio at 5 percentage points within two years (*IMF,* 2009A, 2009B).

In the current crisis such precautionary saving could be limited in Germany and Austria. The strong decline in world trade hit both countries hard because of their economies' export orientation. Nevertheless, savings did not change markedly: between 2007 and 2010 the share of savings in disposable income merely increased from 10.8 percent to 11.5 percent in Germany. In Austria, it even declined from 11.6 percent to 10.6 percent. The volume of discretionary social policy measures was particularly high in Germany. Especially short-time work, which directly saved jobs, in combination with other measures of working time reduction substantially dampened the decline in employment during the crisis. This is assumed to have contributed substantially to a prevention of a rise in unemployment and consequently of uncertainty due to the crisis and is therefore assumed to have stabilised private households' expectations.

For an analysis of the macroeconomic effects of this weak increase of the savings ratio in Germany, the increase of the share of savings in disposable income is replaced by the current EU average on the one hand (Scenario 1) and by the long-term average estimated by the IMF (Scenario 2)[5]. Accordingly an increase of the savings ratio dampens consumption demand considerably (Scenario 1 –3 percent, Scenario 2 –5½ percent). This results in substantial GDP losses (2011 –0.9 percent to –1.6 percent compared to the baseline scenario without increases saving) and in a substantial increase of unemployment (+100,000 to +180,000). These results provide evidence for the major importance of social security systems and innovative social policy measures for the macroeconomy.

Table 5: Effects of increased uncertainty and precautionary saving in Germany

		EU average scenario	IMF scenario	EU average scenario	IMF scenario
		2010		2011	
GDP	in percent	– 0.6	– 1.1	– 0.9	– 1.6
Consumption	in percent	– 2.1	– 4.0	– 2.9	– 5.5
Unemployment	in 1,000	+ 44.5	+ 80.3	+ 105.0	+ 179.4

Source: Oxford Economic Forecasting, WIFO calculations.

Reform requirements concerning the use of discretionary social policies

A particular problem of discretionary fiscal policy measures is their lagged effect. This has also become apparent in the latest crisis: from the spring of 2008 onwards, real GDP shrank and unemployment increased. However, discretionary measures to counteract these developments were enacted only end of 2008 and were implemented gradually starting in early 2009. They did not take full effect before the end

[5] In the model the increase is implemented gradually per quarter in 2008 and 2009, in 2010 and 2011 the savings ratio remains at the increased level.

of 2009. Reversely, it is also important that measures to stimulate economic activity are phased out again after an adequate duration, in order not to impair structural change. Therefore, the International Monetary Fund suggests making discretionary stabilisation measures more automatic (*Blanchard – Dell'Ariccia – Mauro,* 2010). For instance, funding in certain fields could be linked to the trends of relevant economic indicators. In Denmark, active labour market policy is already practising this: if the unemployment rate increases, funds for training and qualification are raised automatically. A similar approach would be conceivable for the level and duration of unemployment benefits or concerning the minimum income benefit (Mindestsicherung).

Various policy instruments exhibit very diverse growth and employment effects. Of the stimulus packages in the EU, the lion's share concerns tax reductions. Especially in a phase of uncertainty their demand and employment impact is relatively small. Targeted measures, which directly support households with a high propensity to consume or subsidise employment in industries affected by the crisis, are particularly effective.

The welfare state has an anti-cyclical effect by stabilising households' expectations and by preventing precautionary savings during a recession. Private households rely on the social protection function of the social security system and do not increase their savings during the crisis. The growth and employment effect of this stabilisation of expectations is difficult to quantify empirically, but can be assumed to be comparable to those of the implemented discretionary measures.

Discretionary social policy could be made automatic to a larger extent. Further it should focus, particularly, on households with a high propensity to consume and on direct employment stabilisation.

During the financial and economic crisis, again, the size of discretionary fiscal and especially social policy measures was high, particularly in those countries, where automatic stabilisers in public budgets react strongly. At the same time, it is these countries that have traditionally exhibited an open economic structure oriented towards external trade and have, for this reason, established a comprehensive social security system.

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The Stabilising Effect of Social Policies in the Financial Crisis – Summary

Social policy measures and the social security systems in the EU stabilised GDP and employment noticeably during the recent financial and economic crisis. In terms of their size automatic stabilisers were particularly important. Discretionary social policy measures aiming at the stabilisation of the economy had positive but modest effects. The welfare state's stabilising influence on expectations, though difficult to quantify, is also assumed to have played an important role.

The major advantage of automatic stabilisers consists in their immediate effectiveness. Among social expenditures unemployment benefits are the most important component. Pensions and health care expenditures also work as automatic stabilisers. The stabilisation effect of the tax system increases with its progressivity. Within the EU the welfare states differ widely with respect to their automatic stabilisation effects: the latter are particularly strong in Denmark, followed by Belgium, Germany, Sweden and Austria. In Southern and Eastern Europe, by contrast, they are relatively weak.

Discretionary social policy measures in the EU amounted to about 1.1 percent of GDP both in 2009 and 2010. They largely consisted of tax reductions for private households. Only Denmark, Sweden, Belgium, Portugal and Spain implemented discretionary social policy measures exceeding 0.5 percent of GDP on the expenditure side of the budget. These measures raised the GDP both of the respective countries and of their trade partners. In Austria, GDP increased by about 1 percent owing to domestic discretionary policy measures. This is complemented by an effect equivalent to 0.5 percent of GDP caused by the discretionary social policies of other EU countries. For the euro area an increase of GDP by 0.9 percent is derived from model estimations. Discretionary social policy measures to support demand helped to create 330,000 jobs in the EU. However, the impact of particularly effective employment policy measures such as the reduction of working hours by introducing short-time working schemes, is not fully reflected in the model simulations. In Germany alone more than 1.5 million employees were in short-time working schemes at their peak in spring 2009.

The positive effects of discretionary social policies would be larger, if the coordination between EU member countries were improved and policy makers focused more on a temporary increase of transfers to households with a high propensity to consume as well as direct employment promotion.

Discretionary social policies could partly be made automatic by linking particular expenditures to the evolution of relevant economic indicators. Here, Denmark, where funds for training and qualification measures are automatically increased in case of a rising unemployment rate, serves as an example.

The welfare state also produces anti-cyclical effects by stabilising private households' expectations. Empirically these expansionary effects are difficult to quantify. Indeed, they are likely to be similar in size to those of the discretionary measures that were implemented during the recent crisis.