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EU STIMULUS PACKAGES

Estimating the size of the European stimulus packages for 2009: an update

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Highlights

- In December 2008, the European Council agreed an EU-wide economic stimulus of “around €200 billion”. However, it was left unclear how much each country should contribute, and there was no clear timeline detailing which part of the stimulus was to be delivered by when.
- This paper presents the latest breakdown of the fiscal stimuli in member states. The total stimulus in the EU for 2009 is found to be the equivalent of around one percent of GDP.
- The equivalent figure for the US is estimated at about 1.7 percent of GDP, substantially above the EU average but only marginally above the largest national stimulus package in the EU.
- The contributions to the European stimulus vary substantially by country. The fiscal stimulus is greatest as a percentage of GDP in Germany, while, at the other extreme, Italy appears to be engaging in marginal fiscal consolidation in response to the crisis.
- In terms of spending categories, there is no clearly discernible pattern. Different starting conditions and variations in the lobbing clout of sectoral interest groups may explain at least part of the observed differences.

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EU STIMULUS PACKAGES

Estimating the size of the European stimulus packages for 2009: an update[1]

DAVID SAHA AND JAKOB VON WEIZSÄCKER, APRIL 2009[2]

1. INTRODUCTION

In December 2008, the European Council agreed on an EU-wide economic stimulus of "around €200 billion". However, this agreement is not very specific in two important respects. First, it is unclear which country is to contribute how much to the roughly €170 billion part of the fiscal stimulus that is to be effected by member states, with the remaining €30 billion to be contributed at the EU level. Second, there is no clear timeline detailing which part of the stimulus is to be delivered by when. However, both the geography and the timing of the European stimulus are important dimensions when trying to assess the likely economic impact of the pact and the progress towards it implementation.

In order to contribute to the debate on the geography and timing of the stimulus, we presented a first estimate of the size of fiscal stimuli that had recently been proposed by member states (and had, in some cases, already been adopted) just in time for the European Council. The present update of that earlier paper simply presents the latest breakdown of the fiscal stimuli in member states using the same methodology as before. In addition, an attempt is made to compare the total European package for 2009 to the stimulus to be implemented in the US.

To keep the complexity of the EU side of the exercise manageable, we only take into account the 13 largest economies in the EU that make up more than 90 percent of the EU's GDP, plus the planned boost at the Community level. Despite this simplification, the task of estimating the size of the different programmes remains challenging, not least because of the great variety of different instruments used and the rapid evolution of national debates.

In the following section of this note, we present our main findings. The third section then explains the methodology underlying our results. Finally, the annex lists the country specific tables on which our assessment is based.

Main findings

The estimates regarding the effective size of the active fiscal stimulus (beyond automatic stabilisers) are summarised in Table 1.

Table 1: Estimating the size of the stimulus package for 2009

	Tax cuts & fiscal expenditures		Extra credit & similar measures	
	€ bn	% of GDP	€ bn	% of GDP
Belgium	1.2	0.4%	2.1	0.6%
Denmark	0	0.0%	0	0.0%
Germany	39.3	1.5%	70.3	2.8%
Ireland	0	0.0%	0	0.0%
Greece	0	0.0%	23	0.9%
Spain	12.3	1.1%	54.3	4.9%
France	16.9	0.9%	41.5	2.1%
Italy	-0.3	0.0%	0	0.0%
Netherlands	6.1	1.0%	0.3	0.1%
Austria	3.9	1.4%	2.5	0.9%
Poland	1.6	0.5%	5.0	1.6%
Sweden	3.8	1.3%	8.8	3.0%
United Kingdom	22.6	1.4%	23.3	1.4%
13 largest EU countries	107.6	0.94%	231.2	2.0%
Imputed EU-27 total	120.3	0.94%	258.6	2.0%
European Commission	9.3	0.07%	15.5	0.1%
Imputed grand total	129.6	1.01%	274.1	2.1%

1. An earlier version of these estimates was released just before the European Council in December 2008. The financial support of the European Parliament for the preparation of an earlier version of this paper is gratefully acknowledged. The current estimates capture, to the best of our knowledge, the situation as of 22nd April 2009. Revised figures for Sweden have been included on the basis of a more detailed breakdown of the 2009 budget we obtained recently.

2. The authors would like to thank Maite de Sola, Marco Cornia and Martin Kessler for excellent research assistance.

In our evaluations, fiscal stimuli delivered in the form of tax cuts or expenditure increases are treated separately from the government-sponsored provision of extra credit to producers and consumers, or economically similar measures.

The most important reason for this is that one euro of subsidised credit is typically substantially less than the fiscal equivalent of one euro. In normal times, it only amounts to the amount of credit provided multiplied by the difference between the subsidised and the relevant market interest rates. Clearly, this approach is not readily applicable in times of liquidity restrictions and we recognise that government-sponsored credit can contribute to supporting private spending. However, the two categories of stimuli are essentially not – or at least not directly – commensurate, and it is problematic that the public discussion nevertheless often treats them as such.

Clearly, the contributions to the European stimulus vary substantially by country. According to our estimates, the classic fiscal stimulus is greatest as a percentage of GDP in Germany, which is due to the sizeable second stimulus package that the German government tabled in January 2009. At the other extreme, Italy appears to be engaging in marginal fiscal consolidation in response to the crisis, thereby reducing the effect of the automatic stabilisers. Spain is most active when it comes to the provision of additional credit and similar measures, which is to some extent related to its real-estate bubble bursting just before the global financial crisis hit. Overall, the size of the plans in the two categories, fiscal spending and credit provision, is not closely correlated. Greece, for example, is only active in the latter category.

The weighted average of the classic fiscal stimulus over the 13 countries reaches 0.9 percent of GDP. Assuming that the 14 small member states not covered in this note deliver a stimulus of the same proportion of GDP as the 13 larger member states, this can be taken to be the size of the national stimuli as a proportion of the EU's total GDP. Adding the 0.07 percent contribution of the European Community, the total fiscal boost is estimated to be just above one percent of the EU's GDP. This would still appear to be substantially below the target of the Council that member states and community-level institutions should strive to reach 1.5 percent of GDP.

However, compared to the December version of our estimates for the EU, there has been a marked increase in the size of the EU stimulus. This is mostly due to the German "Konjunkturpaket II", the new social package of the French government, the doubling of the Dutch stimulus package and the new measures contained in the 2009 UK budget, presented on 22nd April 2009.

When comparing our estimates to the target set by the European Council, two things should be noted. First, the European Council's target allows countries to count towards the total size of the stimulus measures that would only become effective well after our cut-off point of end 2009. Second, by counting government-sponsored credit provision and economically similar measures towards the overall size of the package, the 1.2 percent of GDP target agreed by the European Council for the member states would be within easy reach even by the end of 2009. Similarly, it is clear that the target of 0.3 percent of GDP for Community level activity is nominally within reach based on the current proposals.

However, declaring victory on the European stimulus package by simply adding extra credit provision to the direct fiscal stimulus would be questionable on economic grounds. Our findings

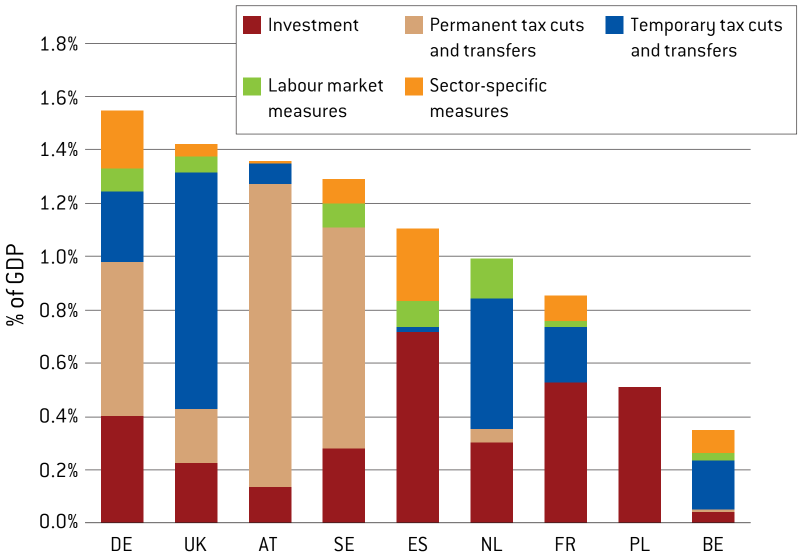
'By counting government-sponsored credit provision and economically similar measures, the 1.2 percent of GDP target would be within easy reach, but the likely real impact on aggregate demand in the near future may well be more limited than suggested by the headline figures.'

suggest that it is essential to look beyond the headline figures. It should be recognised that the likely real impact on aggregate demand in the near future may well be more limited than suggested by the headline figures.

Composition of stimulus packages

The stimulus packages across the EU not only vary substantially in size but also in composition. Figure 1 summarises these differences in composition for the eight largest stimulus packages.

Figure 1: Break-down of select EU stimulus packages by spending category



Source: Bruegel calculations

There is no clearly discernible pattern. At the one extreme, countries like Poland and Austria only use one or two spending categories to deliver their stimulus. By contrast, Germany, with its large stimulus package, has decided to rely on all spending categories. One likely explanation for this great variance in composition are different starting conditions. For example, there may be countries where public infrastructure is acutely lacking so that investment projects enjoy widespread political support, whereas in others there are issues in the tax system that are waiting to be dealt with as part of a stimulus package.

An international comparison

Another interesting question is how the aggregate stimulus package in the EU compares to other large packages, not least in view of the impact on global aggregate demand. While truly global coverage is beyond the scope of this exercise, we have attempted to compile an estimate of the stimulus package in the US 2009. Table 2 provides a comparison of the US package with the European stimulus.

Table 2: Comparison of EU and US stimulus packages for 2009[3]

	€ billion	% of GDP
EU	129.6	1.0%
USA	186.0	1.7%

3. Table 2 only includes tax cuts and extra spending. Due to methodological issues, credit provision and related measures were excluded from the comparison. It is also worth noting that the US plan major expenditures for 2010 and beyond which are not included as they are set to become effective after the end of 2009 .

2.METHODOLOGY

The estimates we produce are based on publicly available information at the time of writing. Government announcements regarding planned fiscal measures are counted towards the estimates only to the extent that they have provided a break-down of the total amount announced into concrete individual measures.

Qualifying criteria

Legislative or administrative measures are included in our estimates if:

- They were adopted after 1st September 2008 or
- They had not yet been adopted but their adoption is highly probable.

Furthermore, the effects of such measures are only included to the extent that they were expected to occur between September 2008 and end 2009. All such effects are grouped under one of the following headings:

- *Additional spending disbursed*
- *Foregone tax revenue* and
- *Extra credit and economically similar measures.*

Measures intended to (fully or partly) refinance the stimulus are counted negatively to the extent that they become active before the end of 2009. Expenditures brought forward to that period that were planned for 2010 or beyond are also counted, whereas changes in cash-flow within the period under consideration (between September 2008 and end 2009) are regarded as neutral. Early payments of individually defined government liabilities or subsidies are the economic equivalent of government sponsored provision of credit and are only counted as such.

Additional spending (on and off budget) and foregone tax revenues are treated as commensurate. One of the difficulties with planned off-budget increases in investment (such as in state-owned enterprises) is that it is difficult to ascertain whether these investments are in fact additional or were already planned anyway. However, to the extent we lack information here we give the announced plans the benefit of the doubt.

Additional credit volume and economically similar measures such as changes in the timing of payments are listed separately.

For the sake of simplicity, we also exclude mere reallocations within budget positions, even if they are likely to have marginal effects on consumption or investment.

Calculation of effects

For the quantification of tax cuts, only the mechanical effect of the tax cuts are considered, excluding changes in tax revenues resulting from changes in the behaviour of individuals and firms. We thereby avoid having to make contentious assumptions about agents' behaviour during crises.

For the calculation of additional credit volume, measures at the core of the financial sector rescue packages including the recapitalisation of banks, the buying-up of problematic assets from banks and the guarantee of credits between banks are excluded. Also excluded are measures proposed by government where government does not have proper legislative control over the actors that are to carry out the measures, eg the proposals by some member states involving EIB actions.

Amounts are entered as billions of euros or billions of national currency units.

Annex: Member state and community-level breakdown

Belgium

The Belgian stimulus was announced on 11th of December.

	€ bn	% of GDP
Additional fiscal spending:	1.24	0.35%
Additional credit + similar measures	2.13	0.60%

Category	Measure	Net amount (€ bn)
Tax cuts	Measures for construction sector[4]	0.30
	No tax on credit insurance	0.02
Extra spending	Higher unemployment pay[5]	0.10
	Energy subsidy to households[6]	0.14
	Higher social security allocations[7]	0.51
	Investments into green technology	0.02
	Larger fund for energy cost reduction[8]	0.01
	Accelerated public investments	0.12
	Lower cost of using food safety agency[9]	0.03
Extra credit + similar measures[10]	Participation funds (for SME credit)[11]	0.30
	Measures for companies facing liquidity problems[12]	0.44
	Lower tax retention[13]	0.23
	Amount of tax retention to be kept at company	0.04
	Indexation of taxes taken into account in tax retention	1.12

[4] Largely VAT cuts for construction work.
[5] Temporary measure for 2009 only.
[6] Each Belgian household shall receive an energy voucher over € 30.
[7] Contains the "welfare envelope" and additional welfare measures taken in the 2009 budget.
[8] This figure represents the budgeted costs for enlarging the fund.
[9] Lower fees to be charged to industry clients.
[10] More access to financing instruments for export, import and investment risks is also planned through the "Ducroire", but no additional budget or credit impact is quantified since existing resources are to be better utilised.
[11] New product "INITIO" largely designed to offer credit to SMEs.
[12] Consists of measures to allow later payment of bills and of debts to the government.
[13] These last three measures apply to tax retention only, not to the final amount of taxes paid by firms and are thus the economic equivalent of an interest-free loan.

Denmark

No package according to our criteria. A budgetary expansion of 0.4% of GDP was already decided in 2007 and consists of a higher EITC and a higher threshold for the middle income tax bracket. A stimulus-related income tax was announced in March 2009, but is fully financed by raising taxes on pollution and energy consumption.

Germany

	€ bn	% of GDP
Additional fiscal spending:	39.33	1.55%
Additional credit + similar measures	70.30	2.76%

Category	Measure	Net amount (€ bn)
Tax cuts[14]	Degressive depreciation deduction	1.94
	Higher tax-free allowances for companies	0.24
	Suspension of car tax on new vehicles[15]	0.44
	Tax deductibility of professional commute[16]	5.00
	Package for tax burden reduction, stabilisation of social security contributions and investment in families[17]	6.00
	Income tax cut[18]	2.90
	Reduction in health insurance contributions[19]	3.00
	State payment of 50% social insurance for short-time workers	1.25
	Reform of car tax[20]	0.17
Extra spending	Investments into transport infrastructure[21]	1.00
	Longer eligibility for short-time compensation	0[22]
	Improvement of regional economic structure[23]	0.20

[14] The deductibility of construction work from the personal income tax will only have fiscal effects in 2010 and thereafter.

[15] This includes an extended car tax holiday for cars fulfilling strict ecological criteria.

[16] “Pendlerpauschale” was reintroduced, valid retroactively from 2007, by a constitutional court ruling. Since the Federal Ministry has announced it will not re-finance these expenditures, these payments work as a stimulus. Only repayments for the years 2007 and 2008 are considered here since the 2009 deduction will only be paid out in 2010.

[17] Mainly higher childcare benefits, tax deductions based on the number of children and lower employee contributions to unemployment insurance. The total amount is in effect a mix of cuts in taxes and social security contributions and additional spending.

[18] Takes effect on July 1st, 2009. Consists principally of a higher standard deduction and lower bottom rate.

[19] Takes effect on July 1st, 2009. Benefits both employers and employees equally.

[20] Only administration costs are budgeted so far

[21] Acceleration ofplanned projects already in the pipeline.

[22] Costs of this measure remain unclear, not least due to interactions with other social insurance systems, but will only to a very limited extent fall into 2009.

	Infrastructure investment programme[24]	8.65
	Innovation support programme	0.45
	Retraining and stronger job service	0.95
	Increased child benefits[25]	2.15
	Premium for new car purchases[26]	5.00
Extra credit + similar measures	CO2-friendly renovations of houses	2.80
	Additional credit for SMEs	15.00
	Credit for infrastructure investment by municipalities in structurally disadvantaged regions	1.50
	Corporate innovation and energy efficiency credit	1.00
	Additional guarantees and credit lines for larger enterprises[27]	50.00

Ireland

Ireland was originally planning a neutral cyclically adjusted budget: Automatic stabilisers would be allowed to work, but no further anti-cyclical fiscal policies would be enacted. In March, Taoiseach Brian Cowen announced spending cuts totalling €2bn in 2009, largely consisting of revenues from a new pension levy on public servants worth €1.4bn

Greece

	€ bn	**% of GDP**
Additional fiscal spending[28]:	0.00	0.00%
Additional credit + similar measures	23.00	0.89%

Category	**Measure**	**Net amount (€ bn)**
Additional credit + similar measures	Special government bond issue to supply SME credits and mortgage loans[29]	8.00
	Loan guarantees	15.00

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[23] Of which € 100 million are paid in cash and another € 100 million in commitment authorisations.

[24] Total volume of € 17.3 bn allotted for 2009-2010. The German government maintains that at least 50% of this sum will be spent in 2009.

[25] Consists of a one-off lump-sum payment to all families eligible for child benefits plus higher child care components of social security benefits

[26] Conditional on buying an energy-efficient car and selling an old car for demolition. Raised to € 5 bn in Apr 09.

[27] We assume that a maximum 50% of the € 100 bn total volume will be used in 2009

[28] On 18 March, Greece announced budget consolidation measures for 2009, consisting of a freeze on pensions and public sector salaries this year, and a one-off tax on high-income earners.

[29] Although this will show up in the budget as government deficit, its effect is to provide extra credit at low interest rates.

Spain

	€ bn	% of GDP
Additional fiscal spending:	12.31	1.10%
Additional credit + similar measures	54.28	4.86%

Category	Measure	Net amount (€ bn)
Tax cuts	Longer tax-exemption of saving accounts for housing purchases even if no house is bought	0.03
	Extended eligibility for tax deductions when selling houses	0.10
	Reduction in employer social contributions for hiring previously unemployed workers	0.08
Extra spending[30]	Employment Plan[31]	1.10
	Public Investment Fund[32]	8.00
	Sector specific support[33]	3.00
Extra credit + similar measures	Option to temporarily halve mortgage repayments[34]	2.50
	Credit for enterprises and families[35]	42.00
	Deductions for low-income families[36]	2.00
	Early payment of unemployment benefits[37]	0.08
	Up front tax deduction for housing[38]	1.70
	Earlier repayment of VAT reclaims	6.00

[30] At the end of February, an additional € 1.5 bn for employment measures were announced, but these are fully financed by corresponding cuts in other budget positions. Also, on 31st March, the indefinite extension of the tax deductibility of R&D expenditures (having no budget effect in the next two years) as well as a lower interest rate on corporate tax arrears of companies were announced. The budgetary effect of the latter measure for 2009 has, to our knowledge, not yet been quantified.

[31] Yet undefined plan to be comprised of active labour market measures and temporary employment schemes.

[32] Allocated to municipalities for subcontracting public works.

[33] Although officially called sector-specific, this package contains both sector specific and cross-sector support. € 800 million earmarked to support the car industry, remainder to be spent on environment (€ 600 million), research and innovation (€ 500 million), a new care component of the welfare state (€ 400 million), housing renovations and sustainable tourism

[34] This measure allows homeowners in economic hardship only to pay half of their mortgage instalments for two years, effectively an option to restructure mortgage debt to allow slower repayment.

[35] Provided by the government-owned ICO bank (Instituto de Crédito Oficial). 7 bn were already made available in 2008.

[36] Timing change: rather than being repaid at a later moment in time as previously practised, the deductions will now be applied before the initial tax payment.

[37] Economic equivalent of an interest free loan.

[38] Economic equivalent of an interest free loan.

France

	€ bn	% of GDP
Additional fiscal spending:	16.90	0.80%
Additional credit + similar measures	41.45	2.08%

Category	Measure	Net amount (€ bn)
Tax cuts[39]	Reduced obligation to contribute to social insurance conditional on new hiring, for very small firms	0.70
Extra spending	Direct public investment (government and local government)[40]	6.50
	Sectoral subsidies: housing industry, subsidies to building, renovation, buyers and renters.	1.20
	Sectoral subsidies: car industry	0.60
	Increased payment to the endowment for the basic income provision[41]	0.80
	Employment policies	0.50
	State-owned enterprises investment	4.00
	Social package[42]	2.60
Extra credit + similar measures	Credit for PPP projects[43]	8.00
	Loans and guaranteed loans to SMEs	22.00
	Loans to social housing construction	4.50
	Faster implementation of research tax credit and profit tax reimbursement[44]	5.60
	Change of VAT reimbursement mechanism[45]	3.60
	Higher down-payments on public procurement projects[46]	1.00

In the absence of further information, the planned additional investments by state owned enterprises are assumed to be in addition to existing investment plans.

[39] A further measure of changing the accounting rules for capital depreciation will only lead to budgetary effects in later years.
[40] Most of these investments were originally planned for after 2010 and are now overwhelmingly to take place in 2009.
[41] 'Revenu de solidarité active'
[42] Additional package announced by President Sarkozy on 18th February, containing tax cuts, higher compensation for employees on short-time and one-off payments to people recently made redundant and without claim to unemployment benefits. Without precise information on the budgetary effect, we expect the money to be fully spent in 2009.
[43] We expect 50% of the total volume of €16 bn for 2009-2010 to be implemented in 2009.
[44] Economic equivalent of an interest free loan.
[45] Economic equivalent of an interest free loan.
[46] Economic equivalent of an interest free loan.

Italy

	€ bn	% of GDP
Additional fiscal spending:	-0.26	-0.02%
Additional credit + similar measures	0.00	0.00%

Category	Measure	Net amount (€ bn)
Tax cuts	No increase of highway toll	0.09
	Tax cut for productivity bonuses[47]	0.46
	Deductibility of corporate tax from regional corporate tax	1.19
	Deferred VAT payments[48]	0.19
	Municipal infrastructure investment	0.00
	Voluntary revision of company book values[49]	-2.76
	More tax inspections	-1.88
	Tax inspections of private associations	-0.15
	Increased taxation of TV services	-0.47
Extra spending	Spending on low income families	2.40
	Aid to house mortgages	0.35
	Unemployment benefits	0.10
	Financing of strategic infrastructure	0.06
	Increased tax revenue costs	0.05
	Renewal of school cleaning contracts	0.11

[47] Less income tax paid on bonuses based on productivity criteria.
[48] Loss of revenue from later payment of VAT by companies will lead to a marginal tax revenue losses as some firms will have gone bankrupt before paying up their tax liabilities.
[49] Presumably in response to intensified enforcement efforts.

Netherlands[50]

	€ bn	% of GDP
Additional fiscal spending:	6.08	0.99%
Additional credit + similar measures	0.33	0.05%

Category	Measure	Net amount (€ bn)
Tax cuts	Tax cuts for SMEs	2.00
	Accelerated depreciation for investements	1.00
	Liquidity measures[51]	0.32
Extra spending	Unemployement benefits (working hours reduction)	0.20
	Labour market measures[52]	0.71
	Green growth measures[53]	0.62
	Infrastructure and construction[54]	0.72
	Regional and local initiatives	0.50
Extra credit + similar measures	Changed calculation of corporate losses[55]	0.34

[50] Apart from the two measures listed first and already adopted in November 2008, measures were announced March 26th, 2009.
[51] Several changes to fees, taxes (eg airport tax) to bolster the liquidity of firms.
[52] Includes several measures aimed at better qualification and retraining.
[53] Includes help for energy-efficient renovations and green innovation programmes.
[54] Building and renovation of schools, care institutions and transport infrastructure
[55] Economic equivalent of an interest free loan, as it involves the timing of loss reporting and tax deductibility.

Austria[56]

	€ bn	% of GDP
Additional fiscal spending:	3.93	1.35%
Additional credit + similar measures	2.50	0.86%

Category	Measure	Net amount (€ bn)
Tax cuts	Early implementation of income tax reform	2.20
	Degressive depreciation deduction	0.23
	Reduced VAT rate on medication	0.28
	Tax exemptions	0.14
	Burden reduction for families with children[57]	0.50
Additional Spending	Regional employment initiatives[58]	0.08
	Spending package, September 2008[59]	0.40
	Additional research expenditure[60]	0.05
	Mandatory kindergarten year for all	0.07
	Energy saving cheques[61]	0.10
	Investment in public facilities[62]	0.02
	Advancing of railroad investments	0.01
	Subsidies to house saving scheme	0.02
	Investments into broad-band internet infrastructure	0.01
	"Mittelstandsfonds" - venture capital fund for SMEs	0.08
Extra credit + similar measures	additional erp credits	0.20
	credit guarantees for SMEs	0.40

[56] We include measures agreed on by the new government but not yet formally adopted by parliament.
[57] Contains different forms of tax deductions for families with children.
[58] Supporting corporate investments with employment effect and continuing education measures.
[59] Consists of abolition of university tuition fees, increase of care benefits and pensions and extension of business internationalisation support
[60] To be spent directly on programmes and projects.
[61] Incentive programme for households to engage in energy-saving investments.
[62] investments into buildings and other real estate owned by the BIG, the state-owned real estate group.

Poland

	PLN bn	% of GDP
Additional fiscal spending[63]:	6.80	0.49%
Additional credit + similar measures	21.50	1.56%

Category	Measure	Net amount (PLN bn)
Extra spending	Increased co-financing of EU structural funds projects	6.80
Extra credit + similar measures	New SME credit line	20.00
	Investment in renewable energy from national fund for environmental protection	1.50

[63] Other components of the Polish stimulus plan as published by the Polish government are not included here since they were already part of the budget, ie decided before our cut-off date 1st September 2008 (income tax and VAT reforms). PLN 40 billion in guarantees of bank liabilities are part of a financial sector bailout and thus also not considered here.

Sweden

	SEK bn	% of GDP
Additional fiscal spending[64]:	41.99	1.31%
Additional credit + similar measures	95.81	2.99%

Category	Measure	Net amount (SEK bn)
tax cuts	2009 Budget: Income tax measures[65]	16.92
	2009 Budget: Lower business taxes[66]	3.21
	2009 Budget: Lower employee contributions to social insurance	1.00
	2009 Budget: No VAT on higher education	0.30
	Tax deduction for house renovations, conversions, maintenance	3.60
Extra spending	2009 Budget: Infrastructure investment	3.80
	2009 Budget: Research+education[67]	2.79
	2009 Budget: Climate and energy[68]	0.85
	2009 Budget: Psychiatric + elderly care	0.75
	2009 Budget: Judicial system reform[69]	0.78
	2009 Budget: Green car premium	0.43
	2009 Budget: Other measures[70]	0.44
	Stronger employment service (active labour market policy)	3.80
	R&D in automotive sector	3.00
	Additional infrastructure investment	0.33
Extra credit + similar measures	Higher export credit guarantees	75.00
	Credit guarantees for car sector	20.00
	Deferment of tax payments by companies	0.46
	Tax respite (April fiscal bill)[71]	0.35

[64] The stimulus in the 2009 budget is delivered against the background of a previously planned (before September 2008) consolidation of budget expenses. Of the ca. SEK 10 bn extra expenses, only SEK 5 bn present a net (nominal) addition to the 2008 level of expenditures, thus essentially implying zero growth of real expenditures whereas there are real cuts in revenues.
[65] Consists of a larger in-work tax credit and a cut in income tax.
[66] Consists of a lower corporate tax rate and reduced employer contributions to social insurance.
[67] Includes measures directed at school, preschool, vocational and entrepreneurship education and research funding.
[68] Greenhouse gas emissions reduction, energy efficiency and renewable energy measures.
[69] Higher funding for constituent agencies of judicial system
[70] Includes smaller measures in the unemployment insurance, the pensions system, measures for increased competition in public good provision and additional means for better integration of immigrants.
[71] Economic equivalent of an interest-free loan as this respite only changes the timing of tax payment.

United Kingdom

	GBP bn	% of GDP
Additional fiscal spending:	19.89	1.36%
Additional + similar measures	20.53	1.41%

Category	Measure	Net amount (GBP bn)
Tax cuts/increases	VAT cut[72]	12.50
	Higher allowance in income tax[73]	0.37
	Higher child tax credit[74]	0.38
Extra spending	Accelerated capital expenditure[75]	2.40
	Increase in basic state pension[76]	0.90
	2009 Budget measures[77]	3.35
Extra credit + similar measures	Credit guarantee programme[78]	20.00
	Credit measure in 2009 budget[79]	0.53

[72] Cut from the previous standard rate of 17.5% to the European minimum standard rate of 15% until end 2009.

[73] Allowance risen by an additional 145 GBP/capita in the 2008 pre-budget report, additional to an already planned rise.

[74] Brought forward from April to January in pre-budget report.

[75] GBP 3 bn shall be brought forward for spending during the 2008-2009 and 2009-2010 fiscal years. Our figure assumes a start of spending in January 2009 and uniform distribution of spending until March 2010, thus yielding GBP 2.4 bn of spending during the 2009 calendar year.

[76] Brought forward from April to January in pre-budget report.

[77] The 2009 budget, presented 22nd of April contains a number of additional spending measures as well as some tax rises to finance expenditures. Most tax rises apart from a fuel duty increase will only take effect in later years. The main expenditure and tax cut measures are: An increase in first-year capital allowances (tax deductibility of investments), a car scrappage scheme, the strategic investment fund, additional funding to the job service, a combination of measures benefitting pensioners, support to the housing sector and funding for “green” technology, that is, low carbon technologies as well as energy and resource efficient technologies.

[78] Only the GBP 20 bn of additional credit guarantees approved on 14th of January 2009 qualify as additional credit, whereas the numerous measures taken on 19th of January we classified as bank bailouts and thus did not include.

[79] Deferred payments of business rates are the economic equivalent of an interest-free loan.

Community level

	€ bn	% of GDP
Additional fiscal spending:	9.30	0.07%
Additional credit + similar measures	15.500	0.12%

Category	**Measure**	**Net amount (€ bn)**
Extra spending	ESF spending forwarding	1.80
	Plan to spend budget reserves on energy and internet infrastructure[80]	2.50
	Forward structural funds spending	4.50
	Accelerated call for trans-european transport projects (TEN-T)	0.50
Additional credit + similar measures	Additional EIB loans to SMEs and Mid-caps	3.50
	EIB convergence lending	2.50
	EIB flexibility reserve	3.00
	Climate change financing by EIB	6.00
	EBRD additional credit for green and infrastructure investment	0.50

[80] € 5bn in 2009-2010. We assume 50% of the spending to occur in 2009.

US

	$ bn	% of GDP
Additional fiscal spending:	284.78[81]	1.99%

The US stimulus package, that is, the American Recovery and Reinvestment Act signed by President Obama on 17th February, has a total volume of $787 bn. Consistent with our general methodology, we only take into account the effect of spending and tax cuts in 2009. For this purpose, we make use of the expenditure profile of the stimulus calculated by the Congressional Budget Office[82], which estimates about $ 285 bn to be spent in 2009, the package's effect to be concentrated on the period of 2009-2011 and having significant fiscal effect until as late as 2015.

Category	**Measure**	**Net amount ($ bn)**
Tax cuts	Tax cuts	122.72
Extra spending	Spending package	162.05

Category	**Measure[83]**	**Net amount ($ bn)**
Tax cuts	All tax provisions	122.72
Extra spending	Agriculture, Rural Development, Food and Drug Administration and Related Agencies	7.70
	Commerce, Justice, Science and Related Agencies	3.79
	Department of Defense	2.21
	Energy and Water Development	5.51
	Financial Services and and General Government	1.01
	Homeland Security	0.65
	Interior, Environment, and Related Agencies	2.04
	Departments of Labor, Health and Human Services, and Education, and Related Agencies	16.26
	Legislative Branch	0.01
	Military Construction and Veterans Affairs and Related Agencies	0.84
	State, Foreign Operations and Related Programs	0.14
	Transportation and Housing and Urban Development	8.67
	State Fiscal Stabilisation	58.50
	Assistance for Unemployed Workers and Struggling Families	37.57
	Health Insurance Assistance	16.60
	Health Information Technology	0.46
	Assistance for Unemployed Workers and Struggling Families	0.11

[81] Due to the difference between US fiscal years and the calendar years, we adjusted the figure accordingly.

[82] *Cost estimate for the conference agreement for H.R.1,* Congressional Budget Office, 2009

[83] The breakdown follows the item structure of the act.