

Ways out of the crisis

EU recommends that 24 out of the 27 EU countries tighten fiscal policy. Some countries have tightened fiscal policies already in 2010 and some countries have decided on more ambitious consolidation plans than recommended by the Commission. Macroeconomic model calculations show that it will have large consequences for both GDP growth and the development on the labour market if all 24 countries tighten fiscal policy at the same time. If only the 5-8 countries with the largest budget deficit tighten fiscal policy the negative effects on the European economy will not be as harsh.

A second path is to introduce reforms. Tightening fiscal policy might improve the budgets in the short run, but in the medium and long run, an economic upturn in Europe requires structural changes in the form of reforms that change the underlining structures. Model calculations show that a strategy based on investments in green growth, increasing productivity and the education level, fighting social inequality and introducing a FTT-tax can create almost 6.5 million jobs over the next 20 years.

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The outlook for the European economy

In 2008 and 2009 the European economy experienced the most severe crisis in the history of the European Union. The latest available data suggests positive growth in 2010, but the growth is too small to match the major setback in GDP in 2008 and 2009. On top of that a growth rate above the historical rate is required to prevent employment from falling. With that in mind, even though the worst part of the “growth-crisis” seems to be over, we have far from seen the full effect of the crisis on the labour market.

Table 1 below shows the key figures in the present forecast for EU-27. As it can be seen from the table the EU was severely hit by the economic crisis in 2009 where GDP dropped with more than 4 percent.

Data for 2010 is still coming in and is not yet complete but the latest available data suggests that GDP in 2010 rose by 1.8 % for EU27. In 2011 and forward it is likely that GDP will continue to grow at a rate above or close to the historical rate. The rather modest growth in the EU the coming years will only result in a small decrease in the unemployment levels and so unemployment will remain high.

	2009	2010*	2011*	2012*	2013*	2014*	2015*	2016-2020*
GDP (growth in percent)	-4,2	1,8	1,7	2,0	1,7	1,8	1,8	1,9
Employment (million people)	222,5	221,2	222,0	223,4	224,3	225,2	226,1	228,8
Unemployment (million people)	21,5	23,2	22,9	22,0	21,8	21,7	21,6	21,5
Unemployment rate (percent of labour force)	8,9	9,6	9,5	9,1	9,0	8,9	8,9	8,7
Public budget (percent of GDP)	-6,8	-6,8	-5,1	-4,2	-4,1	-3,9	-3,7	-3,1

Note: * indicates the forecast period. 2010 is still a forecast since not all countries have published fourth quarter figures.

Source: AE on the basis of the European Commission Autumn forecast 2010 and Consensus forecasters October 2010, calculated with the international macroeconomic model HEIMDAL.

But matters might be even worse than suggested in table 1.

EU recommends that 24 out of the 27 EU countries tighten fiscal policy

Even though the European economy is growing again, the impact of the crisis on the member countries public budgets are now showing. According to the Stability and Growth pact, the member countries should seek to keep their public budgets below 3 pct. of GDP in the medium run. In the light of the fact that the majority of the European countries have implemented recovery packages and expenses to unemployment benefits have increased and taxes shrunk, most member countries now stand in a situation where the public budget is exceeding or are expected to exceed a public deficit 3 percent of GDP in the near future.

The European Commission has outlined deficit procedures that outline recommendations for the specific countries. Table 2 shows the recommendations from the European Commission measured in average annual fiscal effort in pct. of GDP. As it is shown in the table the European Commission recommends that 24 out of 27 countries should tighten their fiscal policy. On average it is recommended that the countries should tighten fiscal policy corresponding to a total fiscal effort of close to 4 percent of GDP from 2010-2015.

	2010	2011	2012	2013	2014	2015	2010-2015
Greece	2,28	2,28	2,28	2,28	2,28		11,4
Ireland	2	2	2	2	2	2	12,0
Latvia	2,75	2,75	2,75				8,3
Spain	1,9	1,9	1,9	1,9			7,6
Lithuania	2,25	2,25	2,25				6,8
Portugal	1,625	1,625	1,625	1,625			6,5
United Kingdom	1,2	1,2	1,2	1,2	1,2		6,0
Romania	1,8	1,8	1,8				5,4
Czech Republic	1	1	1	1			4,0
France	1	1	1	1			4,0
Slovakia	1	1	1	1			4,0
Poland	1,25	1,25	1,25				3,8
Cyprus	1	1	1				3,0
Slovenia	0,75	0,75	0,75	0,75			3,0
Belgium	0,75	0,75	0,75				2,3
Netherlands		0,75	0,75	0,75			2,3
Austria		0,75	0,75	0,75			2,3
Germany		0,7	0,7	0,7			2,1
Bulgaria	0,75	0,75					1,5
Denmark		0,5	0,5	0,5			1,5
Italy	0,5	0,5	0,5				1,5
Hungary	0,5	0,5					1,0
Malta		0,75					0,8
Finland		0,5					0,5
Estonia							0,0
Luxembourg							0,0
Sweden							0,0
EU-27 (weighed average)	0,8	1,0	1,0	0,8	0,2		3,8

Note: For Greece, it is an enhanced recommendation. Germany is planning an improvement of the structural balance of almost ¼ % of GDP on average from 2011-2013. They have only been asked for an improvement of ½ % of GDP on average from 2011-2013 by the Commission. Ireland did tighten fiscal policies with 2½ % in 2010 and have since then been asked to tighten fiscal policies with 9½ % from 2011-2015. In total 12% from 2010-2015.

Greece with the latest update has to tighten fiscal policies with a total of 11.4 % of GDP from 2010-2014.

Spain is expected to improve the structural balance with 7.6 % of GDP from 2010 to 2013, ie. 1.9 % of GDP on average.

Portugal is expected to improve the structural balance with 6.5 % of GDP from 2010 to 2014, ie. 1.625 % of GDP on average.

Romania is expected to improve the structural balance with 5.4 % of GDP from 2010 to 2013, ie. 1.8 % of GDP on average.

The UK is only expected to tighten fiscal policies with a total of 6 % of GDP from 2010-2014, ie. 1.2 % of GDP on average which is below the recommendation from the Commission. No further steps are planned from the Commissions side.

Source: AE on the basis of the European Commission, Economic and Financial Affairs, Ongoing Country-specific Excessive Deficit Procedures.

There is a significant risk connected to tightening fiscal policy this much. Although the recovery in 2010 has been better than predicted, the economic progress is still modest, and the projections for the coming years do not suggest a quick recovery either. In other words the economic upturn is still so fragile that tightening fiscal policy may very well mean that the recovery will be running out of steam.

Fiscal tightening in line with EU recommendations will jeopardize recovery

If all 24 EU countries tighten fiscal policy at the same time in line with the recommendations outlined in table 2 above, it will have major consequences for the overall European economy.

Table 3 shows the alternative forecast scenario where the fiscal tightening is taken into account. Box 1 elaborates the assumptions underlying the model calculations.

Box 1. Assumptions behind the model calculation

In the scenario below it is assumed that the countries listed in table 2 on average over the period from 2010 till 2015 will follow the recommendations from the European Commission. Since 2010 now has passed the calculations begin in 2011.

From 2011-2015 the overall average tightening is similar to the figures pictured in table 2, corresponding to a total fiscal effort of well above 3 percent of GDP from 2010-2014.

It is assumed that the tightening is equally spread between less public spending and tax increases. It is also assumed that the interest rate will be ¼ percentage point lower each year from 2011-2014 (cumulative, so the *level* in 2014 is 1 percentage point lower) in the scenario where fiscal policy is tightened compared to the baseline scenario.

It is assumed that the US will conduct a neutral fiscal policy.

Table 3. Key figures for EU-27 when the recommendations from EU are taken into account

	2009	2010*	2011*	2012*	2013*	2014*	2015*
GDP (growth in percent)	-4,2	1,8	0,9	1,3	1,1	1,7	2,1
Employment (million people)	222,5	221,2	220,7	220,3	219,7	219,6	220,0
Unemployment (million people)	21,5	23,2	23,9	24,1	25,2	25,8	26,0
Unemployment rate (percent of labour force)	8,9	9,6	9,9	10,0	10,4	10,7	10,7
Public budget (percent of GDP)	-6,8	-6,8	-4,6	-3,2	-2,5	-2,0	-1,5

Note: * indicates the forecast period. In the calculations is assumed that the total average annual fiscal effort on average from 2010-2015 will be in line with the figures pictured in table 2. It is assumed that the tightening is equally spread between less public spending and tax increases. It is also assumed that the interest rate will be lowered as a reaction to the fiscal tightening. Since 2010 now has passed the calculations begin in 2011. The growth rate would on average be 0.2 percent higher each year had the tightening not been implemented in 2010.

Source: AE on the basis of the European Commission Spring forecast 2010 and Consensus Forecasters April 2010, calculated with the international macroeconomic model HEIMDAL.

As shown in the table above a fiscal tightening will have large consequences for both GDP growth and the development on the labour market. Instead of having growth rates close to historical rates, GDP growth will be significantly lower if fiscal policy is tightened along the lines in table 2. From 2011-2015 the annual GDP growth is on average reduced by almost 0.5 percent a year compared to a situation without fiscal tightening. That influences the labour market. Instead of a gradual improvement of the situation with falling unemployment rates in the current forecast, the unemployment rate will in the alternative scenario continue to rise until 2015 where it will peak at 10,7 percent of the labour force.

On top of that it is very likely that fiscal tightening will go hand in hand with falling consumer and investor confidence. If it is hard to sell and export goods businesses are less likely to expand and invest. At the same time consumers are experiencing a high risk of being unemployed coursing a tendency towards higher savings. Lack of confidence will also mean that there is a large risk that the unemployment rate will increase even more than pictured in table 3 and take hold at a historically high level. All in all if the lack of confidence among consumers and investors are taken into account it draws in the direction

of even larger negative effects from the fiscal tightening than shown in table 3, and the lack of confidence will also to some extent offset part of the budget improvements.

In the calculations above it is assumed that the US will conduct a neutral fiscal policy. If the US instead tightens fiscal policy as well, then it will have negative spill-over effects on the European economy and the figures for the European economy will be worse than in the calculations above. Finally it is assumed that the ECB will react and that the interest rate will be lower in the scenario where fiscal policy is tightened compared to baseline scenario. If this is not the case it will also draw in the direction of larger negative effects on the European economy.

All in all the effects above can seem intense but they may very well be lower edge estimates, as the calculations build on very mild assumptions, and if lack of confidence, spill-over effects from the US and lack of reactions from ECB is taken into account the negative effects will be even larger.

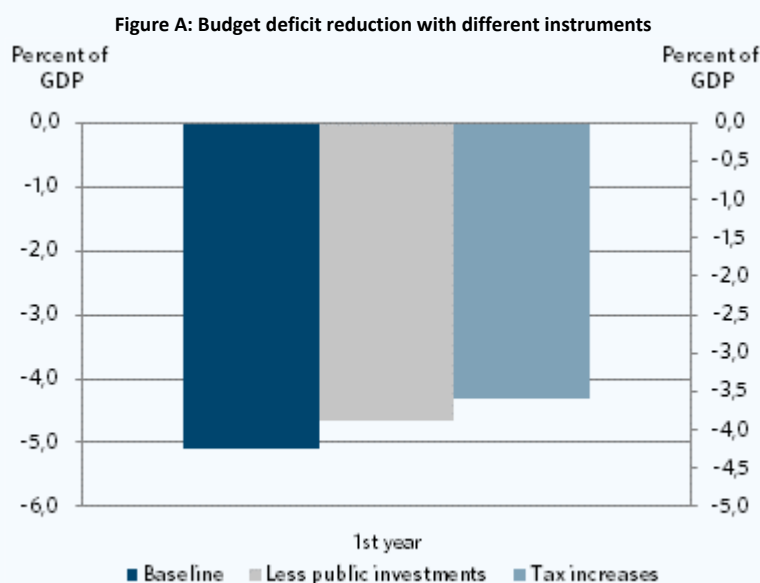
In the calculations above, it is assumed that the fiscal tightening is equally spread between less public spending and tax increases. But it does make a difference how the tightening is implemented. As shown in more detail in box 2, it is possible to obtain a larger budget deficit reduction if the tightening is implemented as tax increases rather than less public spending.

Box 2. Budget deficit reduction with different instruments

In the calculations above it is assumed that the tightening is equally spread between less public spending and tax increases. There is however a difference in the budget deficit reduction, if the tightening is implemented as tax increases or cutting public investments.

Figure A shows the effect on the EU-27 budget when all 27 EU countries increase their taxes with 1 percent of GDP or spend 1 percent of GDP less on public investments. As seen, it is possible to reduce the public deficit more, if the tightening is implemented as tax increases compared to the situation where the tightening is implemented as less public investments. As shown in the figure, fiscal tightening by increasing taxes corresponding to 1 percent of GDP will after one year have reduced the budget deficit by 0.8 percentage points (from 5.1 pct./GDP to 4.3 pct./GDP), whereas fiscal tightening implemented by spending less on public investments (corresponding to 1 percent of GDP) will after one year only have reduced the budget deficit by slightly less than 0.5 percentage points. (from 5.1 pct./GDP to 4.7 pct./GDP). This shows, that when it comes to deficit reduction, tax increases are more effective than cutting public investments.

This is due to the fact that the effect on the labour market is larger if public investments are reduced compared to if taxes are increased. If taxes are increased consumers will not reduce consumption with the full amount, as they will try to equalise consumption over time and draw on their savings. The same effect is seen if taxes are cut, then the total tax cut will not be transferred into the economy as consumers will choose to spend part of the tax cut on consumption and part on saving. When public investments are increased or reduced there will not be this opposite effect.



Source: AE on the basis of the international macroeconomic model HEIMDAL.

Large variation in the effects between countries

The figures above show that the overall effects on EU-27 are large from tightening fiscal policy. But the individual country effects varies a lot as some countries are recommended to tighten fiscal policy more than 10 percent of GDP from 2010-2015 whereas other countries can do with less than 2 percent.

Table 4 shows the consequences of the fiscal tightening in the five largest EU countries. As shown there is a large difference between how much the countries are recommended to tighten fiscal policy and therefore also large differences between the effects on growth and employment.

Table 4. Effects from fiscal tightening on growth and employment, 2010-2015

	Fiscal tightening	Growth in GDP 2010-2015 (percent)			Growth in employment 2010-2015 (mil.)		
	Percent of GDP 2010-2015	Baseline Scenario (a)	Fiscal tightening (b)	Difference in percentage points (b-a)	Baseline Scenario (c)	Fiscal tightening (d)	Difference in million (d-c)
Germany	2,1	9,7	6,8	-2,9	0,9	0,1	-0,8
UK	6	11,5	7,1	-4,4	0,7	-0,9	-1,6
France	4	9,0	5,9	-3,0	0,8	0,3	-0,5
Italy	1,5	6,0	5,2	-0,8	0,3	0,2	-0,1
Spain	7,6	8,0	4,1	-3,9	0,5	-0,2	-0,6
EU-27	3,8	9,4	6,4	-3,0	4,9	-0,9	-5,9

Note: In the calculations is assumed that the total average annual fiscal effort from 2010-2015 will be in line with the figures pictured in table 2. It is assumed that the tightening is equally spread between less public spending and tax increases. It is also assumed that the interest rate will be lowered as a reaction to the fiscal tightening. Since 2010 now has passed the calculations begin in 2011.

Source: AE on the basis of the international macroeconomic model HEIMDAL.

Out of the five largest EU countries United Kingdom and Spain are the two countries that are recommended to tighten fiscal policy the most, and are therefore also the two countries that suffers the largest declines in GDP compared to a situation without the tightening (column b-a). GDP in United Kingdom is expected to be nearly 4.5 percent lower from 2010-2015 as a result of the European tightening, and 1.6 million jobs can be lost as a consequence of the tightening. Even though Germany is only expected to tighten fiscal policy with 2.1 percent of GDP from 2010-2014, GDP in Germany is still expected to be 3 percent lower in 2015 compared to a situation without the tightening. The relatively large effect on GDP is due to the fact that all countries tighten fiscal policy at the same time. The effect on GDP and employment pictured in table 4 covers both the domestic negative effect and the negative spill-over effect. The spill-over effects are elaborated later in the paper but it is already clear that the spill-over effects have a significant impact on the outcome of the fiscal tightening which stresses the importance of coordination. The importance of coordination is also discussed later in the paper.

A 2020 Strategy

Budget cuts, less public consumption and increased taxes are one way to address the growing public budget deficits. Another path however is to reform the economy out of the crisis. This chapter will focus on how to increase the European growth potential in the medium and long run in order for Europe to regain momentum in growth. Changes in business cycles in the short run can be responded to with fiscal policy. In the medium and long run, an economic upturn requires structural changes in the form of reforms that changes the underlining structures in society in a wide range of areas.

Tightening fiscal policy might improve the budgets in the short run, but it does not change the fact that many Europeans are unemployed and if the fiscal tightening creates lack of confidence in the economy for consumers and investors, then the upturn may very well be jeopardized. In the medium and long run, an economic upturn in Europe requires structural changes in the form of reforms that changes the underlining structures in society in a wide range of areas, so that Europe quickly returns to its historical growth pad as well as increases the growth potential in the medium and long run. Such a development will create jobs, lower unemployment from its present historically high level and improve the budget.

The strategy suggested in this section shows an alternative way for the European economy, also called the 2020 strategy. The strategy is based on the underlying ideas in the PES paper “A progressive Strategy for a Green, Smart and Inclusive Europe” and “A revenue package for the European Union”. The following elements are included in the strategy. Firstly, focus is on making a shift to low carbon activities by *implementing a smart green growth strategy*. Secondly, focus is on turning knowledge and creativity into the main resource of people, companies and regions by *implementing an ambiguous education strategy*. Thirdly, the focus is on renewing and strengthening the welfare system to fight social inequality. This could be done by creating *larger equality between men and women*, and by *increasing the education level for the weakest* and in this way lifting the incomes in the bottom. Finally a tax on financial transactions – a so called FTT-tax is introduced. The strategy outlined in this paper is so to say focusing on the following four pillars:

- **A smart green growth strategy**
By implementing a simultaneous investment strategy across the European Union we can obtain higher economic growth, productivity and prosperity. This could be investments in infrastructure such as road and public transportation, or environmental investments and energy renovations. But also investments in a greener energy system such as investments in wind mills etc.
- **Higher productivity and education level**
By increasing the education level and making sure that the European labour force increase and hold the skills that are required by society, we do not only increase employment and cut unemployment we also improve productivity for greater future prosperity.
- **Fighting social inequality**
By increasing the female participation we can increase employment and create more equal opportunities for men and women. One way to make it more likely for women to participate in the labour force is to develop and substitute the public childcare system. By increasing the education level for the weakest we can lift the incomes in the bottom and in this way reduce income spread and hereby inequality. This can be done through investments in better education for the weakest in society, and through active labour market policies and active social policies targeted at the weakest in society. In this way we can fight social inequality by getting weaker groups employed.
- **Financial transactions tax**
The introduction of a tax on financial transactions (FTT-tax) will help to stabilize the financial markets and will provide a significant tax-revenue which can be used for fiscal consolidation or to finance other political goals. A FTT-tax will also increase the contribution from banks and other financial institutions in order to cope with the deficits on public budgets.

The effects of the 2020 Strategy

A strategy as the one described above, with simultaneous investments, improvement of the productivity, increasing employment, creating a sustainable development and changing the structure of public spending can and must be done differently in different countries as the different challenges must be taken into account – as well as different public budget situations. This analysis does not give a plan in detail for each country. Instead it sketches the effects of different initiatives and gives a scenario on how the effect could be.

The final effect will depend on the nature and pace of the initiatives. The following calculations will build on the four pillars: green investments, education, fighting social inequality and a FTT-tax. The scenario

illustrates the effects of structural changes in the European economy in the coming ten years. Box 3 gives a detailed description of the scenario.

Box 3. Details behind the calculations

The medium term scenario illustrates the structural effects of implementing the strategy described above over the coming ten years from 2010 till 2020.

The initiatives are calculated as increasing the labour force by ½ percent point to the year 2020. This effect could come as a combination of effects of education, childcare, active labour market policies and research and development. Increased productivity and competition result in a lower inflation rate than otherwise have been.

The investment initiatives are assumed to be distributed equally between private and public investments so that the total investment level in the EU on average is 9 percent higher in 2020 compared to a situation without the investment plan.

The utilization of the extra resources in the labour market is subject to the condition that an active economic policy is implemented to increase demand on labour. The demand generating equilibrium is equally distributed between private and public internal demand. The inflation rate is assumed to be 0.2 percent point lower each year than otherwise.

A Financial transactions tax (FTT-tax) is introduced. Estimates from Brazillier (2010) suggest that extra tax-revenue of 200 billion euro a year can be generated from such a tax. This amounts to approximately 1.6 % of GDP in EU27. The tax is introduced over a three year period from 2011 to 2013.

Table 5 shows the forecast for the next ten years if structural changes are implemented within green investments, higher productivity and education level, lower social inequality and the introduction of a FTT-tax.

Table 5. Key figures in the 2020-strategy scenario for EU-27

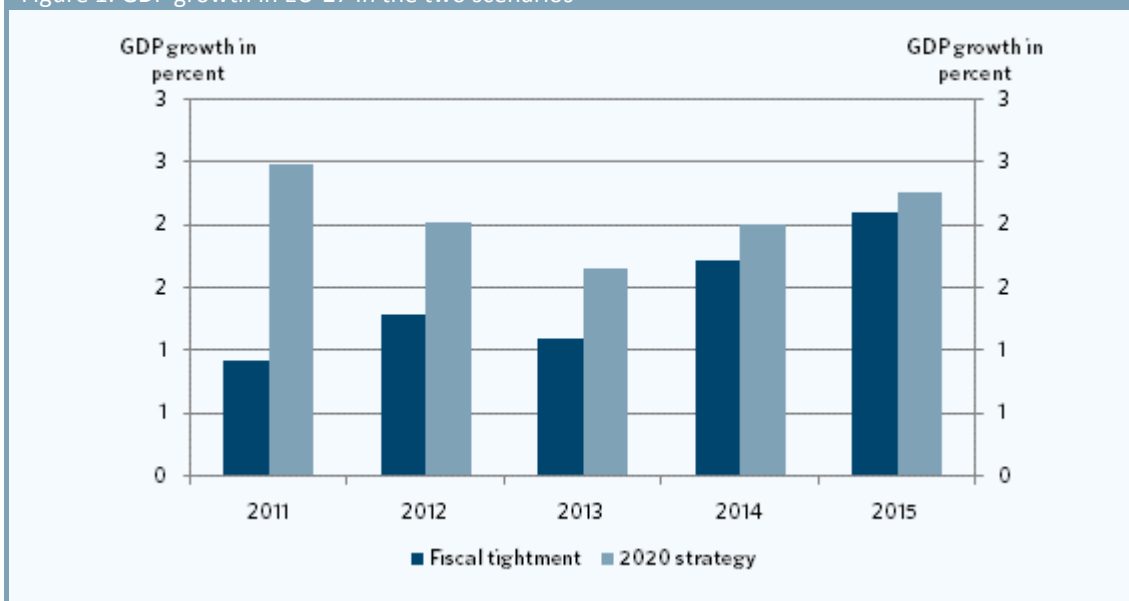
	2009	2010*	2011*	2012*	2013*	2014*	2015*	2016*-2020*
GDP (growth in percent)	-4,2	1,8	2,5	2,0	1,7	2,0	2,3	2,4
Employment (million people)	222,5	221,2	223,1	224,8	225,8	226,9	228,5	233,4
Unemployment (million people)	21,5	23,2	22,2	21,2	21,2	21,0	20,6	19,1
Unemployment rate (percent of labour force)	8,9	9,6	9,2	8,8	8,7	8,6	8,4	7,7
Public budget (percent of GDP)	-6,8	-6,8	-4,6	-3,2	-2,7	-2,5	-2,0	-1,2

Note: * indicates the forecast period.

Source: AE on the basis of the European Commission Autumn forecast 2010 and Consensus Forecasters October 2010, calculated with the international macroeconomic model HEIMDAL.

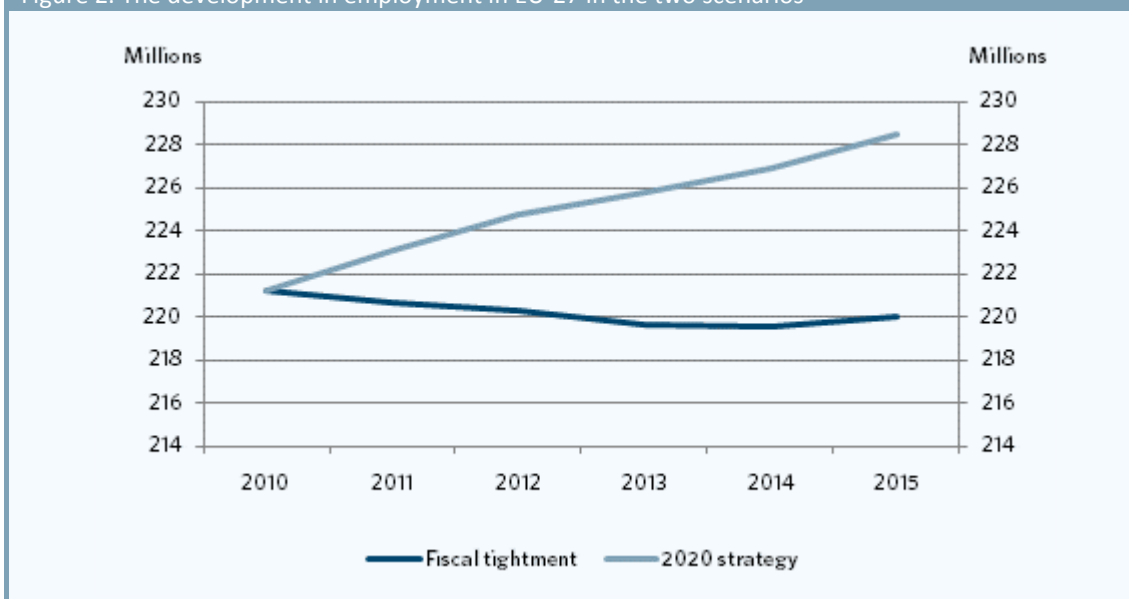
As shown in the table growth rates will on average be above 2 percent in the coming ten years if the strategy is implemented. The structural changes in the European economy will break the unemployment curve and unemployment will fall from 2010 till 2020. In 2015 unemployment will be 5½ million lower compared to the scenario with fiscal tightening. The structural changes will create jobs from green investments as well as all the derived jobs coming from the increased demand in the economy. Growth potential is also increased as both productivity and the labour force is increased. The increase in the labour force is among other thing a result from more women coming into the labour market. Figure 1-4 show the development in the key figures in the scenario with fiscal tightening and the alternative scenario with the 2020 strategy.

Figure 1. GDP growth in EU-27 in the two scenarios



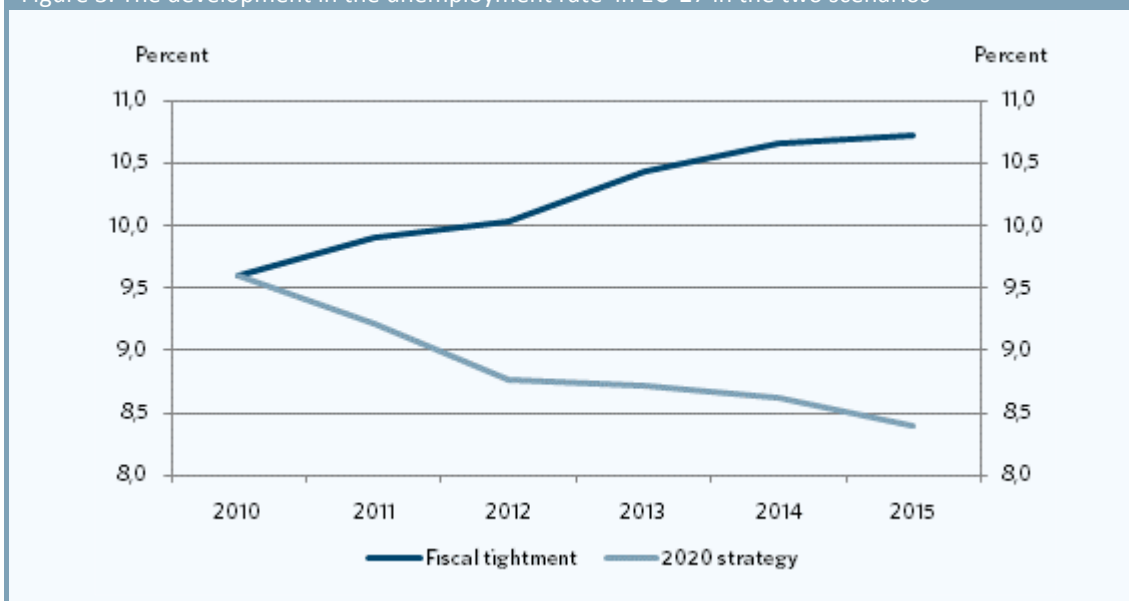
Note: In the calculations is assumed that the total average annual fiscal effort on average from 2010-2015 will be in line with the figures pictured in table 2. It is assumed that the tightening is equally spread between less public spending and tax increases. It is also assumed that the interest rate will be lowered as a reaction to the fiscal tightening. Since 2010 now has passed the calculation begin in 2011. The growth rate had the tightening not been implemented in 2010 would on average be 0.2 percent higher each year.
Source: AE on the basis of the international macroeconomic model HEIMDAL.

Figure 2. The development in employment in EU-27 in the two scenarios



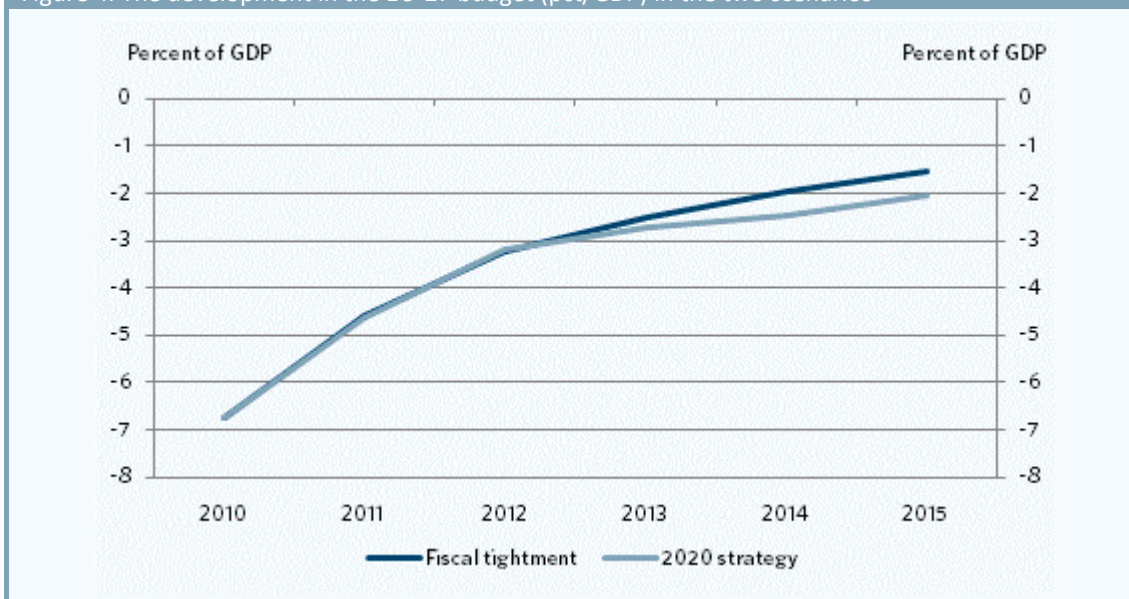
Note: In the calculations is assumed that the total average annual fiscal effort on average from 2010-2015 will be in line with the figures pictured in table 2. It is assumed that the tightening is equally spread between less public spending and tax increases. It is also assumed that the interest rate will be lowered as a reaction to the fiscal tightening. Since 2010 now has passed the calculation begin in 2011.
Source: AE on the basis of the international macroeconomic model HEIMDAL.

Figure 3. The development in the unemployment rate in EU-27 in the two scenarios



Note: In the calculations is assumed that the total average annual fiscal effort on average from 2010-2015 will be in line with the figures pictured in table 2. It is assumed that the tightening is equally spread between less public spending and tax increases. It is also assumed that the interest rate will be lowered as a reaction to the fiscal tightening. Since 2010 now has passed the calculation begin in 2011.
Source: AE on the basis of the international macroeconomic model HEIMDAL.

Figure 4. The development in the EU-27 budget (pct/GDP) in the two scenarios



Note: In the calculations is assumed that the total average annual fiscal effort on average from 2010-2015 will be in line with the figures pictured in table 2. It is assumed that the tightening is equally spread between less public spending and tax increases. It is also assumed that the interest rate will be lowered as a reaction to the fiscal tightening. Since 2010 now has passed the calculation begin in 2011.
Source: AE on the basis of the international macroeconomic model HEIMDAL.

Table 6 shows the effect on GDP and employment in a number of countries. In the period between 2010 and 2015 GDP in EU-27 will grow by 4.5 percent more in the scenario with structural changes compared to the scenario with fiscal tightening. In employment terms the total effect on EU-27 will be 8 million extra employed in 2015 than would have been in the case of fiscal tightening.

Table 6. Effects from the 2020 Strategy on growth and employment, 2010-2015

	Growth in GDP 2010-2015 (percent)			Growth in employment 2010-2015 (million)		
	Fiscal tightening (a)	2020 strategy (b)	Difference in percentage points (b-a)	Fiscal tightening	2020 strategy (d)	Difference in million (d-c)
Germany	6,8	11,2	4,4	0,1	1,1	-1,1
United Kingdom	7,1	13,4	6,4	-0,9	1,3	-2,1
France	5,9	9,5	3,6	0,3	0,9	-0,5
Italy	5,2	7,6	2,4	0,2	0,5	-0,3
Spain	4,1	9,8	5,7	-0,2	0,8	-1,0
EU27	6,4	10,9	4,5	-0,6	7,3	-7,9

Note: In the calculations is assumed that the total average annual fiscal effort from 2010-2015 will be in line with the figures pictured in table 2. It is assumed that the tightening is equally spread between less public spending and tax increases. It is also assumed that the interest rate will be lowered as a reaction to the fiscal tightening. Since 2010 now has passed the calculation begin in 2011.

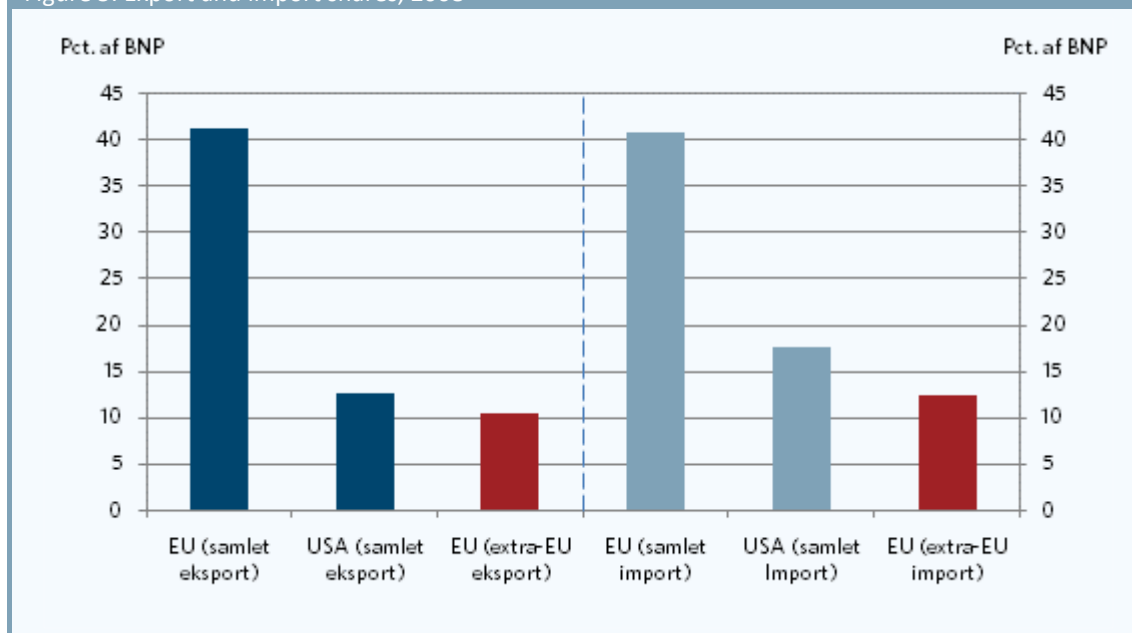
Source: AE on the basis of the international macroeconomic model HEIMDAL.

The importance of coordination

As shown above there is a significant risk of slowing down growth and keeping unemployment historically high if fiscal policy is tightened. The effects on the European economy are big and this is partly due to the fact that nearly all European countries are tightening fiscal policy at the same time.

In the figure below it is shown why the European countries are so integrated and dependent on each other. Figure 5 shows import and export shares for the US and the EU both with regards to the total import and export in the EU and with regards to extra-EU imports and exports.

Figure 5. Export and import shares, 2008



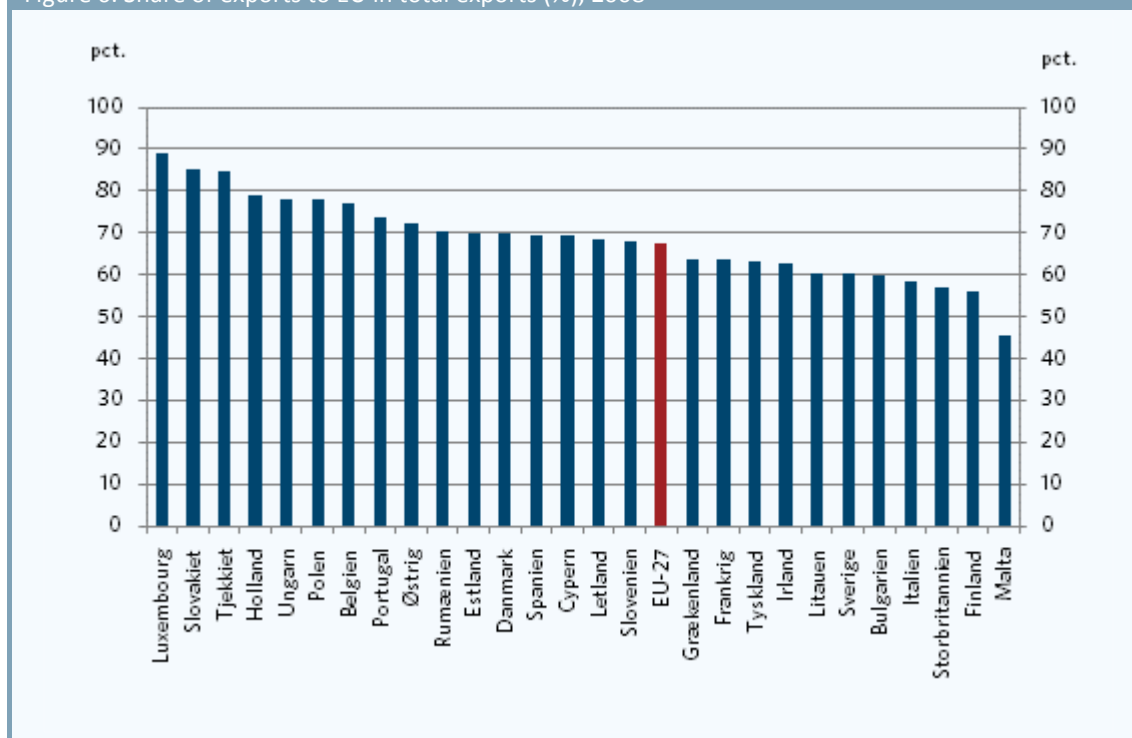
Source: AE on the basis of Eurostat.

On the surface the EU looks as a very open economy as both import and export make up more than 40 percent of GDP, but if the EU is looked at as one economy and all the intra-EU trade is left out, so that

only the trade with non-EU countries are included (the so called extra-EU import and export) a totally different picture shows. The extra-EU export and import only make up 10 and 13 percent of GDP respectively. In the US export and import make up 13 and 18 percent of GDP respectively. Looking at extra-EU trade, the EU is actually a more closed economy than the US, which makes it even more important for the European countries to cooperate as the economies are highly integrated. This underlines why the European countries should be looked at as one economy and why a high level of policy coordination is crucial.

The same thing is shown in Figure 6 that shows the share of exports to EU in total export in European countries. The figure shows that on average 2/3 of all exports from European countries goes to other European countries. Especially some of the smaller European countries and some of the central- and eastern European countries depend highly on intra European trade.

Figure 6. Share of exports to EU in total exports (%), 2008

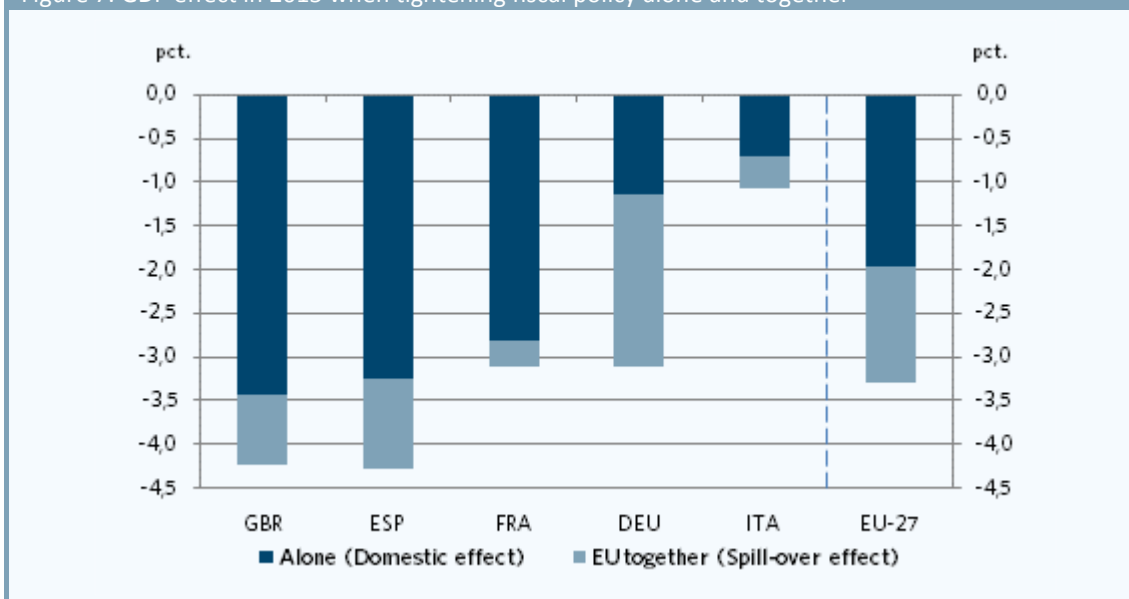


Source: AE on the basis of Eurostat.

The large integration among European countries also shows in the spill-over effects between the countries. Figure 7, 8 and 9 show the accumulated effect on GDP, employment and the public budget in 2015 in EU's five largest countries, when each country is tightening fiscal policy alone and together with all the other European countries.

Figure 7 shows how on average 40 percent of the negative effect on GDP is caused by the negative spill-over effects, and consequently by the fact that all countries are tightening at the same time. It is also seen that the spill-over effects are larger for a country like Germany that depend highly on exports and has a relative small fiscal tightening of its own. In France and Italy the situation is different. Here most of the effect on GDP is domestic, whereas the spill-over effects make up a smaller share.

Figure 7. GDP effect in 2015 when tightening fiscal policy alone and together

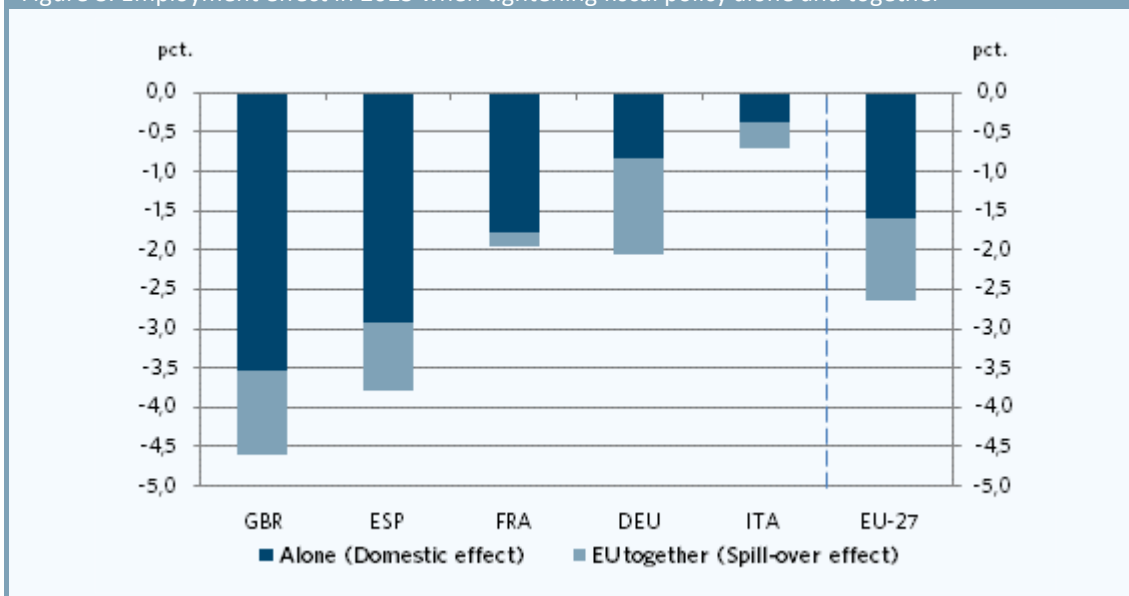


Note: In the calculations is assumed that all countries tighten fiscal policy as recommended by the European Commission, cf. table 2. It is assumed that the tightening is equally spread between less public spending and tax increases. Since 2010 now has passed the calculations begin in 2011. It is also assumed that the interest rate will be lowered as a reaction to the fiscal tightening. The "EU-27 alone"-effect reflects a weighted average of the effects when the separate countries are stimulating alone.

Source: AE on the basis of the international macroeconomic model HEIMDAL.

Figure 8 shows the overall employment effect decomposed in the domestic effect and the spill-over effect for the five largest EU countries. The largest negative effect on employment is seen in United Kingdom as they are recommended to tighten fiscal policy the most, and due to the large share of exports the relative spill-over effects are largest in Germany.

Figure 8. Employment effect in 2015 when tightening fiscal policy alone and together



Note: In the calculations is assumed that all countries tighten fiscal policy as recommended by the European Commission, cf. table 2. It is assumed that the tightening is equally spread between less public spending and tax increases. Since 2010 now has passed the calculation begin in 2011. It is also assumed that the interest rate will be lowered as a reaction to the fiscal tightening. The "EU-27 alone" effect reflects a weighted average of the effects when the separate countries are stimulating alone.

Source: AE on the basis of the international macroeconomic model HEIMDAL.

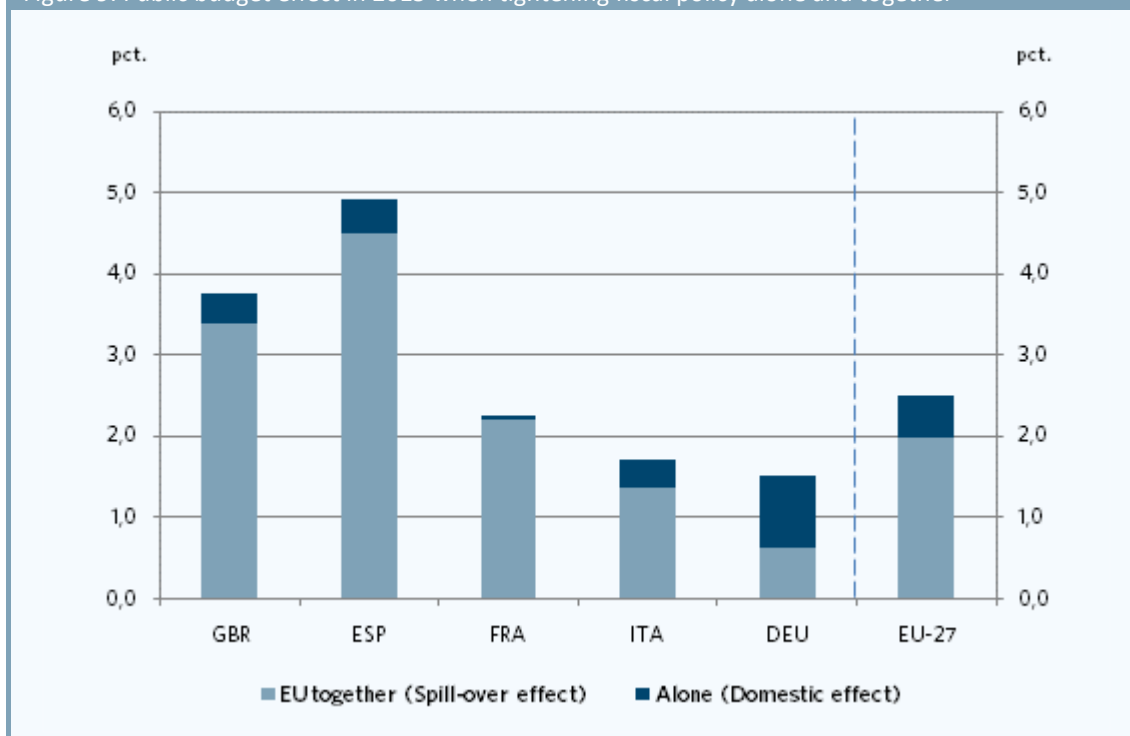
Figure 9 shows the overall effect on the budget decomposed in the domestic effect and the spill-over effect for the five largest EU countries. The figure shows how the budget improvements are larger when

the countries tighten fiscal policy alone compared to the situation where all countries tighten together. For EU-27 this means that the weighted average effect on the budget is 2.5 percentage points when the 24 countries tighten fiscal policy alone. When the 24 countries tighten fiscal policy together, and the negative spill-over effects are taken into account, the effect on the budget is only 2 percentage points.

This is due to the fact that negative spill-over effects are created when all countries tighten fiscal policy at the same time. Let's for instance say that a country cut public expenses to improve the public budget, if the countries' trading partners do the same, it will lower exports, this will lead to job losses, and will worsen the public budget compared to a situation where there is no negative spill-over effects.

The figures stress the importance of European coordinating not only in the situation of fiscal expansion but just as important in the present situation of fiscal tightening. If the spill-over effects are not taken into account, then the negative effects from tightening fiscal policy are underestimated and the beginning upturn jeopardized.

Figure 9. Public budget effect in 2015 when tightening fiscal policy alone and together



Note: In the calculations is assumed that all countries tighten fiscal policy as recommended by the European Commission, cf. table 2. It is assumed that the tightening is equally spread between less public spending and tax increases. Since 2010 now has passed the calculations begin in 2011. It is also assumed that the interest rate will be lowered as a reaction to the fiscal tightening. The "EU-27 alone" effect reflects a weighted average of the effects when the separate countries are stimulating alone.

Source: AE on the basis of the international macroeconomic model HEIMDAL.

The effects of only some countries tightening fiscal policy vs. the 2020 strategy

In the calculations above it is assumed that all countries will follow the recommendations from EU and tighten fiscal policy in line with table 2. The calculations show that a simultaneous fiscal tightening of this size will lower GDP growth significantly and will cause a higher unemployment rate than would have been the case if the 2020 strategy had been implemented.

It is clear that some kind of fiscal tightening must take place, especially in the light of the latest turmoil on the financial markets in Southern Europe. But as the calculations above show, half of the negative effect on the European economy is caused by the so-called negative spill-over effects that are created when nearly all countries tighten fiscal policy at the same time. It would therefore be wise to let the countries with the largest budget deficits tighten fiscal policy.

In the following we will do the same calculation, but just assuming that only some of the countries will tighten their fiscal policy. The calculations are now divided into four scenarios – A baseline scenario and three alternative scenarios. The three alternative scenarios are:

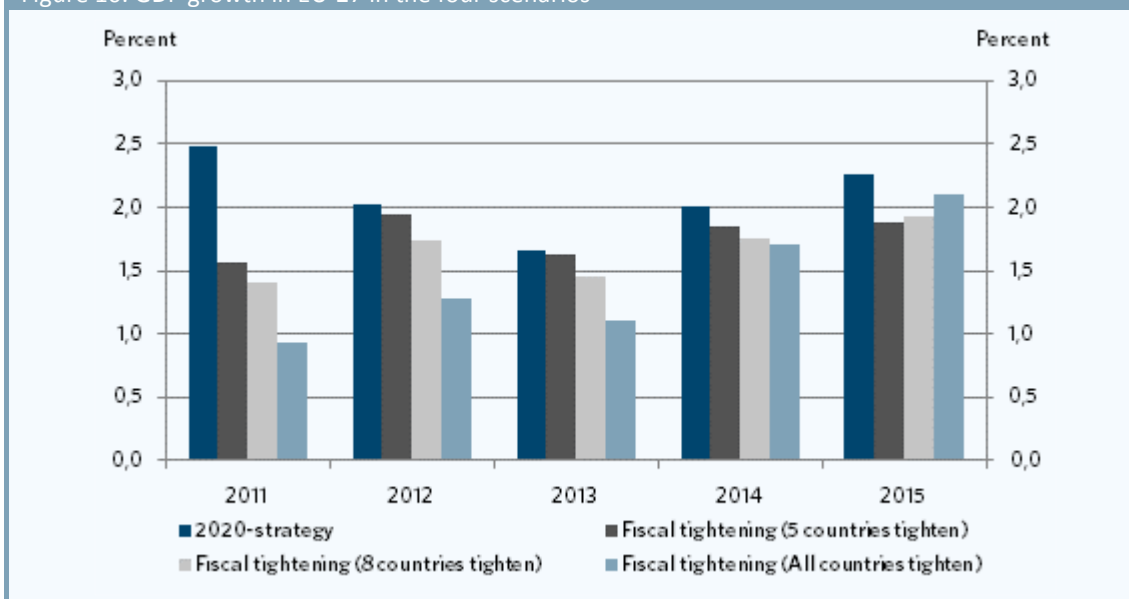
- Scenario 1 where all countries tighten fiscal policy in line with the recommendations from EU, as outlined in table 2 and identical with the calculations in figure 1-4.
- Scenario 2 where only the five countries with the largest recommendations will tighten fiscal policy. This corresponds to the case where only Ireland, Greece, Spain, Latvia and Lithuania tightens fiscal policy in line with table 2.
- Scenario 3 where only countries with recommendations of 5 percent of GDP or more from 2010-2014 will tighten fiscal policy, corresponding to 8 countries. This corresponds to the case where Ireland, Greece, United Kingdom, Latvia, Lithuania, Spain, Romania and Portugal tighten fiscal policy in line with table 2.

Since 2010 now has passed all the calculations begin in 2011.

Figure 10-13 compare the scenarios with the 2020-strategy.

Figure 10 shows the GDP growth in the four scenarios. As shown the effect on GDP can be reduced significantly if only 5 or 8 countries tighten fiscal policy compared to all 24 countries as the EU recommend. If all 24 countries tighten fiscal policy at the same time, the average annual GDP growth from 2010-2015 compared with the average growth in the 2020-strategy will be reduced from 2 percent to 1.4 percent on average per year. If only 5 or 9 countries tighten fiscal policy then the average GDP growth rate will be 1.7 - 1.8 percent. Especially in 2011-2013 the growth rate will be higher if only some countries tighten fiscal policy.

Figure 10. GDP growth in EU-27 in the four scenarios



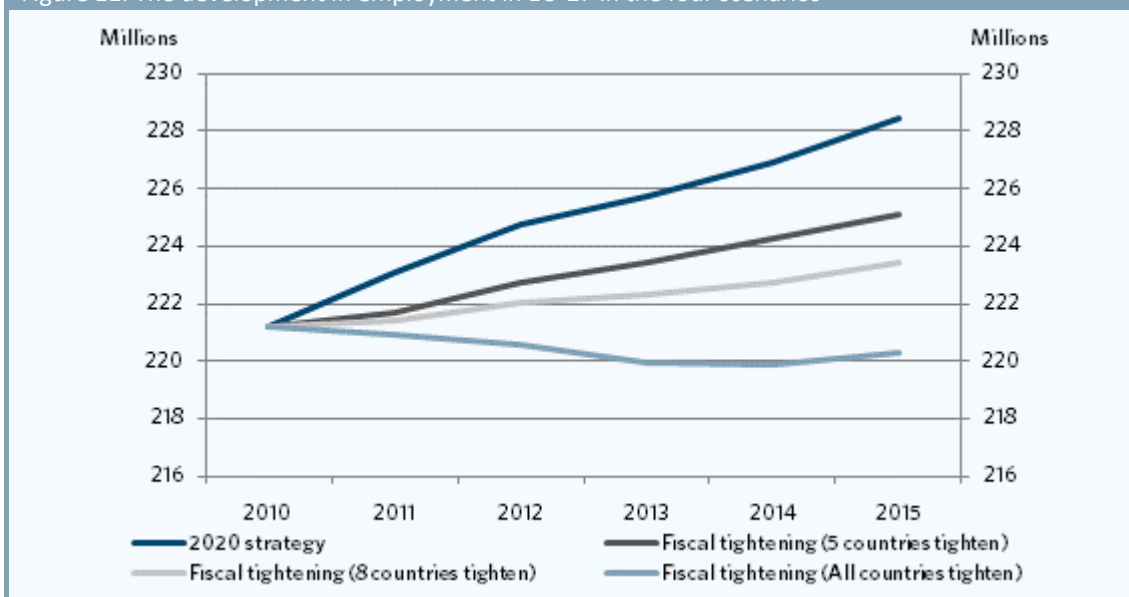
Note: In the calculations is assumed that the total average annual fiscal effort on average from 2010-2015 will be in line with the figures pictured in table 2. It is assumed that the tightening is equally spread between less public spending and tax increases. Since 2010 now has passed all the calculations begin in 2011.

It is also assumed that the interest rate will be lowered as a reaction to the fiscal tightening.

Source: AE on the basis of the international macroeconomic model HEIMDAL.

Figure 11 and 12 show the effect on employment and unemployment in the four scenarios. Likewise will the negative effect on employment be less severe if only some countries tighten fiscal policy from 2010. Instead of 8.7 million jobs being lost if all 24 countries tighten at the same time compared to the 2020 scenario, only a little more than 3 million jobs will be lost compared to the 2020 scenario if only the 5 countries with the largest budget deficits tighten fiscal policy. And instead of an unemployment rate of 2.2 percentage points above the unemployment rate in the 2020 scenario, the unemployment rate will only be 0.8 percentage points higher if only 5 countries tighten fiscal policy.

Figure 11. The development in employment in EU-27 in the four scenarios

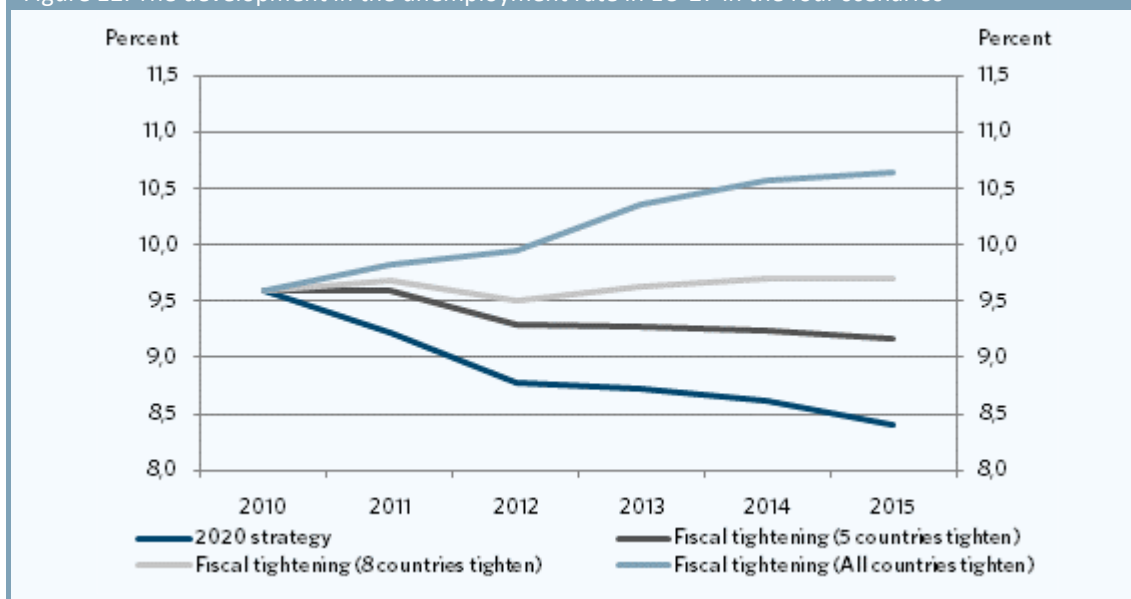


Note: In the calculations is assumed that the total average annual fiscal effort on average from 2010-2015 will be in line with the figures pictured in table 2. It is assumed that the tightening is equally spread between less public spending and tax increases. Since 2010 now has passed all the calculations begin in 2011.

It is also assumed that the interest rate will be lowered as a reaction to the fiscal tightening.

Source: AE on the basis of the international macroeconomic model HEIMDAL.

Figure 12. The development in the unemployment rate in EU-27 in the four scenarios



Note: In the calculations it is assumed that the total average annual fiscal effort on average from 2010-2015 will be in line with the figures pictured in table 2. It is assumed that the tightening is equally spread between less public spending and tax increases. Since 2010 now has passed all the calculations begin in 2011.

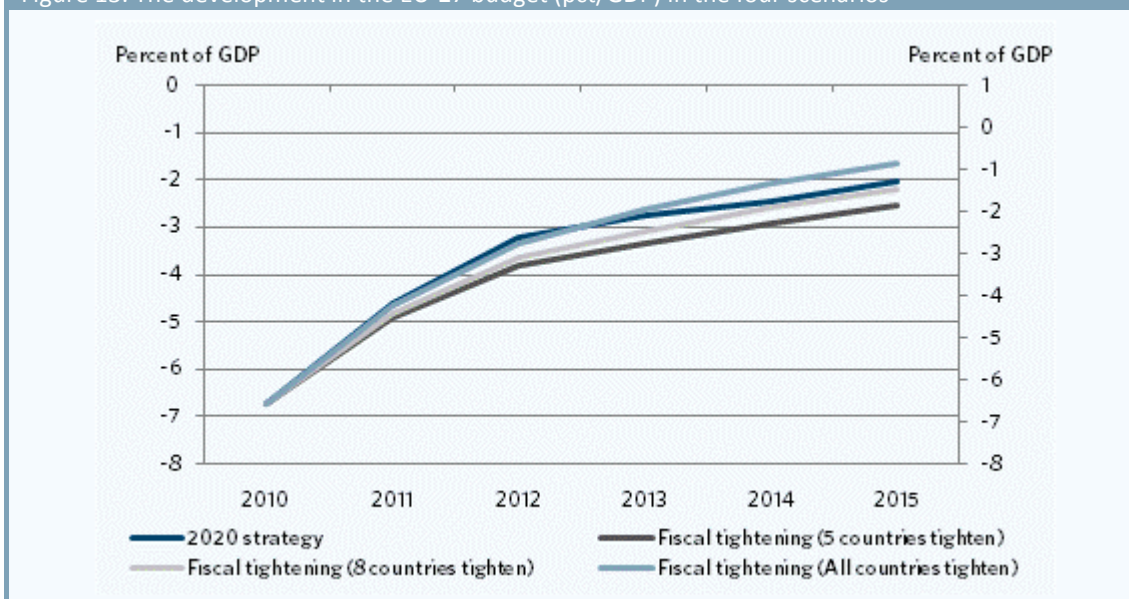
It is also assumed that the interest rate will be lowered as a reaction to the fiscal tightening.

Source: AE on the basis of the international macroeconomic model HEIMDAL.

Figure 13 shows the effect on the public budget in the four scenarios. The overall effect on the public budget is of course bigger if all 24 countries tighten fiscal policy. In that case the budget from 2010 to 2015 is improved from -6.8 percent of GDP to -1.6 percent of GDP – an improvement of 5.1 percentage points. But the budget from 2010 to 2015 is still improved by 4.2 percentage point if only 5 countries tighten fiscal policy. This is because the negative spill-over effects are not to the same extent drawing in the opposite direction.

Actually the 2020 strategy has the second highest improvement of the public budget which is improved from -6.8 percent of GDP in 2010 to -2.0 percent of GDP in 2015.

Figure 13. The development in the EU-27 budget (pct/GDP) in the four scenarios



Note: In the calculations is assumed that the total average annual fiscal effort on average from 2010-2014 will be in line with the figures pictured in table 2. It is assumed that the tightening is equally spread between less public spending and tax increases. Since 2010 now has passed all the calculations begin in 2011.

It is also assumed that the interest rate will be lowered as a reaction to the fiscal tightening.

Source: AE on the basis of the international macroeconomic model HEIMDAL.

The calculations show that by letting the European countries tighten fiscal policy in different speeds it is possible to reduce the negative spill-over effects and therefore also reduce the negative effects on the European economy from tightening fiscal policy.