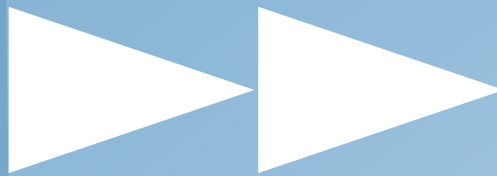




SPRING 2013

# EUROPEAN REFORM BAROMETER



## NO TIME FOR COMPLACENCY



MARCH 2013

# BUSINESSEUROPE



## WHO ARE WE?

BUSINESSEUROPE's members are 41 central industrial and employers' federations from 35 countries, working together to achieve growth and competitiveness in Europe. Its mission is to strengthen the competitiveness of the European economy in order to increase prosperity and opportunities for all Europeans.

## WHAT IS THE EUROPEAN REFORM BAROMETER?

BUSINESSEUROPE's Reform Barometer looks at the global performance of the EU, its 27 Member States, Iceland, Norway and Switzerland, on the basis of key indicators covering taxation and public finances, business environment, innovation and skills, access to finance and financial stability, and labour market.

## FOR FURTHER INFORMATION: ECONOMICS DEPARTMENT

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## FOREWORD

Europe is entering into a critical phase of its recovery. On the surface, there are signs of improvement but we are walking on very thin ice and the pendulum can quickly swing back to the worst moments of the crisis if doubts about the ability to pursue necessary reforms in the European Union re-emerge.

In particular, the virtuous circle of greater financial market stability, falling government borrowing costs and improving confidence that the Euro Area is starting to benefit from, can be quickly reversed if leaders become complacent and ease off on reforms. Member States must continue to press ahead with structural reforms during 2013.

Similarly, in order to be able to make the investments essential for long-term growth and competitiveness, companies need to be confident that leaders are committed to policies that support competitiveness and economic stability. Companies are looking for Member States to reform in three key areas:

- > **Fiscal consolidation:** Member States must strengthen confidence in the stability of public finances by continuing to progress towards balanced budgets and in turn starting to reduce long-term debt position. Fiscal consolidation needs to focus upon reductions in public expenditure (protecting investment), rather than tax increases as part of an overall policy that seeks to increase long-term competitiveness.
- > **Labour market reform:** National structural reforms are needed to overcome labour market rigidities and to increase productivity and employment. Well-functioning and flexible labour markets facilitate job creation, transitions between jobs, and help to match skills supply and labour demand.
- > **Product market reform:** Opening markets to increased competition, including through completion of the single market in areas such as services, energy and digital economy can help drive productivity growth and employment creation. Member States must also support business expansion by reducing administrative costs.

Across Europe, companies are producing world-leading goods and services drawing on cutting edge technology and highly skilled workers. Similarly, different Member States demonstrate excellence across a variety of policy areas crucial for competitiveness, ranging from education and skills systems to innovation support.

This publication illustrates where European countries can learn from each other and, supported by the Council and the Commission through the European Semester, implement the ambitious policy reforms Europe urgently needs to enable businesses to invest and expand in order to kick start growth and employment creation.



**Jürgen R. Thumann**

President  
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Director General  
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# BUSINESSEUROPE



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# EXECUTIVE SUMMARY

## THE IMPORTANCE OF STRUCTURAL REFORMS FOR GROWTH

Almost 5 years have passed since the outbreak of the global financial crisis. Yet Europe remains unable to return to a path of sustained growth. EU output remains below 2008 level, with 8 million people having lost their job since the start of the crisis.

Europe urgently needs to press ahead with structural reforms to both labour and product markets that can raise long-term output. By eliminating 50% of Euro Area countries' gaps with OECD best practise, Euro Area GDP could, within 5 years, increase by 3.75%.

## REFORM PROGRESS IN 2012 AND BUSINESS PRIORITIES FOR 2013

- Whilst many Member States made progress in structural reforms during 2012, companies continue to be concerned that such reform efforts lack the urgency that is clearly required. A survey of our member federations suggests the greatest improvements came in the area of financial stability. But reform progress in a number of areas impacting on productivity and investment, as well as trade and competitiveness, was much too slow.
- **BUSINESSEUROPE** member federations continue to identify consolidation of public expenditure as the key priority for 2013. In addition, companies draw particular attention to the importance of growth-enhancing tax reforms, improvements in bank lending conditions, and enhanced sector-specific competition.

## REFORM BAROMETER 2013: KEY RESULTS

- In this year's Barometer, we focussed our indicators on benchmarking policies that are important for long-term growth, drawing attention to policy choices that governments can change directly or influence in the medium term.
- We are not advocating that all Member States need to improve their performance in every indicator. Countries' specific circumstances influence the national policy framework, and different approaches can successfully achieve the same policy goal. Nevertheless, weak performance in any given area provides a good starting point for deeper analysis of possible underlying causes and for assessing scope for policy improvements.
- We also believe it is important to consider both performance levels and the direction of change. This can reveal whether higher income European economies, while remaining frontrunners, are losing ground and risk becoming less competitive.

THE KEY MESSAGES FROM THE INDICATORS ARE PRESENTED BELOW IN **5 KEY INTER-RELATED THEMES**:

## 1. TAXATION AND PUBLIC FINANCES

### KEY OBSERVATIONS

- > Member States progressed in **reducing budget deficits**. In the EU, deficits fell from almost 7% of EU GDP in 2009 to less than 4% in 2012.
- > **Effective corporate tax levels** have been reduced in recent years (particularly in Slovenia and the United Kingdom) but **overall tax rates** in most EU countries remain much higher than those experienced outside the EU.
- > **Administration of tax systems** has been improved in a number of countries (e.g. Finland, and Bulgaria), but scope for improvement remains.

### RECOMMENDATIONS

- > Building on recent progress, further effort is required on **fiscal consolidation** on a number of Member States.
- > To help reduce **overall tax burdens**, fiscal consolidation should focus primarily on reductions in current public expenditure protecting investment, not tax rises.
- > Tax reforms should shift taxation away from labour and capital which are most damaging to growth and employment.
- > Alongside national measures to **make tax systems more user-friendly**, Member States should harmonise administrative systems when possible, particularly for VAT.

## 2. BUSINESS ENVIRONMENT

### KEY OBSERVATIONS

- > **Administrative burdens** have been reduced in some countries (notably Slovenia and Bulgaria), but remaining divergences highlight scope for further improvement.
- > **Market openness** varies widely between Member States, beyond that accounted for by differences in sizes of Member States' economies.
- > **Energy costs** have increased considerably in recent years, with significant divergence between countries. Ireland and the Netherlands nevertheless demonstrate that governments do have policy scope to restrain energy price rises.

### RECOMMENDATIONS

- > **Regulation** must be designed to minimise administrative burdens.
- > **Differences in market openness**, should be reduced by minimising the costs of enforcing contracts, properly transposing European directives, and ensuring most public procurement is advertised openly throughout the EU internal market.
- > **Energy prices** must allow EU businesses to be competitive in international markets. Completion of the EU internal energy market and more balanced EU environmental regulation can help drive down costs.

### 3. INNOVATION AND SKILLS

#### KEY OBSERVATIONS

- > **R&D spending** as a percentage of GDP remains stuck at around 2% in the EU, substantially below both the US and Japan.
- > **Maths, reading and science:** performance in these key knowledge areas in most EU countries are now significantly lagging behind the best performing Asian economies.

#### RECOMMENDATIONS

- > **R&D intensity** must be increased to reach the goal of 3% of GDP in R&D expenditures.
- > **Innovation policies** must be more business oriented with targeted initiatives that stimulate private R&D investments and encourage clustering between public institutions, academia and businesses.
- > Priority must be given to promoting **lifelong learning**, and complementarities between higher education and training to answer future skills needs.

### 4. ACCESS TO FINANCE AND FINANCIAL STABILITY

#### KEY OBSERVATIONS

- > **Interest rates charged for bank loans** to corporations have increased in all surveyed countries. Rises have been strongest in peripheral economies of the Euro Area where sovereign borrowing costs have risen.
- > **Banks' willingness to provide loans to SMEs** deteriorated over the last 18 months.

#### RECOMMENDATIONS

- > Companies, particularly SMES, must be able to **access finance** on reasonable terms.
- > New **regulation of financial services** should both increase financial stability, and ensure that banks are able to increase lending to businesses as the economy picks up.
- > The Euro Area needs to make progress on implementing the **banking union**, notably the single supervisory mechanism, in order to reduce divergences in borrowing costs within the single currency area.
- > **Alternative financing routes** to bank lending need to be facilitated.

### 5. LABOUR MARKET

#### KEY OBSERVATIONS

- > **Unit Labour Costs:** countries with most rapid increases in ULC before the crisis, notably Ireland, Portugal and Greece have started making progress, but further progress is needed.
- > **The tax wedge on low income earners** is much higher in most Member States than in Japan and the US. The UK, for example, has raised the level at which people start pay to tax on their earnings, making low paid work more attractive.
- > Countries, notably Spain, France and the Czech Republic have started to make progress on **labour market reforms**, but much more needs to be done to reap all the employment benefits.

#### RECOMMENDATIONS

- > Ensure **unit labour cost** rises are consistent with rises in productivity growth.
- > Target cuts in **employers' social security contributions** to encourage them to hire more staff.
- > Reduce tax burdens on labour to make work more attractive for low-income earners, compared with welfare benefits.
- > All **contractual arrangements** must be designed with the primary goal of contributing to job creation.
- > Ensure **retirement ages** evolve to reflect longer life expectancy.

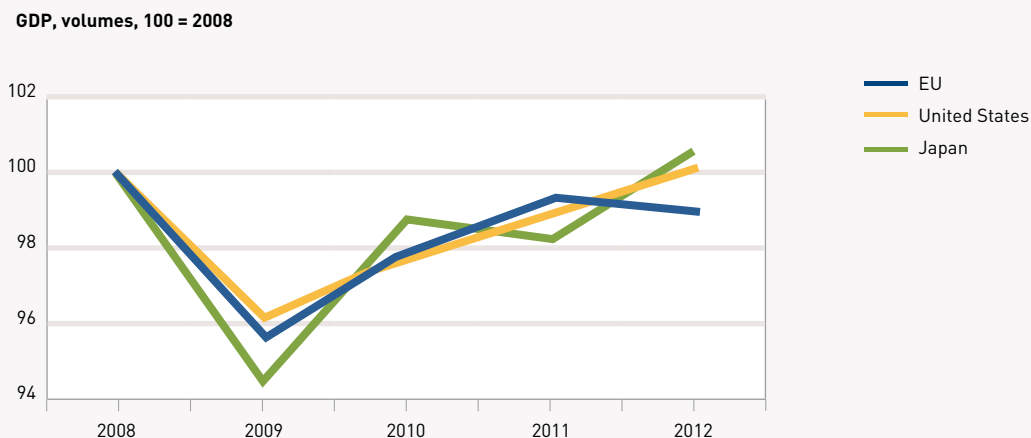
# 1. REFORM PROGRESS IN THE EUROPEAN UNION

## THE IMPORTANCE OF STRUCTURAL REFORM FOR GROWTH

Almost five years have passed since the outbreak of the global financial crisis. Yet Europe remains unable to return to a path of sustained growth. The second half of 2012 saw some reduction in financial market uncertainty, boosted both by a strong commitment from the European Central Bank (ECB) to support the single currency, and action from EU leaders to strengthen the institutional foundations of the Economic and Monetary Union (EMU) by agreeing the initial stages of a banking union. Output nevertheless fell.

Indeed, whilst output in the United States and Japan is estimated to have climbed above its pre-crisis peak in 2012, EU output remains below 2008 level (chart 1). Unless Europe focuses on policy measures which really increase competitiveness, build business confidence and kick-start economic activity, the post-crisis divergence in growth performance that emerged in 2012 between the EU and other major economies threatens to become a long-term phenomenon.

CHART 1: CHANGE IN GDP, MAJOR ECONOMIES, 2008-2012

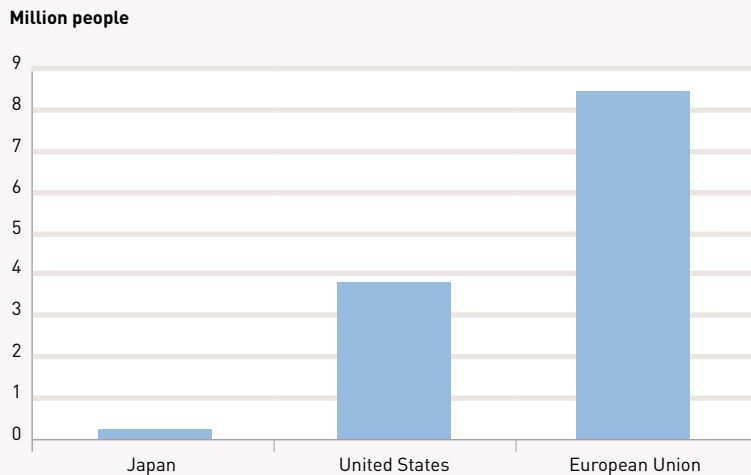


Source: IMF

EU unemployment is now almost 3,5 percentage points above its pre-crisis level, meaning that 8 million people have lost their job since the start of the crisis (chart 2). Similarly, employment is estimated to have fallen by 0,74 million in 2012. In contrast, in the US, 2,4 million jobs have been created in the last two years, after a much deeper initial fall in employment following the crisis. Unemployment has risen to 25.1% in Spain, 23.6% in Greece and 10.6% in Italy with youth unemployment of 56.5%, 57.6% and 37.1% respectively threatening to scar the life chances of a generation.



## CHART 2: CHANGE IN UNEMPLOYMENT, MAJOR ECONOMIES, BETWEEN 2008 AND 2012



Source: Ameco

Europe urgently needs to press ahead with structural reforms to both labour and product markets if it wants to raise long-term output and create jobs. Whilst the full benefits of structural reforms will take time to feed through, reforms can nevertheless provide an immediate boost to growth through raising confidence, building expectations of higher profitability and income, boosting demand, and investment in particular.

Delaying reforms will only weaken the recovery. Europe remains an attractive investment destination: the location for over 20% of global foreign direct investment (FDI) flows<sup>1</sup> in 2011, compared to 15% in the US and 8% in China. But it is essential that Europe continues to improve its attractiveness in this area as competition with emerging countries in particular, continues to increase.

The IMF estimates that **by eliminating 50% of Euro Area countries' gaps with OECD best practises, Euro Area GDP could, within 5 years, increase by 3.75%** (1.5% from labour market reforms and 2.25% from product market reforms). By taking forward reforms simultaneously, Member States also benefit from spill-overs as growth picks up in neighbouring countries, driving export demand and increasing competition.

## REFORM PROGRESS IN KEY POLICY AREAS IN 2012

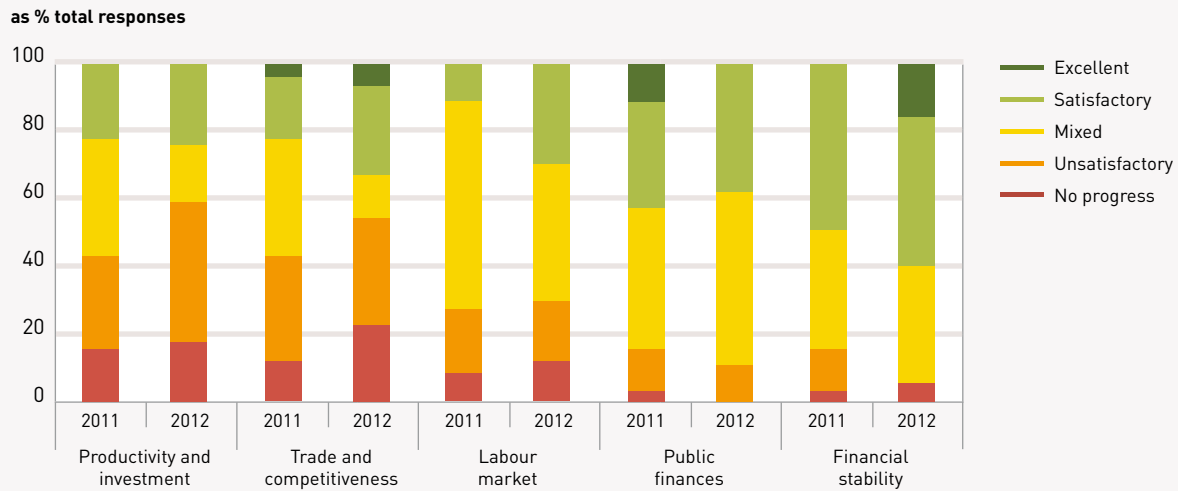
Whilst many Member States made progress in structural reforms during 2012, businesses continue to be concerned that such reform efforts lack the urgency that is clearly required.

BUSINESSEUROPE member federations point to an acceleration of reforms in the area of financial stability, which also this year represent the area with most favourable reform progress. This is due to progress in capital reserves for financial institutions and greater transparency in financial markets.

On the contrary, reform progress in productivity and investment as well as trade and competitiveness were the slowest. Many countries have started to make progress on labour market reforms, but progress will take time to feed into the indicators, and more needs to be done to reap all the employment benefits (please see labour market box on page 26). Members noted some progress in terms of public finances, particularly in some programme countries.

<sup>1</sup> Extra EU – FDI between EU countries is not counted.

CHART 3: BUSINESSEUROPE MEMBER FEDERATIONS ASSESSMENT OF REFORM PROGRESS BY POLICY AREA IN 2012



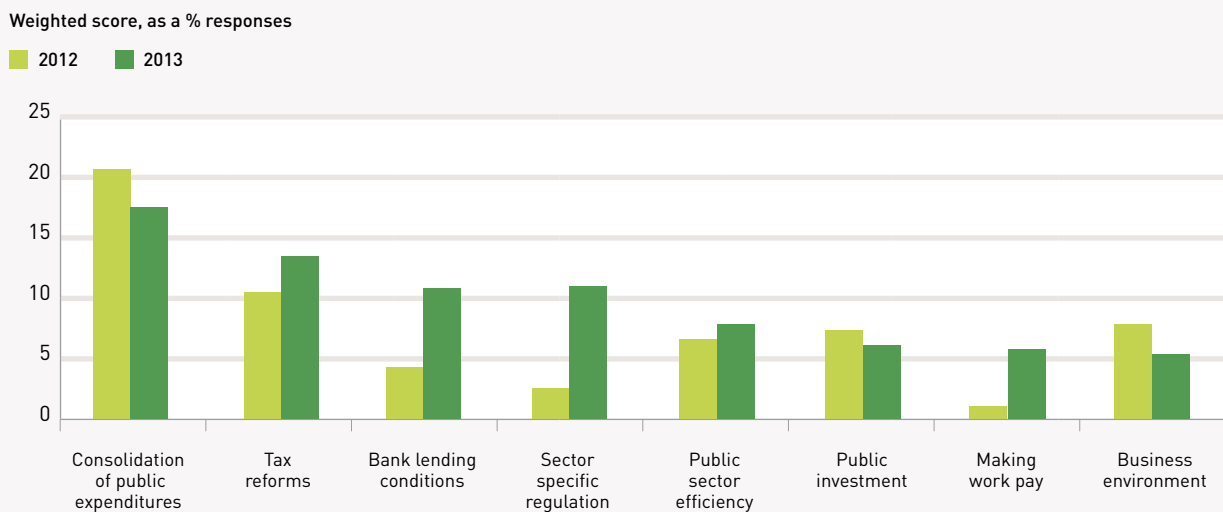
Source: BUSINESSEUROPE survey of members federations

## REFORM PRIORITIES IN 2013

Chart 4 provides an analysis of the key reform priorities of BUSINESSEUROPE member federations.

- 1. Consolidation of public expenditure:** Businesses across Europe continue to give the highest priority to reforms which can increase the sustainability of public finances and therefore increase both consumer and investor confidence.
- 2. Tax reforms:** Companies are particularly concerned about the pressure on taxation that has resulted from austerity measures. Tax reforms should be growth enhancing and shift the burden away from labour and capital.
- 3. Bank lending conditions:** Affordable access to finance is a pre-condition to allow enterprises to make the investments necessary to drive growth and maintain competitiveness. Businesses continue to feel considerable constraints in accessing funds in many Member States.
- 4. Sector-specific regulation:** Companies call for an open internal market to reduce firms' costs and increase efficiency. This is particularly important in the case of energy prices.

CHART 4: BUSINESSEUROPE MEMBER FEDERATIONS' REFORM PRIORITIES FOR 2013



Source: BUSINESSEUROPE survey of member federations

## 2. REFORM BAROMETER 2013 KEY RESULTS



### BENCHMARKING POLICIES FOR GROWTH

In this year's Barometer, we focused on indicators that function as policy benchmarks in areas that are important for long-term growth. Our revised indicators draw attention to policy choices that governments have the opportunity to change directly such as administrative burden, or can have a strong indirect influence upon growth within a medium term time frame, such as education performance.

The indicators are presented under **5 key inter-related themes** identified as having a direct causal relationship with growth and labour market performance.

1. TAXATION AND PUBLIC FINANCES
2. BUSINESS ENVIRONMENT
3. INNOVATION AND SKILLS
4. ACCESS TO FINANCE AND FINANCIAL STABILITY
5. LABOUR MARKET

We are not advocating that all Member States need to improve their performance in every indicator. Even carefully selected indicators can be a crude way of measuring different aspects of economic policy, with outcomes impacted by a range of factors including both differences in definitions/ international comparisons and local factors. Moreover, countries' specific circumstances influence the national policy framework, and different approaches can successfully achieve the same policy goal.

Nevertheless, weak performance in indicators in a given area provides a good starting point for a deeper analysis of possible underlying causes and assess scope for policy improvements. It also provides a basis to examine other countries experiences, and exchange best practices.

We provide data at two points, both the most recent observation (2012 where available) and for 2008. We therefore consider both performance levels and the direction of change. In many cases, particularly with regard to the Member States that joined the EU in 2004, we see continuing improvements across a wide range of indicators. On the contrary, higher income European economies remain frontrunners but are losing ground and risk becoming less competitive in future years.



## DETAILED ANALYSIS

### I. TAXATION AND PUBLIC FINANCES

#### KEY POLICY RECOMMENDATIONS

- Member States need to continue **fiscal consolidation**, focusing primarily on reductions in current public expenditure protecting investment, rather than tax rises.
- **Tax reforms** should shift taxation away from labour and capital which are most damaging to growth and employment.
- Member States should continue their efforts to make the **administration of their tax systems** more user-friendly.
- Greater EU **harmonization of administrative systems when possible**, particularly for VAT, must be taken forward in a way that would bring less complexity and greater transparency to EU cross-border activities.

Events of recent years are a stark reminder that sustainable public finances are key for long-term growth. Lack of confidence over the ability of a government to repay its debts can lead to a self-reinforcing spiral whereby increased borrowing levels lead to higher borrowing costs, and in turn require higher taxation levels. High levels of taxation risk weakening incentives both for investment and workers to enter the labour market, impacting negatively on long-term growth, especially if paired with unstable and non-transparent tax systems.

There is a strong negative correlation between public debt and growth. For example, Rogoff (2010)<sup>2</sup> shows that countries with public debt over 90% GDP have experienced GDP growth on average 2 percentage points lower than countries with public debt under 30% GDP during the last 100 years.

While fiscal consolidation may have a short-term impact on domestic demand, an increasing body of work from the European Commission, the IMF and the OECD<sup>3</sup> provides evidence that spending-based deficit cuts are often associated with both smaller recessive effects and better consolidation results. Reductions in expenditures driven by increased public sector efficiency can alleviate the tax-burden on the economy whilst maintaining high quality public services.

For any given level of taxation, difference in the structure of taxation can also impact on growth prospects. The OECD<sup>4</sup>, which investigates optimal policies notes for example that labour and corporate taxes are particularly harmful to growth given their damaging impact on investment and employment incentives. Similarly, it is important that the administrative costs for users of complying with the tax system are as low as possible, with tax rules both clear and not overly complex.

<sup>2</sup> Growth in a time of debt, K. Rogoff, C. Reinhart; National Bureau of Economic Research 2010

<sup>3</sup> European Commission (2011), "Tax reforms in EU Member States 2011 – Tax policy challenges for economic growth and fiscal sustainability"; Guichard, S., M. Kennedy, E. Wurzel and C. André (2007), "What Promotes Fiscal Consolidation: OECD Country Experiences", OECD Economics Department Working Paper no. 553. OECD, Paris IMF (2010), World Economic Outlook: Recovery, Risk, and Rebalancing. World Economic and Financial Surveys, October; European Central Bank (2010), "The Effectiveness of Euro Area Fiscal Policies", ECB Monthly Bulletin, July

<sup>4</sup> Tax Policy Reform and Economic Growth, OECD 2010

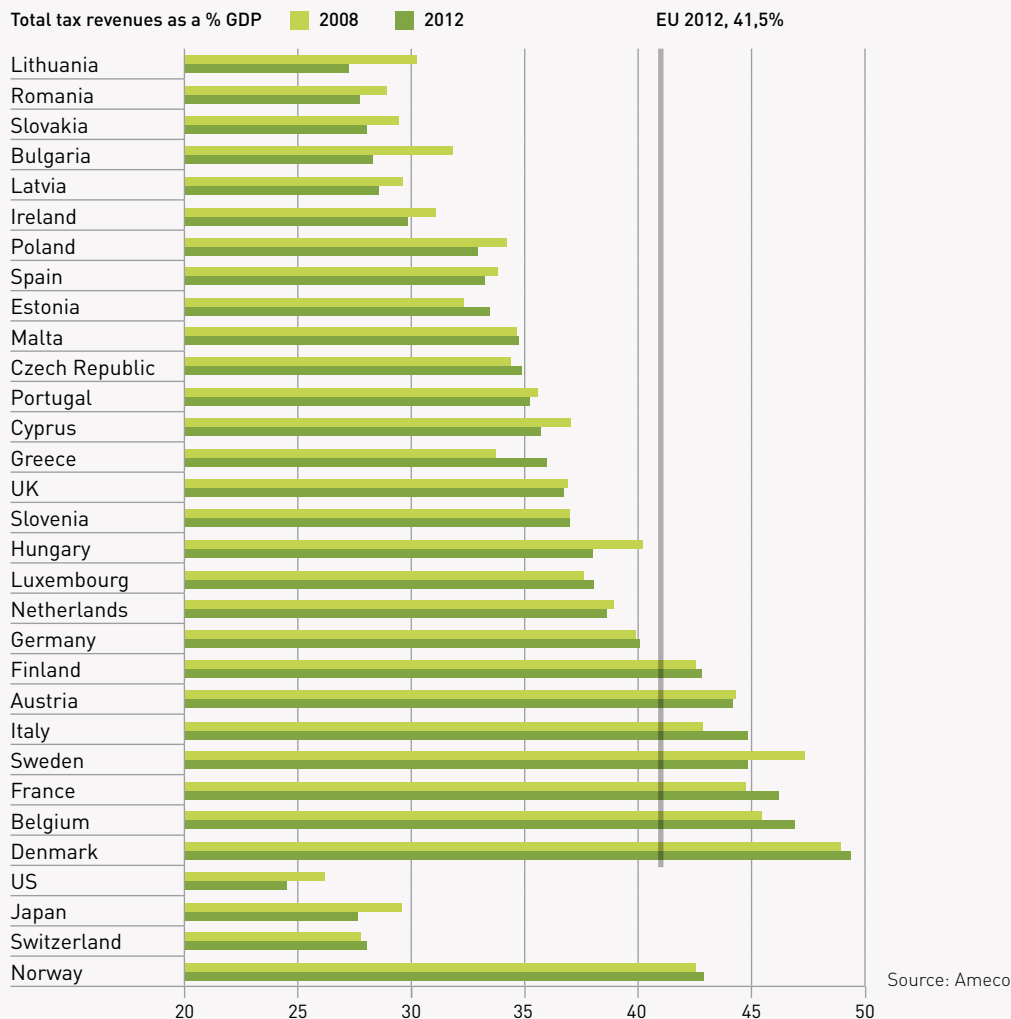
### Selected Indicators

- > To gain a full picture on the **overall future burden of taxation and to the stability of public finances**, consideration needs to be given not only to the current tax burden, but also to whether current revenues are covering expenditure (budget deficit) and to the stock of government debt.
- > Regarding the **composition of taxes**, a clear indication on the impact of taxation on corporate investment is given by the effective average tax rate on non-financial corporate sector.
- > Finally the administrative burden of tax weighing on companies gives further information on the cost efficiency of the tax system.

### Key observations and recommendations

- > **Member States are making progress on reducing budget deficits.** Average (weighted) budget deficits of EU Member States have fallen to -3.6% by the end 2012, compared to -6.9% in 2009. Nevertheless, **there is still more work to do** to bring deficits into balance, particularly in Greece, Ireland and Spain, and start the process of reducing overall debt levels.
- > Overall **tax burden in many EU countries are much higher than those experienced outside the EU.** This reflects policy choices linked to the European social model, including, for example, provision of public funded health care. Nevertheless, evidence shows that many EU Member States may be approaching the point where further tax rises will be particularly harmful to growth<sup>5</sup>.

**CHART 5: OVERALL TAX BURDEN ON THE ECONOMY, 2008-2012**



<sup>5</sup> How do Laffer curves differ across countries; M. Trabandt, H. Uhlig; National Bureau of Economic Research 2012

TABLE 1 - TAXATION AND PUBLIC FINANCES

|                | Current tax revenues<br>(% GDP) |      |        |        | Public deficit<br>(% GDP) |       |        |        | Public debt<br>(% GDP) |      |        |        | Effective average tax<br>rate, non financial<br>corporate sector |      |        |        | Administrative<br>tax burden<br>(hours /year) |      |        |        |
|----------------|---------------------------------|------|--------|--------|---------------------------|-------|--------|--------|------------------------|------|--------|--------|--|------|--------|--------|---|------|--------|--------|
|                | 2008                            | 2012 | Rank12 | Change | 2008                      | 2012  | Rank12 | Change | 2008                   | 2012 | Rank12 | Change | 2008   | 2012 | Rank12 | Change | 2008  | 2012 | Rank12 | Change |
| Belgium        | 46                              | 47   | 32     | -2     | -1,1                      | -3,1  | 18     | -6     | 89                     | 100  | 28     | 3      | 25   | 26   | 24     | -1     | 156   | 156  | 15     | -4     |
| Bulgaria       | 32                              | 28   | 4      | 5      | 1,7                       | -1,0  | 6      | 1      | 14                     | 19   | 2      | 1      | 9  | 9    | 1      | 0      | 616   | 454  | 34     | -3     |
| Czech Republic | 34                              | 35   | 16     | -1     | -2,2                      | -5,2  | 27     | -10    | 29                     | 45   | 11     | -2     | 18   | 17   | 10     | 2      | 808   | 413  | 33     | -1     |
| Denmark        | 48                              | 49   | 33     | -1     | 3,3                       | -4,1  | 21     | -18    | 33                     | 46   | 12     | -1     | 23   | 22   | 17     | 0      | 135   | 130  | 10     | -1     |
| Germany        | 40                              | 40   | 25     | -2     | -0,1                      | 0,1   | 3      | 7      | 67                     | 82   | 22     | 3      | 28   | 28   | 28     | 0      | 196   | 207  | 22     | -6     |
| Estonia        | 32                              | 34   | 12     | -2     | -2,9                      | -0,5  | 5      | 15     | 5                      | 11   | 1      | 0      | 17   | 17   | 8      | -1     | 81  | 85   | 4      | 0      |
| Ireland        | 31                              | 30   | 9      | -1     | -7,4                      | -7,7  | 31     | 1      | 45                     | 117  | 30     | -13    | 14   | 14   | 5      | 0      | 76  | 80   | 3      | 0      |
| Greece         | 34                              | 36   | 18     | -7     | -9,9                      | -6,6  | 30     | 3      | 113                    | 162  | 33     | 0      | 22   | 18   | 12     | 4      | 224   | 202  | 21     | -1     |
| Spain          | 34                              | 33   | 11     | 1      | -4,5                      | -10,2 | 34     | -6     | 40                     | 88   | 24     | -8     | 33   | 32   | 30     | 0      | 234   | 167  | 16     | 5      |
| France         | 45                              | 47   | 31     | -2     | -3,3                      | -4,6  | 24     | -2     | 68                     | 90   | 26     | 0      | 35   | 34   | 31     | 0      | 132   | 132  | 11     | -3     |
| Italy          | 43                              | 44   | 29     | -2     | -2,7                      | -2,8  | 14     | 4      | 106                    | 127  | 32     | 0      | 27   | 25   | 22     | 4      | 314   | 269  | 28     | -3     |
| Cyprus         | 38                              | 35   | 15     | 5      | 0,9                       | -5,5  | 28     | -20    | 49                     | 87   | 23     | -3     | 11   | 11   | 2      | 0      | -   | 147  | 14     | -      |
| Latvia         | 30                              | 28   | 6      | 0      | -4,2                      | -1,5  | 7      | 19     | 20                     | 42   | 10     | -4     | 14   | 12   | 3      | 1      | 279   | 264  | 27     | -3     |
| Lithuania      | 30                              | 27   | 2      | 5      | -3,3                      | -3,1  | 17     | 4      | 16                     | 41   | 9      | -4     | 13   | 13   | 4      | -1     | 166   | 175  | 18     | -6     |
| Luxembourg     | 38                              | 39   | 23     | -2     | 3,2                       | -1,5  | 8      | -4     | 14                     | 21   | 3      | 1      | 26   | 25   | 21     | 3      | 59  | 59   | 1      | 0      |
| Hungary        | 40                              | 38   | 22     | 2      | -3,7                      | -2,4  | 12     | 12     | 73                     | 79   | 21     | 8      | 20   | 19   | 16     | -2     | 330   | 277  | 30     | -2     |
| Malta          | 34                              | 35   | 14     | -1     | -4,5                      | -2,6  | 13     | 14     | 61                     | 73   | 19     | 4      | 32   | 32   | 29     | 0      | -   | 139  | 12     | -      |
| Netherlands    | 40                              | 39   | 24     | -2     | 0,5                       | -4,0  | 20     | -11    | 58                     | 71   | 18     | 4      | 24   | 28   | 27     | -8     | 180   | 127  | 9      | 5      |
| Austria        | 44                              | 44   | 28     | 0      | -1,0                      | -3,0  | 16     | -5     | 64                     | 74   | 20     | 4      | 23   | 23   | 18     | 0      | 170   | 170  | 17     | -4     |
| Poland         | 34                              | 33   | 10     | 4      | -3,7                      | -3,5  | 19     | 4      | 47                     | 56   | 17     | 1      | 17   | 18   | 12     | -2     | 418   | 286  | 31     | -1     |
| Portugal       | 36                              | 35   | 17     | -1     | -3,7                      | -5,0  | 26     | -1     | 72                     | 121  | 31     | -3     | 24   | 27   | 26     | -7     | 328   | 275  | 29     | -2     |
| Romania        | 29                              | 28   | 5      | -2     | -5,7                      | -2,9  | 15     | 15     | 13                     | 38   | 8      | -6     | 15   | 15   | 6      | 0      | 202   | 216  | 24     | -6     |
| Slovenia       | 38                              | 38   | 21     | -2     | -1,9                      | -4,4  | 22     | -8     | 22                     | 54   | 16     | -9     | 20   | 16   | 7      | 8      | 260   | 260  | 26     | -4     |
| Slovakia       | 29                              | 28   | 3      | 1      | -2,1                      | -4,8  | 25     | -9     | 28                     | 52   | 13     | -5     | 17   | 17   | 11     | -2     | 325   | 207  | 22     | 4      |
| Finland        | 43                              | 44   | 27     | -1     | 4,3                       | -1,9  | 11     | -9     | 34                     | 53   | 14     | -2     | 25   | 23   | 20     | 1      | 269   | 93   | 6      | 17     |
| Sweden         | 47                              | 45   | 30     | 1      | 2,2                       | -0,4  | 4      | 1      | 39                     | 38   | 7      | 6      | 25   | 23   | 19     | 3      | 122   | 122  | 8      | -1     |
| United Kingdom | 38                              | 37   | 19     | -1     | -5,0                      | -6,3  | 29     | 0      | 52                     | 90   | 25     | -4     | 28   | 25   | 23     | 4      | 105   | 110  | 7      | -1     |
| Iceland        | 37                              | 37   | 20     | -3     | -13,5                     | -1,6  | 10     | 24     | 70                     | 96   | 27     | 0      | -  | -    | -      | -      | 140   | 140  | 13     | -3     |
| Norway         | 42                              | 42   | 26     | -1     | 18,8                      | 13,0  | 1      | 0      | 48                     | 28   | 4      | 15     | 27   | 27   | 25     | 0      | 87  | 87   | 5      | 0      |
| Switzerland    | 28                              | 28   | 7      | -5     | 2,0                       | 0,2   | 2      | 4      | 39                     | 35   | 5      | 9      | 19   | 19   | 15     | -2     | 63  | 63   | 2      | 0      |
| Croatia        | -                               | 34   | 13     | -      | -2,0                      | -4,6  | 23     | -8     | 29                     | 54   | 15     | -5     | 17   | 17   | 8      | -1     | 196   | 196  | 20     | -4     |
| Turkey         | -                               | -    | -      | -      | -2,8                      | -1,5  | 9      | 10     | 40                     | 36   | 6      | 9      | 18   | 18   | 14     | -3     | 223   | 223  | 25     | -6     |
| United States  | 26                              | 25   | 1      | 0      | -6,4                      | -8,5  | 32     | -1     | 76                     | 108  | 29     | 1      | 37   | 37   | 32     | 0      | 187   | 175  | 18     | -3     |
| Japan          | 30                              | 30   | 8      | -3     | -1,9                      | -9,1  | 33     | -20    | 192                    | 238  | 34     | 0      | 41   | 40   | 33     | 0      | 355   | 330  | 32     | -3     |

- > Many **EU Member States** have brought down effective corporation tax levels in recent years to levels that compare favourably to those in the US. But the proportion of **labour taxation** remains **extremely high** by international comparisons, and also varies according to the overall size of wages.
- > Simplified reporting procedures, increased use of electronic filing and payments have significantly improved the **administration of tax systems**, for example in Finland and Bulgaria, but scope to improve performance remains in many Member States.

## II. BUSINESS ENVIRONMENT

### KEY POLICY RECOMMENDATIONS

- Ensure that **regulation** is well designed, with minimum administrative burdens in order to support business start-up, companies' expansion and competitiveness.
- **Increase market openness and competition** and prevent the EU legislator from amendments of the procurement directives that run counter to these essential goals or even reduce market openness; abstain from far-reaching exemptions of transparency in cases of public cooperation and do not put new administrative burdens on public procurement by imposing too far-reaching political obligations.
- **Energy prices** must allow EU businesses to be competitive in international markets. Completion of the EU internal energy market and more balanced EU environmental regulation can help drive down costs.

A supportive business environment is crucial for company start-ups and growth. Open markets with clear and properly enforced rules can promote competition and in turn productivity growth. In contrast, poorly-designed regulation reduces competition and external competitiveness as companies spend unnecessary time and money meeting overly complex regulatory requirements. This harms in particular the most innovative businesses<sup>6</sup>. The Commission estimates that costs of administrative burdens amount to 3.5% of the EU GDP, or €470 billion, 30% of which is originated at EU level.

### Selected Indicators

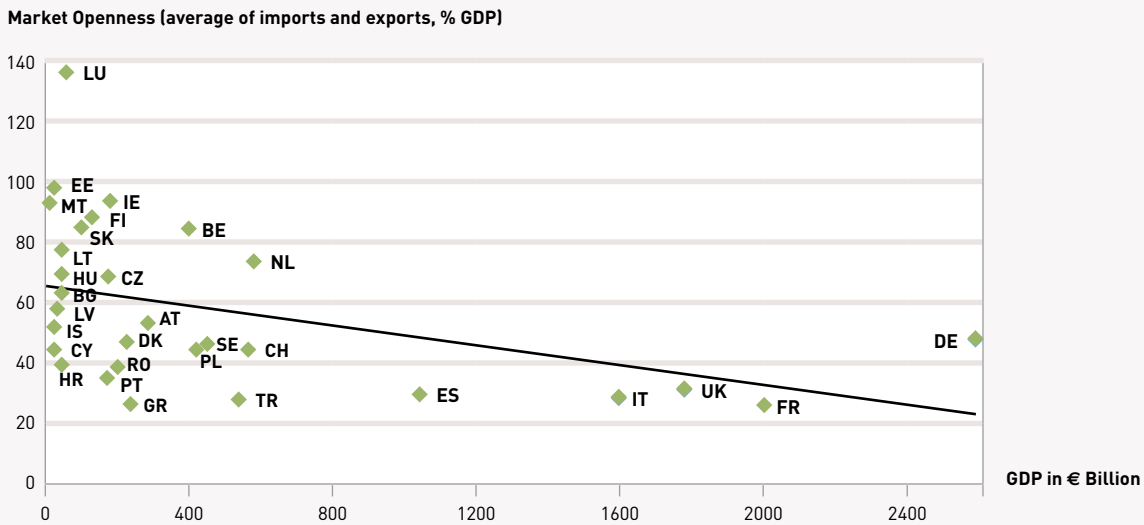
- > The **cost and number of days to start a new business**, as well as the **costs of enforcing contracts**, provide useful indications about the general level and effectiveness of bureaucratic procedures companies may face.
- > Full and proper transposition and implementation of EU legislation is essential to prevent additional unnecessary costs for businesses. The newly published **report on the state of the single market integration and the country reports** by the European Commission provide a detailed assessment on Member States' transposition and compliance performance. This is complemented by the public procurement contracts that are openly advertised in the EU and **openness** of countries to international trade.
- > Further indicators consider issues that impact strongly on many businesses operating costs: the **availability of infrastructure and energy prices**.

<sup>6</sup> Arnold, J., G. Nicoletti and S. Scarpetta [2008], "Regulation, Allocative Efficiency and Productivity in OECD Countries: Industry and Firm-Level Evidence", OECD Economics Department Working Papers, No. 616, OECD Publishing

**Key observations and recommendations**

- > **There is significant divergence, and scope for improvement in a number of areas relating to administrative burdens.** For example, costs to start a new business vary from virtually nil in Slovenia to over 20% of per capita income in Greece. Days to set up a new business range from 4 days in Belgium and Hungary to over 30 days in Poland.
- > Similarly, **market openness varies widely between Member States.** While this reflects to some extent the size of the economies, chart 6 suggests that market openness is particularly low in Portugal, and particularly, Greece. This points to the need for both measures which increase export competitiveness and that open up the economy to wider international competition.

**CHART 6: RELATIONSHIP BETWEEN MARKET OPENNESS AND SIZE OF THE ECONOMY, 2011**



Source: Eurostat and World Bank

- > Only Slovakia, Latvia and Poland have more than 10% of **public procurement openly advertised in the EU**. In many countries the transparency of public procurement that lies below the thresholds set by EU law has significant potential for improvement.
- > The indicators on **energy costs highlight both wide divergences across countries** (over 50% between some countries), **and the increases in costs that have occurred in recent years** (rises in electricity prices have been particularly strong in Cyprus, Denmark and Italy). Nevertheless, Ireland, and the Netherlands demonstrate examples of countries have been able to restrain energy price rises in recent years. In other cases (such as Greece) large excise tax increases have led to a significant increase in energy costs.



**TABLE 2: BUSINESS ENVIRONMENT**

|                | Cost to start a new business (% per capita income) |      |               | Costs of enforcing contracts (% of claim) |      |               | Number of days to set up a new business |      |               | Quality of infrastructure (business survey) |      |               | Gas prices (industrial consumers, kilowatt/hour) |      |               | Electricity prices (industrial consumers, kilowatt/hour) |       |               | Market Openness (average of imports and exports, %GDP) |      |               | Public procurement openly advertised (as % total public procurement) |      |               | Internal market scoreboard (rank) |      |               |      |    |     |    |   |   |
|----------------|--|------|---------------|---|------|---------------|---|------|---------------|---|------|---------------|--|------|---------------|--|-------|---------------|--|------|---------------|--|------|---------------|-----------------------------------|------|---------------|------|----|-----|----|---|---|
|                | 2008   | 2012 | Rank12 Change | 2008                                      | 2012 | Rank12 Change | 2008                                    | 2012 | Rank12 Change | 2008  | 2012 | Rank12 Change | 2008   | 2011 | Rank11 Change | 2008   | 2011  | Rank11 Change | 2008   | 2011 | Rank11 Change | 2008   | 2011 | Rank11 Change | 2008                              | 2011 | Rank11 Change | 2012 |    |     |    |   |   |
| Belgium        | 5,2  | 5,2  | 24            | -4  | 17   | 18            | 15                                      | -2   | 4             | 4   | 1    | 0             | 5,8  | 5,9  | 11            | 0  | 0,040 | 0,042         | 7  | 9    | 0,13          | 0,13   | 16   | 7             | 84                                | 83   | 23            | 19   | 21 | -11 | 19 |   |   |
| Bulgaria       | 2,0  | 1,1  | 8             | 2   | 24   | 24            | 22                                      | 3    | 49            | 18  | 24   | 8             | 2,5  | 3,3  | 33            | -1   | 0,025 | 0,043         | 9  | -8   | 0,07          | 0,08   | 2    | 1             | 68                                | 66   | 42            | 35   | 6  | -2  | 23 |   |   |
| Czech Republic | 9,6  | 8,2  | 27            | -1  | 33   | 33            | 33                                      | -1   | 15            | 20  | 28   | -11           | 4,2  | 5,5  | 17            | 7  | 0,038 | 0,040         | 4  | 9    | 0,13          | 0,12   | 15   | 9             | 63                                | 73   | 21            | 22   | 17 | -1  | 9  |   |   |
| Denmark        | 0,0  | 0,2  | 2             | -1  | 23   | 23            | 20                                      | 2    | 6             | 6   | 5    | -1            | 6,4  | 6,0  | 10            | -4   | -     | 0,087         | 24   | -    | 0,21          | 0,24   | 31   | 0             | 53                                | 51   | 19            | 25   | 11 | 7   | 1  |   |   |
| Germany        | 5,6  | 4,9  | 21            | 0   | 14   | 14            | 8                                       | 2    | 18            | 15  | 21   | 0             | 6,6  | 6,2  | 6             | -4   | 0,053 | 0,056         | 20   | 2    | 0,14          | 0,17   | 28   | -2            | 45                                | 48   | 7             | 7    | 26 | 0   | 8  |   |   |
| Estonia        | 1,7  | 1,6  | 11            | -2  | 19   | 22            | 18                                      | 1    | 7             | 7   | 10   | -2            | 4,7  | 5,4  | 18            | 2  | 0,030 | 0,044         | 11   | -9   | 0,07          | 0,09   | 4    | -2            | 77                                | 97   | 44            | 55   | 2  | 1   | 9  |   |   |
| Ireland*       | 0,3  | 0,3  | 3             | 0   | 27   | 27            | 27                                      | 2    | 13            | 13  | 17   | -3            | 3,7  | 5,2  | 22            | 6  | 0,045 | 0,042         | 6  | 15   | 0,15          | 0,15   | 25   | 3             | 78                                | 95   | 16            | 15   | 23 | -3  | 27 |   |   |
| Greece         | 10,2   | 20,5 | 34            | -7  | 14   | 14            | 8                                       | 2    | 19            | 10  | 16   | 6             | 4,3  | 4,5  | 29            | -6   | 0,032 | 0,043         | 8  | -4   | 0,09          | 0,13   | 18   | -7            | 29                                | 26   | 23            | 22   | 16 | -7  | 26 |   |   |
| Spain          | 14,9   | 4,7  | 20            | 9   | 17   | 17            | 13                                      | 1    | 47            | 28  | 31   | 0             | 5,1  | 5,8  | 13            | 4  | 0,039 | 0,046         | 13   | 1    | 0,11          | 0,14   | 24   | -7            | 30                                | 31   | 23            | 20   | 19 | -8  | 16 |   |   |
| France         | 1,0  | 0,9  | 6             | 1   | 17   | 17            | 14                                      | 1    | 7             | 7   | 10   | -2            | 6,6  | 6,4  | 3             | -1   | 0,037 | 0,047         | 14   | -3   | 0,08          | 0,12   | 13   | -9            | 28                                | 29   | 21            | 18   | 22 | -7  | 24 |   |   |
| Italy          | 18,5   | 16,5 | 33            | -2  | 30   | 30            | 29                                      | 1    | 10            | 6   | 5    | 5             | 3,5  | 3,9  | 32            | -2   | 0,034 | 0,045         | 12   | -4   | 0,16          | 0,21   | 30   | -1            | 29                                | 30   | 15            | 21   | 18 | 3   | 4  |   |   |
| Cyprus         | -  | 12,4 | 31            | -   | -    | 16            | 12                                      | -    | -             | 8   | 14   | -             | 5,5  | 5,3  | 20            | -6   | 0,037 | 0,054         | 19   | -7   | 0,16          | 0,26   | 32   | -2            | 51                                | 44   | 52            | 49   | 3  | -1  | 14 |   |   |
| Latvia         | 2,3  | 2,3  | 16            | -3  | 16   | 23            | 19                                      | -7   | 16            | 16  | 23   | -4            | 3,8  | 4,6  | 28            | -1   | 0,040 | 0,054         | 18   | -1   | 0,08          | 0,13   | 19   | -14           | 49                                | 60   | 61            | 57   | 1  | 0   | 9  |   |   |
| Lithuania      | 2,7  | 1,1  | 8             | 7   | 24   | 24            | 21                                      | 3    | 26            | 22  | 29   | -3            | 4,5  | 5,1  | 26            | -4   | 0,042 | 0,064         | 22   | -4   | 0,10          | 0,14   | 21   | -9            | 65                                | 79   | 22            | 27   | 9  | 4   | 17 |   |   |
| Luxembourg     | 6,5  | 1,9  | 14            | 9   | 9    | 10            | 2                                       | 0    | 26            | 19  | 27   | -1            | 5,9  | 6,2  | 6             | 3  | 0,045 | 0,043         | 9  | 11   | 0,10          | 0,11   | 8    | 6             | 135                               | 138  | 9             | 10   | 25 | -1  | 13 |   |   |
| Hungary        | 8,4  | 8,9  | 28            | -3  | 13   | 15            | 11                                      | -4   | 5             | 4   | 1    | 1             | 4,0  | 4,8  | 27            | -1   | -     | 0,052         | 17   | -    | 0,14          | 0,14   | 23   | 2             | 81                                | 88   | 25            | 25   | 12 | -4  | 6  |   |   |
| Malta          | -  | 8,9  | 28            | -   | -    | 36            | 34                                      | -    | -             | -   | -    | -             | 4,6  | 5,2  | 22            | -1   | 0,037 | 0,041         | 5  | 5    | 0,13          | 0,19   | 29   | -7            | 89                                | 95   | 9             | 31   | 7  | 18  | 2  |   |   |
| Netherlands    | 5,9  | 5,1  | 23            | -1  | 24   | 24            | 23                                      | 4    | 10            | 8   | 14   | -4            | 5,6  | 6,2  | 6             | 7  | 0,033 | 0,049         | 16   | -10  | 0,13          | 0,12   | 12   | 8             | 69                                | 74   | 7             | 6    | 27 | -1  | 18 |   |   |
| Austria        | 5,1  | 4,9  | 21            | -2  | 18   | 18            | 16                                      | 0    | 28            | 28  | 31   | -3            | 6,5  | 6,3  | 4             | 0  | 0,033 | 0,033         | 2  | 5    | 0,13          | 0,13   | 17   | 4             | 56                                | 55   | 12            | 10   | 24 | -1  | 21 |   |   |
| Poland         | 18,8   | 14,4 | 32            | 0   | 12   | 19            | 17                                      | -11  | 31            | 32  | 33   | -4            | 2,5  | 4,0  | 31            | 1  | 0,044 | 0,069         | 23   | -4   | 0,11          | 0,11   | 10   | 6             | 42                                | 46   | 39            | 43   | 5  | 0   | 25 |   |   |
| Portugal       | 2,9  | 2,3  | 16            | 0   | 14   | 13            | 5                                       | 4    | 6             | 5   | 3    | 1             | 5,4  | 6,2  | 6             | 9  | 0,040 | 0,047         | 14   | 1    | 0,09          | 0,14   | 22   | -12           | 38                                | 38   | 14            | 20   | 20 | 2   | 3  |   |   |
| Romania        | 3,6  | 2,8  | 18            | 0   | 20   | 29            | 28                                      | -8   | 10            | 14  | 19   | -9            | 2,3  | 2,8  | 34            | 0  | 0,035 | 0,058         | 21   | -12  | 0,11          | 0,11   | 7    | 8             | 37                                | 41   | 32            | 23   | 15 | -8  | 9  |   |   |
| Slovenia       | 0,1  | 0,0  | 1             | 1   | 19   | 13            | 4                                       | 13   | 19            | 6   | 5    | 17            | 4,8  | 5,4  | 18            | 1  | 0,083 | 0,093         | 25   | -2   | 0,11          | 0,11   | 11   | 7             | 69                                | 71   | 32            | 26   | 10 | -4  | 22 |   |   |
| Slovakia       | 3,3  | 1,8  | 13            | 4   | 26   | 30            | 30                                      | -2   | 16            | 18  | 24   | -5            | 3,7  | 4,3  | 30            | -2   | 0,033 | 0,037         | 3  | 2    | 0,14          | 0,16   | 27   | 0             | 87                                | 87   | 17            | 49   | 4  | 15  | 6  |   |   |
| Finland        | 1,0  | 1,0  | 7             | 0   | 10   | 13            | 6                                       | -1   | 14            | 14  | 19   | -3            | 6,5  | 6,5  | 2             | 2  | -     | -             | -  | -    | 0,08          | 0,09   | 3    | 3             | 45                                | 40   | 23            | 24   | 14 | -2  | 5  |   |   |
| Sweden         | 0,6  | 0,5  | 4             | 0   | 31   | 31            | 31                                      | 0    | 15            | 15  | 21   | -4            | 6,0  | 5,8  | 13            | -5   | -     | -             | -  | -    | 0,09          | 0,10   | 5    | 3             | 49                                | 46   | 19            | 25   | 12 | 5   | 15 |   |   |
| United Kingdom | 0,8  | 0,7  | 5             | 1   | 23   | 26            | 26                                      | -3   | 13            | 13  | 17   | -3            | 5,3  | 5,6  | 15            | 1  | -     | -             | -  | -    | 0,11          | 0,14   | 20   | -1            | 30                                | 33   | 21            | 28   | 8  | 6   | 19 |   |   |
| Iceland        | 2,6  | 3,0  | 19            | -5  | 6    | 8             | 1                                       | 0    | 5             | 5   | 3    | -1            | 5,9  | 6,3  | 4             | 5  | -     | -             | -  | -    | 0,06          | 0,07   | 1    | 0             | 92                                | 110  | -             | -    | -  | -   | -  | - | - |
| Norway         | 2,1  | 1,7  | 12            | -1  | 10   | 10            | 3                                       | 1    | 10            | 7   | 10   | 0             | 5,1  | 5,2  | 22            | -5   | 0,030 | 0,030         | 1  | 2    | 0,10          | 0,12   | 13   | 0             | 38                                | -    | -             | -    | -  | -   | -  | - | - |
| Switzerland    | 2,1  | 2,1  | 15            | -4  | 24   | 24            | 24                                      | 2    | 20            | 18  | 24   | 0             | 6,8  | 6,6  | 1             | 0  | -     | -             | -  | -    | -             | 0,15   | 26   | -             | 47                                | 44   | -             | -    | -  | -   | -  | - | - |
| Croatia        | 11,5   | 7,3  | 25            | 3   | 14   | 14            | 7                                       | 1    | 40            | 7   | 10   | 20            | 4,1  | 5,2  | 22            | 3  | -     | -             | -  | -    | 0,09          | 0,11   | 9    | 0             | 46                                | 41   | -             | -    | -  | -   | -  | - | - |
| Turkey         | 14,9   | 10,5 | 30            | -1  | 19   | 25            | 25                                      | -7   | 6             | 6   | 5    | -1            | 3,5  | 5,3  | 20            | 10   | -     | -             | -  | -    | 0,08          | 0,10   | 6    | 1             | 26                                | 29   | -             | -    | -  | -   | -  | - | - |
| United States  | 0,7  | 1,4  | 10            | -5  | 9    | 14            | 8                                       | -5   | 6             | 6   | 5    | -1            | 6,1  | 5,6  | 15            | -8   | -     | -             | -  | -    | -             | -  | -    | -             | 15                                | -    | -             | -    | -  | -   | -  | - | - |
| Japan          | 7,5  | 7,5  | 26            | -2  | 23   | 32            | 32                                      | -11  | 23            | 23  | 30   | -5            | 5,7  | 5,9  | 11            | 1  | -     | -             | -  | -    | -             | -  | -    | -             | 18                                | -    | -             | -    | -  | -   | -  | - | - |

\*For public procurement, all contracts for supplies and general services with an estimated value of €25,000 or more are publicly advertised

### III. INNOVATION AND SKILLS

#### KEY POLICY RECOMMENDATIONS

- **Innovation policies must be reinvigorated:** R&D intensity must be increased to reach the goal of 3% GDP in R&D expenditures.
- **Innovation policies must be more business oriented** with targeted initiatives that stimulate private R&D investments (e.g. tax incentives and support for access to finance) and encourage synergies and clustering between public institutions, academia and businesses.
- **Education performance should be raised.** Government reforms should prioritise future skill needs, particularly in science, technology, engineering, and mathematics, with the involvement of social partners and promoting lifelong learning as well as encouraging complementarities between higher education and training.
- A more **integrated European innovation landscape** is essential for its international visibility, attractiveness and competitiveness. Horizon 2020 must ensure funding for R&I programmes to support growth creation in Europe with greater focus on innovation, including demonstration activities. The EU must provide financial support in the form of seed funding to help those Member States wanting to establish or strengthen dual-learning apprenticeship systems.

Innovation and skills are key drivers for growth and competitiveness in Europe. Technological progress, and its incorporation in the production process, is essential in order to increase productivity, lower production costs and stimulate investment and growth in developed, human capital intensive European economies.

In the context of increased internationalisation of the value chain and competition from emerging countries, innovation is crucial for Europe to keep a competitive edge in attracting production and jobs in high value added, technology intensive sectors.

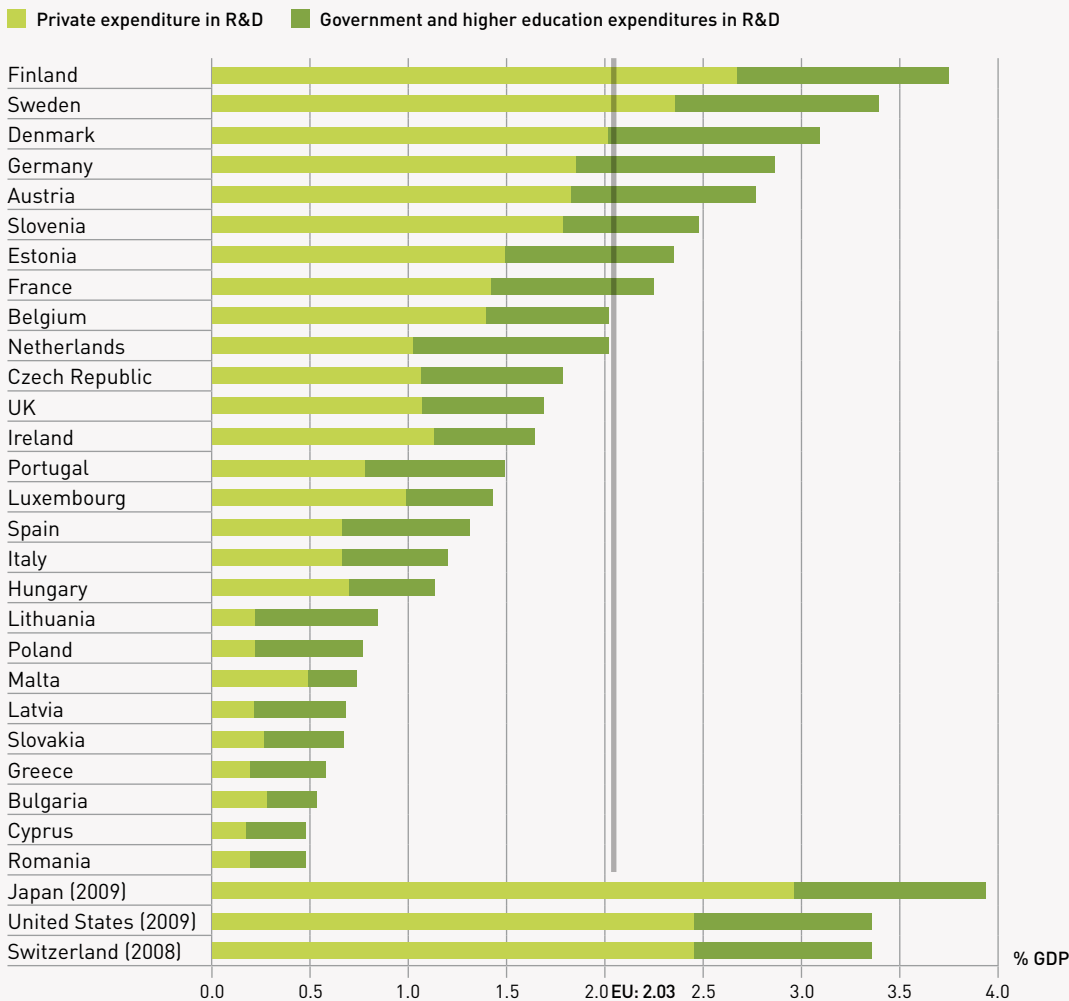
#### Selected indicators

- > Among other key factors, innovation depends upon the availability a highly skilled workforce. Our indicators consider the development of skills particularly important for the economy, including the key areas of reading, science and mathematics as assessed by the OECD PISA study. To remain competitive in light of continued change, qualifications need to be constantly updated through **lifelong learning**.
- > Effective innovation also requires both a substantial volume of **high quality R&D** and **successful commercialisation** of R&D, dependent in particular upon effective **collaboration between businesses, universities and public institutions**. This needs to be encouraged both with the right institutional framework and through effective initiatives. In addition to measure both public and privately funded R&D, we have developed a composite **'research excellence' indicator**, composed of three equally weighted indices on countries' performances in international patent applications, cluster development and university/industry research collaboration.

### Key observations and recommendations

- > Overall **EU R&D spending as a percentage of GDP** remains at around 2%, significantly below Japan (3.4%) and United States (2.8%), with both private and public contributions lower than in these competitor economies.
- > In terms of public R&D, Germany, Finland and Czech Republic provide examples of how expenditure can be maintained, even during periods of fiscal consolidation. Overall **EU private sector investment on R&D has remained essentially unchanged in recent years**. Only the Scandinavian economies, alongside Switzerland are above the 2.0% threshold which matches US performance. Improved performance in Slovenia and Estonia is of note. Spain, Portugal, Italy, Romania, Lithuania, Latvia, Cyprus, Bulgaria, Greece, Slovakia and Poland have scope for improvement, especially with respect to private expenditure.

CHART 7: R&D INTENSITY 2011



Source: Eurostat

- > **In terms of education performance**, whilst there is greater focus on life-long learning, **falling standards in fundamental knowledge areas are a concern**. The latest results of the OECD PISA survey show that performance is falling in half of the EU countries covered by the OECD survey and most EU countries lag significantly behind the best performing Asian economies.
- > There is a correlation between countries with well-established dual learning systems and low levels of youth unemployment. Evidence from Denmark shows that around 80% of students that undertook apprenticeships found employment within one year of completing their studies in the period 2008-2010. This represents a higher transition rate into work than for university graduates.

TABLE 3: INNOVATION AND SKILLS

|                | Government and higher education expenditure on R&D (% GDP) |      |               | Private expenditures on R&D (% GDP) |      |               | Excellence in research composite indicator (score from 0 to 100) |      |               | Inventor Density (Inventors per 1000 hab) |      |               | Share of people aged 25-35 year with tertiary education |      |               | Lifelong learning (persons aged 25 to 64 who receive education or training in the four weeks preceding the survey) |      |               | Education performance (average of pisa scores in maths, reading, sciences) |      |               | Quality of education (score from 0 to 7) |    |     |     |     |    |    |
|----------------|--|------|---------------|-------------------------------------|------|---------------|--|------|---------------|---|------|---------------|---|------|---------------|--|------|---------------|--|------|---------------|--|----|-----|-----|-----|----|----|
|                | 2008   | 2011 | Rank12 Change | 2008                                | 2011 | Rank12 Change | 2008   | 2011 | Rank12 Change | 2008                                      | 2012 | Rank12 Change | 2008  | 2011 | Rank11 Change | 2006   | 2009 | Rank09 Change | 2006   | 2011 | Rank11 Change |  |    |     |     |     |    |    |
| Belgium        | 0,6  | 0,7  | 13            | 3                                   | 1,4  | 1,4           | 9  | 1    | 50            | 49  | 14   | -1            | 0,33  | 0,33 | 9             | 1  | 42   | 43            | 9  | -5   | 511           | 509                                      | 7  | 0   | 5,6 | 5,4 | 3  | 2  |
| Bulgaria       | 0,3  | 0,3  | 27            | 3                                   | 0,2  | 0,3           | 22   | 10   | 22            | 23  | 32   | 1             | 0,01  | 0,01 | 32            | -1   | 26   | 27            | 23   | -2   | 279**         | 432                                      | 31 | 0   | 3,3 | 3,2 | 30 | 1  |
| Czech Republic | 0,5  | 0,7  | 10            | 10                                  | 0,9  | 1,1           | 12   | 5    | 36            | 36  | 19   | 0             | 0,06  | 0,07 | 21            | 0  | 18   | 25            | 27   | 4    | 502           | 490                                      | 19 | -7  | 4,8 | 3,9 | 21 | -8 |
| Denmark        | 0,8  | 1,0  | 3             | 2                                   | 2,0  | 2,1           | 3  | 3    | 64            | 64  | 6    | 0             | 0,48  | 0,46 | 7             | -1   | 36   | 39            | 17   | -3   | 501           | 499                                      | 12 | 2   | 5,7 | 5,0 | 8  | -4 |
| Germany        | 0,8  | 0,9  | 5             | 1                                   | 1,9  | 1,9           | 4  | 3    | 63            | 64  | 7    | 1             | 0,58  | 0,60 | 3             | 1  | 24   | 28            | 22   | 1    | 505           | 510                                      | 6  | 3   | 4,7 | 4,9 | 11 | 5  |
| Estonia        | 0,7  | 0,9  | 6             | 5                                   | 0,6  | 1,5           | 7  | 15   | 32            | 35  | 23   | 0             | 0,10  | 0,12 | 19            | 0  | 36   | 39            | 16   | -1   | 531**         | 514                                      | 5  | -3  | 4,4 | 4,1 | 19 | 1  |
| Ireland        | 0,5  | 0,6  | 17            | 4                                   | 0,9  | 1,2           | 10   | 5    | 49            | 47  | 15   | 0             | 0,24  | 0,24 | 13            | 1  | 46   | 47            | 3  | -1   | 509           | 497                                      | 14 | -6  | 5,6 | 5,3 | 5  | 0  |
| Greece         | 0,4*   | -    | -             | -                                   | 0,2* | -             | -  | -    | 23            | 22  | 33   | -1            | 0,03  | 0,02 | 29            | -3   | 28   | 32            | 20   | 0    | 464           | 473                                      | 29 | -1  | 3,2 | 3,0 | 33 | 0  |
| Spain          | 0,6  | 0,6  | 14            | 2                                   | 0,7  | 0,7           | 19   | 1    | 33            | 37  | 18   | 3             | 0,12  | 0,14 | 18            | 0  | 39   | 39            | 14   | -5   | 476           | 484                                      | 25 | 0   | 3,4 | 3,5 | 26 | 1  |
| France         | 0,8  | 0,8  | 9             | -1                                  | 1,4  | 1,5           | 8  | 2    | 44            | 46  | 16   | 0             | 0,32  | 0,33 | 10            | 2  | 41   | 43            | 7  | -1   | 493           | 497                                      | 15 | 2   | 4,8 | 4,2 | 17 | -4 |
| Italy          | 0,5  | 0,5  | 18            | 3                                   | 0,7  | 0,7           | 18   | 3    | 39            | 39  | 17   | 0             | 0,17  | 0,16 | 17            | 0  | 20   | 21            | 31   | -4   | 469           | 486                                      | 24 | 3   | 3,3 | 3,4 | 28 | 3  |
| Cyprus         | 0,3  | 0,3  | 25            | 6                                   | 0,2  | 0,2           | 28   | 3    | 34            | 36  | 21   | -1            | 0,03  | 0,04 | 24            | 3  | 48   | 50            | 1  | 0    | -             | -  | -  | -   | 5,5 | 4,8 | 12 | -5 |
| Latvia         | 0,5  | 0,5  | 20            | 4                                   | 0,2  | 0,2           | 26   | 6    | 22            | 28  | 27   | 7             | 0,03  | 0,05 | 22            | 3  | 29   | 35            | 18   | 1    | 485           | 487                                      | 23 | -1  | 3,8 | 3,6 | 25 | -2 |
| Lithuania      | 0,6  | 0,7  | 11            | 7                                   | 0,2  | 0,2           | 24   | 4    | 28            | 30  | 26   | 2             | 0,02  | 0,02 | 30            | -1   | 42   | 48            | 2  | 3    | 488**         | 479                                      | 27 | -8  | 3,5 | 4,0 | 20 | 5  |
| Luxembourg     | 0,4  | 0,5  | 21            | 8                                   | 1,3  | 1,0           | 14   | -2   | 69            | 77  | 4    | 0             | 0,37  | 0,32 | 11            | -3   | 39   | 47            | 4  | 6    | 485           | 482                                      | 26 | -5  | 4,3 | 4,4 | 16 | 5  |
| Hungary        | 0,5  | 0,4  | 22            | 3                                   | 0,5  | 0,8           | 17   | 6    | 33            | 33  | 25   | -3            | 0,08  | 0,08 | 20            | 0  | 24   | 28            | 21   | 1    | 492           | 496                                      | 17 | 1   | 3,4 | 3,4 | 28 | -1 |
| Malta          | 0,2  | 0,2  | 28            | 5                                   | 0,4  | 0,5           | 20   | 5    | 28            | 33  | 24   | 2             | 0,04  | 0,03 | 27            | -5   | 23   | 25            | 28   | -3   | -             | -  | -  | -   | 4,9 | 5,0 | 8  | 3  |
| Netherlands    | 0,9  | 1,0  | 4             | 0                                   | 0,9  | 1,1           | 13   | 3    | 64            | 63  | 8    | -1            | 0,51  | 0,49 | 6             | -1   | 40   | 40            | 10   | -2   | 521           | 519                                      | 3  | 0   | 5,2 | 5,3 | 5  | 4  |
| Austria        | 0,8  | 0,9  | 7             | 0                                   | 1,9  | 1,9           | 5  | 2    | 51            | 55  | 10   | 2             | 0,46  | 0,50 | 5             | 2  | 19   | 21            | 30   | -2   | 502           | 487                                      | 22 | -11 | 4,9 | 4,7 | 13 | -2 |
| Poland         | 0,4  | 0,5  | 18            | 8                                   | 0,2  | 0,2           | 25   | 3    | 23            | 26  | 31   | 0             | 0,02  | 0,03 | 26            | 4  | 32   | 39            | 14   | 3    | 500           | 501                                      | 8  | 7   | 4,1 | 3,7 | 24 | -2 |
| Portugal       | 0,6  | 0,7  | 11            | 3                                   | 0,9  | 0,8           | 16   | 2    | 29            | 35  | 22   | 2             | 0,04  | 0,05 | 23            | 0  | 23   | 27            | 24   | 0    | 471           | 490                                      | 20 | 6   | 3,6 | 3,8 | 22 | 2  |
| Romania        | 0,4  | 0,3  | 26            | 0                                   | 0,2  | 0,2           | 27   | 3    | 26            | 22  | 34   | -5            | 0,01  | 0,01 | 33            | 0  | 19   | 23            | 29   | 0    | 407**         | 427                                      | 32 | -2  | 3,4 | 3,1 | 32 | -5 |
| Slovenia       | 0,6  | 0,6  | 16            | 3                                   | 1,1  | 1,8           | 6  | 8    | 36            | 36  | 20   | -2            | 0,19  | 0,20 | 16            | 0  | 30   | 34            | 19   | -1   | 519**         | 499                                      | 13 | -9  | 4,5 | 3,8 | 22 | -4 |
| Slovakia       | 0,3  | 0,4  | 22            | 10                                  | 0,2  | 0,3           | 23   | 4    | 28            | 26  | 30   | -3            | 0,02  | 0,03 | 25            | 3  | 18   | 26            | 25   | 5    | 482           | 488                                      | 21 | 2   | 3,2 | 2,8 | 34 | -1 |
| Finland        | 0,9  | 1,1  | 1             | 2                                   | 2,8  | 2,7           | 1  | 0    | 79            | 83  | 1    | 2             | 0,69  | 0,64 | 2             | 0  | 38   | 39            | 12   | 1    | 553           | 543                                      | 1  | 0   | 5,9 | 5,8 | 2  | 1  |
| Sweden         | 1,0  | 1,0  | 2             | 0                                   | 2,8  | 2,4           | 2  | 1    | 80            | 78  | 3    | -1            | 0,63  | 0,58 | 4             | -1   | 41   | 43            | 7  | -1   | 504           | 496                                      | 18 | -8  | 5,3 | 5,3 | 5  | 3  |
| United Kingdom | 0,6  | 0,6  | 14            | 0                                   | 1,1  | 1,1           | 11   | 2    | 50            | 54  | 11   | 3             | 0,24  | 0,21 | 15            | 0  | 39   | 44            | 6  | 5    | 502           | 500                                      | 11 | 2   | 4,6 | 4,7 | 13 | 4  |
| Iceland        | 1,1  | -    | -             | -                                   | 1,5  | -             | -  | -    | 54            | 50  | 13   | -3            | 0,28  | 0,22 | 14            | -1   | 33   | 39            | 12   | 4    | 494           | 501                                      | 9  | 7   | 6,0 | 5,4 | 3  | -2 |
| Norway         | 0,7  | 0,8  | 8             | 1                                   | 0,8  | 0,9           | 15   | 4    | 52            | 53  | 12   | -1            | 0,35  | 0,34 | 8             | 1  | 44   | 46            | 5  | -2   | 487           | 500                                      | 10 | 10  | 5,1 | 5,0 | 8  | 2  |
| Switzerland    | 0,7  | -    | -             | -                                   | 2,1  | -             | -  | -    | 81            | 81  | 2    | -1            | 0,88  | 0,93 | 1             | 0  | 39   | 40            | 10   | -    | 513           | 517                                      | 4  | 2   | 6,0 | 6,0 | 1  | 0  |
| Croatia        | 0,5  | 0,4  | 24            | -1                                  | 0,4  | 0,3           | 21   | 3    | 25            | 28  | 28   | 2             | 0,03  | 0,02 | 28            | -4   | 20   | 25            | 26   | -    | 164           | 474                                      | 28 | 4   | 3,5 | 3,2 | 30 | -5 |
| Turkey         | 0,4  | -    | -             | -                                   | 0,3  | -             | -  | -    | 29            | 28  | 29   | -4            | 0,01  | 0,01 | 31            | 1  | 15   | 18            | 32   | -    | 432           | 455                                      | 30 | -1  | 3,4 | 3,5 | 26 | 1  |
| United States  | 0,7  | -    | -             | -                                   | 2,1  | -             | -  | -    | 65            | 61  | 9    | -4            | 0,33  | 0,29 | 12            | -1   | -    | -             | -  | -    | 482**         | 496                                      | 16 | 8   | 4,8 | 4,7 | 13 | 0  |
| Japan          | 0,7  | -    | -             | -                                   | 2,8  | -             | -  | -    | 60            | 71  | 5    | 4             | -   | -    | -             | -  | -    | -             | -  | -    | 517           | 529                                      | 2  | 3   | 4,5 | 4,2 | 17 | 1  |

\*data 2007 \*\* Countries for which some data are missing; average calculated only on the basis of 1 or 2 scores

## IV. ACCESS TO FINANCE AND FINANCIAL STABILITY

### KEY POLICY RECOMMENDATIONS

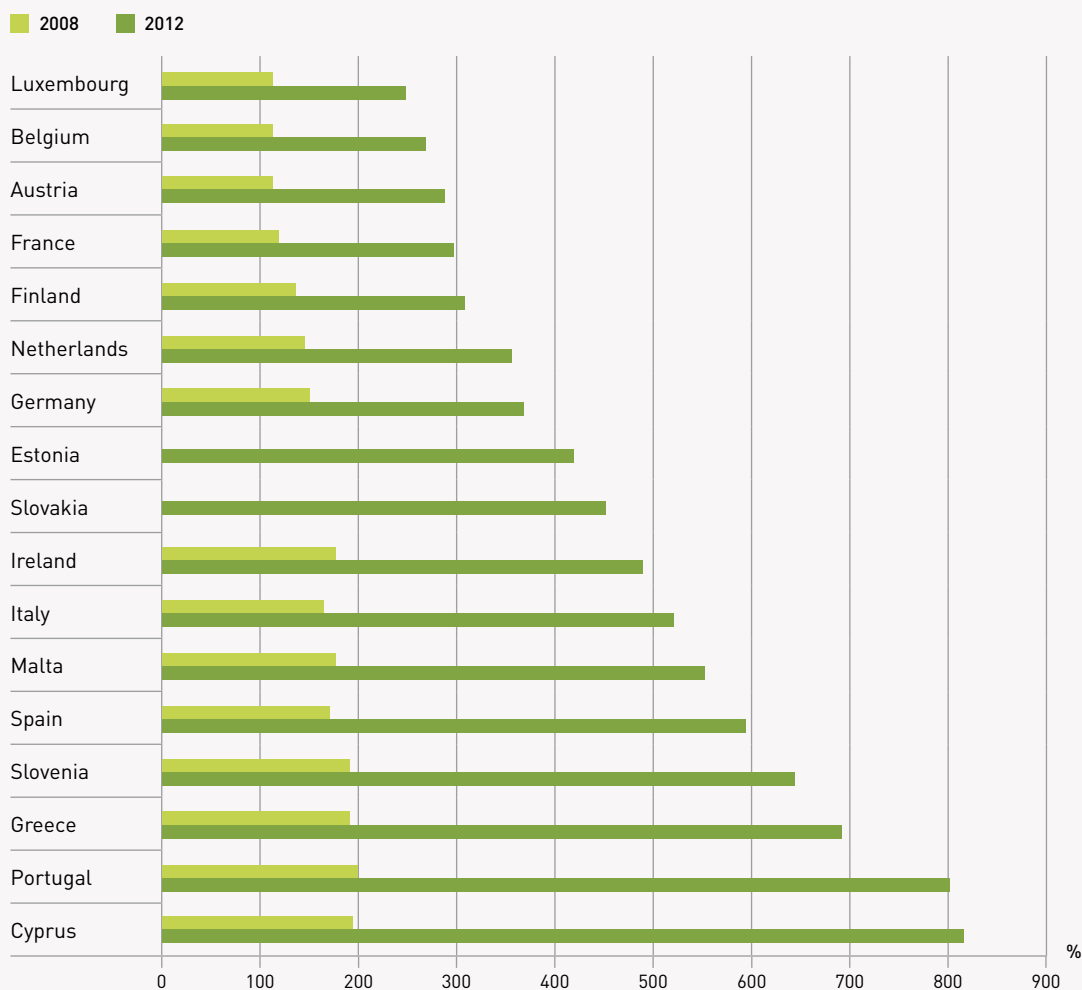
- Companies, particularly SMEs, must be able to **access finance** on reasonable terms,
- **New regulation of financial services** should both increase financial stability, and ensure that banks are able to increase lending to businesses as the economy picks up.
- The Euro Area needs to make progress on implementing the **banking union**, notably the single supervisory mechanism, in order to reduce divergences in borrowing costs within the single currency area.
- Policy must also support the development of **alternative financing routes** to bank lending. For example, venture capital lending is significantly less developed in the EU than the US, and policy at both Member State and EU level must support the development of this financing route through more harmonization.

Access to finance on reasonable terms is a pre-condition to allow businesses to make the investments necessary to drive growth and maintain competitiveness. Finance needs to be available through a variety of routes, to both provide stability and meet the different needs of companies of different size and nature.

The financial crisis has illustrated the damage financial instability does for access to finance, confidence and growth. The negative feedback loop we saw build from 2010, between political uncertainty and financial market instability, impacted strongly on the ability of businesses to access funds for investment at affordable conditions in a number of EU countries. This reduces private investment, and hampers economic growth and employment in the EU.

### Selected Indicators

- > In terms of financial stability, high levels of **private debt** constrain demand and present risks to lenders in the event of a downturn which damages creditors' ability to repay. Tier 1 capital ratios are a measure of banks' capacity to absorb losses, and an indicator of their capacity to expand future lending, with very high capital levels also potentially indicating a reluctance of banks to lend.
- > Our access to finance indicators seek to cover the broad range of financing routes important to businesses. **Interest rates charged on bank loans** to businesses are a key consideration. But it is also important to consider survey data looking at the **willingness of banks to provide loans**, as more difficult funding conditions may be reflected in loan refusals or more restrictive terms, rather than price.
- > In terms of investment flows, the indicators cover **new loans to corporations, new venture capital investment, net bond and share issuance**. Clearly, such flows will be impacted by both supply and demand factors, with weak confidence continuing to constrain investment demand, and should therefore be seen as a starting point for analysis.

**CHART 8: COMPANY BORROWING COSTS: SPREAD BETWEEN INTEREST RATES PAID FOR BANK LOANS BY NON-FINANCIAL CORPORATIONS AND ECB MARGINAL LENDING FACILITY RATES**


Source: ECB

### Key observations and recommendations

- > **Interest rates charged for bank loans to corporations have increased in all surveyed countries** (chart 8), but linked to rising sovereign borrowing costs, rises have been the strongest in peripheral economies of the Euro Area. In addition, willingness of banks to provide loans to SMEs deteriorated in most Euro Area economies over the last 18 months, and particularly in the periphery undermining thus the single market for financial services.
- > **The potential impact of the proposed Financial Transaction Tax needs to be carefully evaluated.** Past experiences with similar taxes should be taken into account, and the potential to harm the proper functioning of the single market for financial services should be carefully examined.
- > Recognising the importance of **credibly guaranteed deposits**, which take into account the issue of moral hazard, the European business community welcomes the progress made in the negotiation of the current proposal on deposit guarantee in EU 27. In the longer term, careful co-ordination of resources between euro area members may further enhance the credibility of such schemes.



## V. LABOUR MARKET

### KEY POLICY RECOMMENDATIONS

- In order to maintain global competitiveness, labour markets need to ensure that **unit labour costs** rises are consistent with rises in productivity growth.
- Targeted cuts in **employers' social security contributions** can play an important role in stimulating demand by encouraging employers to hire more staff. The tax burden on labour should be reduced to make work more attractive for low-income earners, compared with welfare beneficiaries.
- All **contractual arrangements** must be designed so as to contribute to job creation. In some countries, excessive protection of permanent contracts must be reconsidered. Flexible forms of employment can encourage employment growth, including by acting as a stepping stone for the young. Different forms of contractual arrangements are needed to match variations in demand and allow workers to better reconcile work and family life.
- Against the backdrop of **demographic change**, and in order to ensure the sustainability of Europe's pensions and social benefits systems, retirement age should be adapted to reflect increases in life expectancy

Well-functioning and flexible labour markets facilitate transitions between jobs and help to match skills supply and labour demand. The existence of labour market rigidities can make a country a less attractive place for both domestic and overseas investors, reducing employment creation, productivity and economic growth.

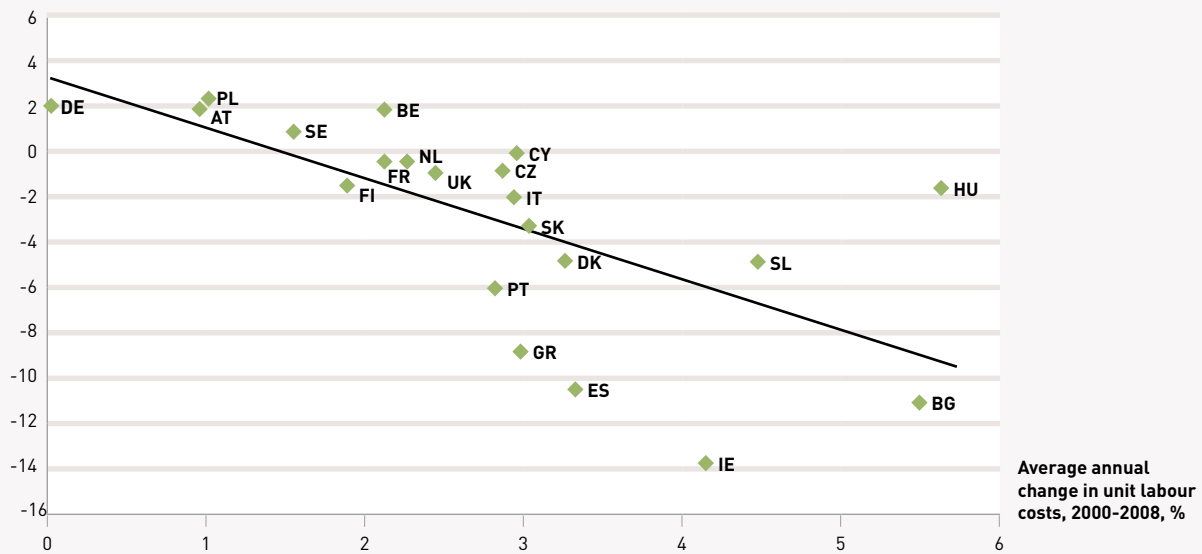
### Selected Indicators

- > The selected indicators aim to highlight some aspects of national labour markets in order to reflect upon how to encourage job creation and improve the overall attractiveness of the labour market through structural reforms.
- > **Unit labour costs** are fundamental to companies' competitiveness, survival and expansion in an increasingly global market place. As chart 9 shows, those countries that saw strong rises in unit labour costs in the period before the crisis generally have suffered the largest increases in unemployment in recent years.
- > **High taxes and social contributions on low income workers** can be particularly damaging to employment creation. Long term unemployment, employment rate, and youth unemployment figures provide us a picture of where each Member States currently stand in terms of labour market results.
- > **Minimum wages** can also be an important factor in limiting employment creation where they exist. However, given publicly available international comparisons do not fully reflect various types of arrangements (e.g. extent of differentiation by age or region, roles of governments and social partners in setting them), no indicator is included.



## CHART 9: RELATIONSHIP BETWEEN UNIT LABOUR COST INCREASE AND EMPLOYMENT

Change in employment, 2008-2011, %



Source: BUSINESSEUROPE on Ameco Data

## Key observations and recommendations

- > Member States that saw the most rapid increases in unit labour costs in the period before the crisis most notably the programme countries (Ireland, Portugal, and Greece) have started making progress in reducing these competitiveness imbalances. However, **more needs to be done to ensure wage development are consistent with productivity gains.**
- > **The tax wedge on low income earners is much higher in most Member States than in both Japan and the US.** The example of Ireland demonstrates what can be achieved in Europe. Similarly, the UK has raised the level at which people start paying taxes on their earnings, making low paid work more rewarding.



## ANALYSIS OF LABOUR MARKET REFORMS AND COUNTRY EXAMPLES

Labour market reforms, taken forward in a number of countries, are to be praised. Reforms initiated before the crisis are already delivering positive responses, such as in the case of Germany. More recent labour reforms, such as in Spain and France point to a positive evolution but will take time to feed through to headline indicators.

- Reforms in **Germany** that were initiated before the crisis are clearly now delivering positive responses. The **French** social partner agreement on "improving competitiveness and security of employment" (11 January 2013), strikes a balance between companies' needs for adaptation around flexibility and competitiveness and employees' demands, for security and career development. It increases legal certainty for companies by shortening procedural timeframes and will contribute to job creation, in particular for the young, and to employee mobility.
- In 2012, the **Spanish** social partners reached a major agreement which includes moves towards linking wages to GDP growth and additional wage updating components based on the development of companies' economic indicators, including productivity. This agreement represents a significant step towards the necessary wage flexibility. Together with the latest labour market reform, it makes progress towards guaranteeing that future adjustments are based on prices and salaries and not on job destruction.
- In **Greece** a new bargaining system which was introduced in February 2012 and completed in November 2012 offers significantly increased flexibility.

However, **the current pace of reforms is not enough to hasten Europe's recovery from the economic crisis and to stimulate employment.**

TABLE 5: LABOUR MARKET

|                | Unit Labour Cost<br>(latest 4 years<br>change, %) |       |        |        | Tax rate on low wage<br>earners |      |        |        | Long-term<br>unemployment rate |      |        |        | Employment rate |      |        |        | Youth unemployment |      |        |        |
|----------------|---|-------|--------|--------|---------------------------------|------|--------|--------|--------------------------------|------|--------|--------|-----------------|------|--------|--------|--------------------|------|--------|--------|
|                | 2008  | 2012  | Rank12 | Change | 2008                            | 2011 | Rank11 | Change | 2008                           | 2011 | Rank11 | Change | 2008            | 2011 | Rank11 | Change | 2008               | 2011 | Rank11 | Change |
| Belgium        | 10,3  | 9,8   | 22     | -8     | 50,2                            | 49,7 | 27     | 5      | 3,3                            | 3,5  | 19     | 9      | 62,4            | 61,9 | 20     | 5      | 18                 | 19,1 | 13     | 10     |
| Bulgaria       | 33,8  | 23,1  | 28     | -4     | 35,1                            | -    | -      | -      | 2,9                            | 6,3  | 26     | -1     | 64              | 58,5 | 26     | -3     | 11,9               | 27,9 | 24     | -12    |
| Czech Republic | 5,7   | 7,2   | 15     | -12    | 40,1                            | 39,5 | 20     | 2      | 2,2                            | 2,7  | 13     | 7      | 66,6            | 65,7 | 14     | 5      | 9,9                | 19,9 | 15     | -6     |
| Denmark        | 16,2  | 6,0   | 13     | 7      | 38,5                            | 36,8 | 16     | 3      | 0,5                            | 1,8  | 10     | -6     | 77,9            | 73,1 | 6      | -2     | 8                  | 14,3 | 8      | -3     |
| Germany        | -1,5  | 8,9   | 19     | -18    | 46,6                            | 45,6 | 25     | 5      | 4                              | 2,8  | 15     | 16     | 70,1            | 72,5 | 7      | 6      | 10,6               | 8,2  | 3      | 8      |
| Estonia        | 52,3  | -2,2  | 7      | 19     | 37                              | 38,8 | 19     | -2     | 1,7                            | 7,1  | 27     | -12    | 69,8            | 65,1 | 15     | -1     | 12,1               | 19,5 | 14     | -1     |
| Ireland        | 20,1  | -13,6 | 2      | 21     | 20,1                            | 21,3 | 2      | 1      | 1,7                            | 8,7  | 30     | -15    | 67,6            | 58,9 | 25     | -7     | 13,3               | 30,6 | 26     | -9     |
| Greece         | 10,1  | -4,9  | 4      | 9      | 34,4                            | 35,6 | 13     | 1      | 3,6                            | 8,8  | 31     | -2     | 61,9            | 55,6 | 32     | -5     | 22,1               | 57,6 | 33     | 0      |
| Spain          | 17,6  | -4,6  | 5      | 17     | 34                              | 36,6 | 15     | -3     | 2                              | 9    | 33     | -15    | 64,3            | 57,7 | 28     | -7     | 24,6               | 53,2 | 32     | 2      |
| France         | 8,8   | 7,8   | 17     | -8     | 45,3                            | 46,5 | 26     | 3      | 2,9                            | 4    | 22     | 3      | 64,8            | 63,9 | 19     | 1      | 19,3               | 24,9 | 20     | 6      |
| Italy          | 10,8  | 7,4   | 16     | 0      | 43,3                            | 44,5 | 23     | 4      | 3,1                            | 4,4  | 23     | 4      | 58,7            | 56,9 | 30     | 0      | 21,3               | 36,6 | 29     | 2      |
| Cyprus         | 5,7   | 5,9   | 12     | -8     | -                               | -    | -      | -      | 0,5                            | 1,6  | 7      | -3     | 70,9            | 67,6 | 12     | -2     | 9                  | 26,8 | 23     | -15    |
| Latvia         | 106,9   | -14,4 | 1      | 27     | 39,9                            | -    | -      | -      | 2,1                            | 8,8  | 31     | -12    | 68,6            | 60,8 | 21     | -6     | 14,5               | 31,7 | 27     | -9     |
| Lithuania      | 37,4  | -6,3  | 3      | 22     | 40,3                            | -    | -      | -      | 1,1                            | 8    | 28     | -19    | 64,3            | 60,3 | 22     | -1     | 12,2               | 26,3 | 21     | -7     |
| Luxembourg     | 15,0  | 17,0  | 26     | -7     | 28,2                            | 29,2 | 5      | 2      | 1,6                            | 1,4  | 4      | 10     | 63,4            | 64,6 | 16     | 8      | 17,3               | 18   | 11     | 11     |
| Hungary        | 16,2  | 10,7  | 23     | -2     | 46,7                            | 45,2 | 24     | 7      | 3,6                            | 5,2  | 24     | 5      | 56,7            | 55,8 | 31     | 1      | 19,9               | 27,9 | 24     | 4      |
| Malta          | 7,3   | 6,8   | 14     | -6     | 17,9                            | -    | -      | -      | 2,5                            | 3    | 17     | 7      | 55,3            | 57,6 | 29     | 4      | 12,2               | 15   | 9      | 5      |
| Netherlands    | 5,1   | 8,4   | 18     | -16    | 33,4                            | 33,1 | 8      | 2      | 1,1                            | 1,5  | 6      | 3      | 77,2            | 74,9 | 4      | 1      | 6,3                | 9,5  | 5      | -3     |
| Austria        | 6,4   | 9,1   | 20     | -14    | 44,4                            | 43,7 | 22     | 6      | 0,9                            | 1,1  | 3      | 5      | 72,1            | 72,1 | 8      | -1     | 8                  | 8,5  | 4      | 1      |
| Poland         | 9,5   | 5,8   | 11     | 0      | 33,6                            | 33,4 | 10     | 1      | 2,4                            | 3,6  | 20     | 2      | 59,2            | 59,7 | 23     | 5      | 17,2               | 26,6 | 22     | -1     |
| Portugal       | 9,3   | -3,1  | 6      | 4      | 32,9                            | 33,1 | 8      | 1      | 4                              | 6,2  | 25     | 6      | 68,2            | 64,2 | 18     | -1     | 20,2               | 37,7 | 30     | -1     |
| Romania        | 81,4  | 17,6  | 27     | 0      | 40,9                            | -    | -      | -      | 2,4                            | 3,1  | 18     | 4      | 59              | 58,5 | 26     | 3      | 18,6               | 22,8 | 18     | 7      |
| Slovenia       | 11,9  | 9,6   | 21     | -3     | 40,3                            | 38,5 | 18     | 5      | 1,9                            | 3,6  | 20     | -3     | 68,6            | 64,4 | 17     | -2     | 10,4               | 21,8 | 17     | -7     |
| Slovakia       | 10,9  | 3,3   | 8      | 9      | 36                              | 36,1 | 14     | 2      | 6,7                            | 9,2  | 34     | 0      | 62,3            | 59,5 | 24     | 2      | 19,3               | 34,5 | 28     | -2     |
| Finland        | 10,0  | 12,9  | 25     | -13    | 38,6                            | 37,2 | 17     | 3      | 1,2                            | 1,7  | 8      | 3      | 71,1            | 69   | 11     | -2     | 16,5               | 19   | 12     | 8      |
| Sweden         | 7,1   | 3,4   | 9      | -2     | 42,5                            | 40,7 | 21     | 5      | 0,8                            | 1,4  | 4      | 3      | 74,3            | 74,1 | 5      | 1      | 20,2               | 23,7 | 19     | 10     |
| United Kingdom | 10,7  | 12,3  | 24     | -9     | 29,7                            | 28,5 | 4      | 4      | 1,4                            | 2,7  | 13     | 0      | 71,5            | 69,5 | 10     | -2     | 15                 | 20,5 | 16     | 3      |
| Iceland        | -   | 5,0   | 10     | -      | 23,6                            | 29,2 | 5      | -1     | 0,1                            | 1,7  | 8      | -7     | 83,6            | 78,5 | 2      | -1     | 8,2                | 13,6 | 7      | 0      |
| Norway         | -   | -     | -      | -      | 34,2                            | 34,2 | 11     | 2      | 0,3                            | 0,8  | 2      | 0      | 78              | 75,3 | 3      | 0      | 7,3                | 9,7  | 6      | -3     |
| Switzerland    | 6,1   | -     | -      | -      | 17,7                            | 18   | 1      | 0      | 0,3                            | 0,4  | 1      | 1      | 79,5            | 79,3 | 1      | 1      | 3                  | 3,2  | 1      | 0      |
| Croatia        | -   | -     | -      | -      | -                               | -    | -      | -      | 5,3                            | 8,6  | 29     | 4      | 57,8            | 52,4 | 33     | -2     | 21,9               | 41,7 | 31     | 1      |
| Turkey         | -   | -     | -      | -      | 37,8                            | 35,4 | 12     | 6      | 2,3                            | 2,1  | 12     | 9      | 44,9            | 48,4 | 34     | 0      | 18,4               | -    | -      | -      |
| United States  | -   | -     | -      | -      | 26,6                            | 27,2 | 3      | 2      | 0,6                            | 2,8  | 15     | -9     | 70,9            | 66,6 | 13     | -3     | 12,8               | 16,2 | 10     | 6      |
| Japan          | -   | -     | -      | -      | 28                              | 29,5 | 7      | -1     | 1,3                            | 1,8  | 10     | 2      | 70,7            | 70,3 | 9      | 3      | 7,3                | 8    | 2      | 1      |

# APPENDIX DATA DEFINITION



## I. Taxation and public finances

1. **Current tax revenue:** taxes and social security contributions, as a % GDP (AMECO).
2. **Public deficit:** general government net lending (+)/ borrowing (-), as a % GDP (AMECO).
3. **Public debt:** general government consolidated gross debt, as % GDP (AMECO).
4. **Effective average tax rate:** non-financial corporate sector – present value of taxes paid, as a % of income generated by an investment (DG Taxud/ZEW).
5. **Administrative tax burden:** hours/year for a company to prepare, file and pay taxes (Doing business report – international finance corporation and World Bank).

## II. Business Environment

6. **Cost to start a new business:** as a % per capita income. Business survey (Doing business report – international finance corporation and World Bank).
7. **Costs of enforcing contracts:** as a % of claims. Business survey (Doing business report – international finance corporation and World Bank).
8. **Number of days to set up a new business:** business survey (Doing business report – international finance corporation and World Bank).
9. **Quality of infrastructure:** business survey (Global Competitiveness Index, World Economic Forum).
10. **Natural gas prices:** industrial consumers - half-yearly prices, Kilowatt/hour, all taxes included; Band I3: 10 000 GJ < Consumption < 100 000 GJ (Eurostat).
11. **Electricity prices:** industrial consumers - half-yearly prices, Kilowatt/hour, all taxes included. Band IC: 500 MWh < Consumption < 2 000 MWh. (Eurostat).
12. **Market openness:** Average of imports and exports, as a % GDP (Eurostat).
13. **Value of public procurement** openly advertised, as a % total public procurement (Eurostat).
14. **Internal market enforcement scoreboard:** transposition and compliance deficit in the areas of services, financial services, transport, digital and energy (European Commission, Internal Market Scoreboard).

## III. Innovation and skills

15. **Public expenditure on R&D:** Government and university expenditures in R&D, as a % GDP (Eurostat).
16. **Private expenditure on R&D:** excluding non-profit sector, as % GDP (Eurostat).
17. **Excellence in research:** composite indicator of three equally weighted indices, scaled on a 0-100 range, on countries' performances in international patent applications (World Intellectual Property Organization), cluster development and university/industry research collaboration (World Economic Forum survey).

18. **Relative inventor density:** inventors per 1000 inhabitants (Techmeter, Eurostat).
19. **Population aged 25 to 34 with tertiary education:** as a % of population aged 25-34 (Eurostat).
20. **Lifelong learning:** as % persons aged 25 to 64 who receive education or training in the four weeks preceding the survey (Eurostat).
21. **Education performance Maths/Reading/Science:** average of reading, mathematics and science scores at PISA tests in 2006 and 2009 (OECD).
22. **Quality of education:** business survey (World Economic Forum).

## IV. Access to finance and financial stability

23. **Loans to non-financial corporations:** Financial transactions (flows), total maturity, neither seasonally nor working day adjusted (% GDP), (ECB).
24. **Company borrowing costs:** interest rates paid, basis points bank loans to corporations, up to 1 year – spread to ECB marginal lending facility rates, (ECB).
25. **Venture capital investment raised:** as a % GDP, (Eurostat).
26. **Net share issuance:** quoted shares, non-financial corporation, (Eurostat).
27. **Regulatory tier 1 capital** (as % of risk weighted assets), (IMF).
28. **SME access to finance** (Willingness of banks to provide a loan to SMEs), (ECB Survey).
29. **Private debt:** net financial assets, total economy, % GDP (Eurostat)

## V. Labour Market

30. **Tax wedge on low earners as a % of labour costs:** The sum of personal income tax, employee plus employer social security contributions together with any payroll tax, minus benefits. A Low earner is defined as a single person without children earning 67% of the average wage, (Eurostat).
31. **Average change over the previous 4 years in nominal unit labour costs,** (AMECO).
32. **Long term unemployment rate:** rate of unemployment lasting for a period of 12 months and more (Eurostat)
33. **Employment rate** number of employed persons as a percentage of the labour force (Eurostat)
34. **Youth unemployment:** percentage of the unemployed in the age group 15 to 24 years old compared to the total labour force (Eurostat)

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