

## ***The Europe 2020 Competitiveness Report – 2012 Edition:*** **Country Profile Highlights**

### **Top 10**

The top 10 countries ranked in *The Europe 2020 Competitiveness Report* are dominated by the Nordic EU Member States, with Sweden, Finland and Denmark taking the lead, closely followed by Western European economies with the notable inclusion of Estonia. A third tier includes most Central, Eastern and Southern European economies. The ranking closes with Greece, Bulgaria and Romania, which require improvements across many areas to achieve higher smart, inclusive and sustainable societies.

### **Sweden**

Sweden ranked first on the report's Europe 2020 Competitiveness Index (maintaining the lead it also held in 2010). It holds the top spot for the "smart" component of the Index. This is driven by a large focus on education and skills training for its workforce, as well as an excellent enterprise environment (where it also ranked 1st in this category) with healthy competition in the national market, a strong culture of entrepreneurship, well developed clusters and financing that is more readily available than in many other parts of Europe. Sweden also has made great strides to encourage the uptake of the latest digital technologies to enhance productivity and innovation (ranked 2nd in the digital agenda category). Such emphasis over the years on creating the conditions for innovation-led growth has paid off in Sweden's number one ranking in the "innovative Europe" category, with very sophisticated business techniques, high spending on R&D, and excellent collaboration between universities and the private sector in research, leading to much innovation output making it to market. Sweden is also ranked 1st in the environmental sustainability component of the Index, demonstrating that sustainability and innovation can go hand-in-hand, with well enforced environmental regulations and much lower pollution levels than in many other parts of the world. Sweden is somewhat less strong in the "inclusive" category, ranking 5th. Although the country ranks first in the social inclusion category, with low inequality and a strong provision of health and social services, Sweden's score is pulled down by its result in the labour market and employment category, where it is ranked a much lower 11th out of 27. This is related to a lack of flexibility in the labour market, some concerns about the relationship between pay and productivity in the country, as well as a notably high youth unemployment rate of 25.2%, placing Sweden a low 20th out of 27 countries on this indicator.

### **Finland**

Finland ranks 2nd in the overall Index, with a profile similar to that of Sweden. Finland's enterprise environment (ranked 2nd), fosters business creation, supported by readily available finance for business investment. It also occupies the top position in the higher education and training category, the result of a strong focus on education over recent decades. This has provided the workforce with the skills needed to adapt rapidly to a changing environment and has laid the groundwork for high levels of technological adoption and innovation. Finland is one of the innovation powerhouses in Europe, ranking 2nd in the innovative Europe category behind only Sweden. Finland also receives a strong assessment in the "inclusive Europe" component (ranked 3rd), with a well functioning labour market and relatively strong labour market participation, as well as strong social inclusion (ranked 3rd), based on low inequality in the country and the provision of social services. Finland's strong showing on the sustainability component (ranked 2nd) demonstrates that its economic prowess is not at the expense of environmentally sustainable practices and outcomes.

### **Denmark**

Denmark is ranked 3rd in the Index. While the country receives strong marks for its innovative capacity (ranked 4th for the overall smart Europe sub-index and 3rd on the innovative Europe category), it stands out most particularly for its top rank in the area of "inclusive Europe". This represents a marked difference with regard to the other Nordic countries, with Denmark continuing to distinguish itself through the benefits of its flexicurity system as it has one of the most efficient labour markets internationally, combined with a strong social safety net. This has led to very high labour market participation, including among the young, at a time when many other European countries are struggling in this area. Denmark also receives a relatively strong

assessment for sustainability, although less so than the other Nordics, and with some concerns related to the amount of protected land area and relatively high CO<sub>2</sub> emissions.

### **The Netherlands**

Despite the current financial and economic difficulties facing the Netherlands, the country places 4th, demonstrates one of the strongest competitiveness performances in Europe. This should provide a solid base for a recovery in economic growth. Overall, the country has been able to build a highly productive, knowledge-intensive, service-based economy (3rd). A high-quality educational and training system (4th) coupled with a good uptake of technology and innovation (4th) and innovative business practices have provided the foundations for doing so. In addition, good business conditions (4th), with high levels of competition (2nd), available finance (4th) and entrepreneurial culture (6th) bring new knowledge into the market via new or improved products and services in an effective manner. As a result, the country has managed to remain highly competitive, securing one of the highest labour participation scores (2nd) and one of the lowest unemployment rates in Europe, despite some rigidity in the labour market both in terms of hiring and firing practices (18th) and the perceived disconnect between pay and productivity (19th). Addressing these rigidities based on the successful experience of some of the Nordic countries to implement a “flexicurity” model would facilitate adjustments to business cycles should economic conditions temporarily deteriorate without giving rise to higher unemployment rates. Moving forward, the country needs to regain its macroeconomic stability by reducing its high deficits, and a process of smart fiscal consolidation should be put in place to do so. Public and private investments in education, training schemes, ICT development and innovation, despite relatively low levels of R&D, have been instrumental in ensuring the high productivity of the national economy and will continue to do so even more, and therefore should be preserved. The experience of the Nordic countries that made their way out of the 1990s financial crisis by further supporting education, technology and innovation could serve as an example.

### **Austria**

Austria ranked 5th in the Index, having moved up one spot since the 2010 assessment and thus overtaking Germany. Austria's greatest strength relates to the environmental sustainability component of the Index, ranked 3rd on this pillar, with extensive use of renewable energy in the country and well enforced environmental regulations, as well as an unpolluted environment and relatively low CO<sub>2</sub> emissions. Austria is ranked a similarly respectable 4th for social inclusion, based on the strong provision of social services in the country, and strong labour market participation, particularly among the young (ranked a high 2nd for its relatively low youth unemployment). With regard to areas for improvement, a more flexible labour market to encourage more job creation, as well as stronger private sector employment of women would further enhance this positive picture. Austria's greatest challenge will be further improving its innovation capacity, ranked 7th out of 27 for the smart Europe component. Of most concern compared with other European countries is the country's enterprise environment. Its rank of 11th in this area is primarily lowered by the many procedures and the significant time required to start a business in Austria, constraining business creation (Austria is ranked 24th in the entrepreneurship sub-pillar). Improvements in this area would give a significant boost to the country's innovation potential.

### **Germany**

Germany is ranked 6th in the Index, down one spot but with a slight increase in score since the 2010 assessment. German companies are among the most innovative in the world, spending heavily on R&D (5th) and displaying a high capacity for innovation (1st) – complemented by the country's harnessing of the digital agenda for higher productivity (7th). Germany is also relatively successful in its environmental sustainability efforts (ranked 6th in this component on the Index), with well-enforced environmental legislation leading to rather strong environmental outcomes. On a less positive note and despite some efforts, Germany's labour market remains rigid (22nd for rigid hiring and firing practices) and with still relatively low participation of women in the labour market. While these rigidities have certainly kept unemployment low during recent economic difficulties, and some German practices such as job sharing have been shown useful under difficult circumstances, rigid rules continue to hinder job creation and more flexibility would place the country on a more solid footing going forward.

### **United Kingdom**

With a highly developed, service-oriented economy, the United Kingdom is positioned at 7th place in the ranking, though it scores 5th in terms of building a smart economy, right behind the Nordic countries and the Netherlands. This has been possible thanks to strong leveraging of ICT (1st), which is instrumental in supporting business innovation in the services sector, high levels of training (3rd) and favourable business conditions (5th) related to high levels of competition (4th) and available financing via local equity markets (3rd) and venture capital (6th). Despite this relatively strong position, the country still faces some problems in

providing gainful employment for some segments of the population, especially for youth, who face unemployment rates of nearly 20% (12th) despite quite flexible labour markets (3rd). This points to some areas that require improvement in order to continue competing successfully and spreading the benefits to all segments of society. More precisely, while the performance of the scientific system is good (4th) thanks to world class universities, the technological and innovation uptake (7th and 8th, respectively) is relatively low due in part to low rates of corporate R&D. While the economic structure of the country may partially justify these lower rates, several manufacturing industries may need to increase their investments in order to improve their innovative potential. Moreover, the overall quality of the educational system, while fairly good, scores behind many other European countries (7th) and enrolls fewer students in tertiary education (20th). To ensure a more harmonious development process, greater focus should be placed on several dimensions supporting environmental sustainability (12th).

### **Luxembourg**

Luxembourg placed in 8th position on the Index, presenting a competitiveness profile that can be regarded as in transition. With an economy largely driven by the financial sector, the country has embarked on a diversification strategy aimed at developing ICT and innovation as new sources of economic growth and employment. Overall, despite benefiting from very favourable conditions for business activity (3rd), the country still trails neighbouring countries in building a smart economy (10th). The strong efforts to build a scientific and technological system are beginning to pay off with levels of scientific and technological production similar to the EU average, despite a shortage of available scientists and engineers in the economy (24th). However, the poor performance of the educational system (26th), both in terms of quantity and quality, is the main area of concern for transitioning towards a higher knowledge-based society. In terms of building an inclusive society (6th), the country has performed well. While the employment activity rate is low (20th) and some rigidities exist in the labour market, the country's industrial relations system scores quite high (5th), resulting in a fairly efficient labour market (8th). Moreover, the government has successfully achieved a reduction in poverty (3rd) and the presence of a strong social safety net (3rd) ensures that most of the population does not fall outside the system.

### **Belgium**

In 9th position, Belgium presents a competitiveness profile that reflects in many ways the average position of Western Europe, with strengths in many areas and the need to improve in a number of others to create a smart, inclusive and sustainable economy. The country has traditionally benefited from a very high-quality education and training system (2nd) that has provided a skilful labour force, including a large number of scientists and engineers (4th) and a strong scientific base (3rd). In general, pro-business policies, despite the very high taxation system (26th), have provided the right conditions for businesses to develop their activities (7th). However, ICT uptake and its impacts on innovation remain comparatively low and the innovation capacity of local firms remains below that of more advanced economies. In terms of building an inclusive society, the government's policies to address inequality and the existence of a very dense social safety net (1st) have fostered a fairly high level of social inclusion (6th). However, to continue maintaining this high social inclusion in times of fiscal constraints, the country will need to ensure higher rates of labour market participation (18th), both by fostering higher activity rates (21st) and eliminating rigidities in the labour market (21st) that affect employment during the low periods of the business cycle. In terms of sustainability, the country should take note of some of the main dimensions that can have a negative impact on the environment, as the country ranks 16th within the EU.

### **France**

France ranked 10th in the overall Index, with a stronger performance in the "smart Europe" and environmental sustainability components than in those measuring inclusiveness. A relatively strong education and training system (9th) has provided the basis for a business sector that is aggressive in adopting digital technologies for productivity enhancements (it is ranked 9th for the digital agenda). These attributes have resulted in a relatively innovative business culture (10th in the innovative Europe pillar), with high R&D spending, highly qualified scientists and engineers available in the country, and with a strong culture of marketing that helps to get new ideas picked up by the market. On the other hand, France ranks a lower 13th for the inclusive Europe component, pulled down in particular by inefficiencies in the labour market (22nd), and low labour participation overall, with high youth unemployment (17th) and particularly low labour force participation by women (26th).

### **Estonia**

Estonia ranks 11th in the overall Index, up two places since the 2010 assessment, effectively swapping places with Ireland. Estonia's greatest strength relates to the country's digital agenda (5th), driven by strong ICT laws, high government prioritization and strong company use of ICT. This has lifted the country up to an overall 11th place in the "smart Europe" component. Its enterprise environment is supportive overall, with the

country ranking first in Europe on the entrepreneurship sub-dimension. However, improving the availability of finance and a more competitive environment could help leverage the digital agenda to a greater extent. By the same token, its strong digital agenda has not yet translated into an equally strong performance in the innovative business culture (16th in the innovative Europe pillar), where the country is being pulled down by low R&D spending, a lack of available researchers, low registration in patents and industrial designs, and little collaboration between universities and the private sector in research. This is also reflected in the education and training pillar, where the country does relatively well in educating its citizens, but could improve by upgrading training schemes. The economy is further characterized by a good performance in the labour market and employment pillar (9th), driven by high labour market efficiency (2nd), which has translated into high labour participation, but with a notable exception of young people whose employment rate – similar to other European countries – has fallen drastically during the recession. This lowers the country's otherwise good performance in this area. On the other hand, Estonia still needs to undertake more efforts towards building an inclusive society, where it ranks a low 20th place, and in promoting greener growth, where it performs well below neighbouring Latvia, as evidenced by its very high CO<sub>2</sub> emissions (27th), limited ratification of environmental treaties and its high dependence on non-renewable resources (20th).

### **Ireland**

Once seen as European “poster child” of rapid growth, Ireland is ranked 12th in the overall Index, demonstrating a need to create better conditions for innovation in order to regain a sustainable growth path. The country can count on a range of good assets to do so. A traditionally good quality and well-performing educational system (8th) has created a dynamic and skilful labour force, including scientists and engineers, who are instrumental in boosting the country's technological capacity. Moreover, the dense network of national universities has also managed to create a scientific base that scores high at the European level (7th), and pro-business policies have facilitated the creation of a highly entrepreneurial culture (5th). However, entrepreneurship is constrained due to the lack of financial resources (27th) following the severe financial crisis of 2008. Corporate efforts to embrace innovation more decisively will need to be recognized as the way out of the crisis, and higher investments to improve the innovation capacity (14th) and raise the number of staff trained (10th) will be necessary. One of the worst financial and economic crises in its history has taken a toll on the capacity to create an inclusive and cohesive society (15th). Although the country can count on fairly flexible labour markets (5th) the high levels of unemployment, especially in particular segments of the population such as the youth (22nd), coupled with the inability of both governments and individuals to provide comprehensive safety nets due to their high levels of debt, have caused a severe deterioration in this area.

### **Slovenia**

Slovenia's strong 13th position in the Index – ahead of Portugal and Spain and in second place after Estonia among the countries that joined the EU in 2004 – mirrors the country's strong competitiveness positioning. Slovenia's educational system turns out large numbers of graduates with fairly good skills and knowledge, and the country has a stronger capacity for innovation than most countries from the region, due to high levels of R&D expenditure, many available scientists and engineers, and numerous patent applications. Coupled with the absence of administrative barriers to setting up new businesses that facilitates entrepreneurial activity, these factors ensure solid progress towards building a knowledge-based economy. The country has also managed to distribute its prosperity in an inclusive manner – it boasts the lowest income inequality in the EU – and manages its natural environment in a sustainable manner (8th). Yet the considerable downturn the country experienced in 2009 also points to areas for improvement in order to make economic performance more sustainable. The availability of finance for business ventures remains constrained (25th), FDI is held back by rules and regulations (26th) and competition suffers from the small size of the domestic market, which gives rise to dominance in the market by few firms (23rd). Labour markets are considered rigid and inefficient (25th) in comparison with the EU and may endanger social inclusion going forward.

### **Portugal**

Ranked 14th on the Index, **Portugal's** competitiveness remains somewhat mediocre after a lost decade of economic growth. Creating an innovation-driven economy will require several reforms and important investments in knowledge generation areas, such as education and training or R&D, which may be difficult to attain in a period of sharp fiscal consolidation. In terms of reforms, the country needs to improve the efficiency of the educational (15th) and innovation (12th) systems. While enrolment rates are reasonably high, especially in secondary education (8th), the quality of the overall educational system lags behind other European countries (15th), failing to provide the skills that are needed for a knowledge-based society. Along the same lines, scientific (14th) and technological performance (20th) continue to trail the rest of Western Europe, affecting the innovation capacity of local firms (17th). In addition, reforms in the goods market will be needed to improve the level of local competition (19th) and decrease the market dominance of a handful of

companies (26th). The good development of ICT infrastructure (3rd) has not been followed by a significant uptake of these tools in society (21st), which has kept the country from reaping its full benefits. As is the case of all EU Member States severely hit by the financial and economic crisis, the level of inclusiveness has been strongly affected. Rising levels of unemployment, partially due to the economic downturn, but also to the severe rigidities in the labour market (26th), have affected the capacity of large segments of the population to participate in the economy. Moreover, the financial constraints of a government with little margin to develop effective policies against poverty (18th) may accentuate the risk of a social divide within the country. Implementing successful labour market reforms will be crucial to alleviating the situation in the future.

### **Spain**

At 15th position, Spain has not managed to fully shift towards a knowledge-based economy. The rapid economic growth that Spain experienced over the past 15 years came to an end with the financial and economic crisis that brought to light the country's competitiveness weaknesses. These hinder its capacity to sustain economic growth and have caused strong employment adjustments in the population. The disproportional importance that the construction sector enjoyed in recent decades diverted human, capital and financial resources from other economic activities. Reversing this situation will take time and sustained effort. Improving the quality of the educational system (24th) so that it provides the right set of skills and boosts the innovation capacity, both technological and non technological, will require sustained investments and reforms to increase the efficiency of investments. Vision and commitment from both government and businesses to make education, training and innovation a strong priority will be crucial, despite the difficult financial situation of the country and the need to reduce fiscal deficits. In addition, facilitating entrepreneurship by cutting red tape (26th) and improving access to finance (18th), following a deep restructuring of a banking system severely exposed to the housing crash, will also require important reforms to be implemented. In terms of inclusion, Spain achieves one of the lowest rates in Europe (19th). The excessively high unemployment rate, which has risen up to over 23% and almost 50% for youth, is seriously hindering the opportunity of a very large segment of the population to contribute to and benefit from national economic activity. The very pronounced rigidities in the labour market (27th) have provoked a sharp rise in unemployment, affecting those who are less protected by the existing system. The labour market reform recently adopted aims to ease this situation.

### **Czech Republic**

The Czech Republic is ranked 16th in the Index, down two positions since the 2010 assessment. Positioned close to the EU's average performance, the country is characterized by an inclusive economy (among the top 10 European economies), led by low income inequality as measured by the Gini coefficient (4th) and an efficient labour market with a healthy relationship between pay and productivity (7th). In terms of "smart growth", the Czech Republic ranks 16th; its enterprise environment attains a performance similar to the European average with relevant strengths in local competition (9th), openness to foreign investments (9th) and non-distortive taxation (8th). However, government regulations are somewhat burdensome (21st), the time and procedures required to start new businesses are still relatively long, and venture capital is not easily obtainable. Consequently, the business environment presents room for improvement. Finally, the lack of innovation is one of the main weaknesses of the country as the Czech Republic trails the EU average, especially in terms of patent applications and the availability of the latest technologies (17th). The other main area for improvement is sustainability where it ranks 22nd due to high dependence on non-renewable energy sources, high levels of CO<sub>2</sub> emissions per energy use (21st) and a relatively low commitment to international environmental treaties (26th).

### **Cyprus**

Cyprus is ranked 17th in the Index with a good inclusive Europe performance (11th). Labour market efficiency (10th) and labour participation (11th) are the main drivers of the country's inclusive economy. Flexibility on hiring and firing practices (8th) does not generate major frictions between labour and employers (10th) and youth unemployment is somewhat lower than in many other European economies (10th with 16.6%). In addition, the enterprise environment pillar is solid (10th), with outstanding entrepreneurship capacity (2nd), a low burden of government regulation (4th) and developed financial markets with financing through loans and venture capital relatively available (6th and 9th, respectively) compared with elsewhere in Europe. However, the overall smart growth performance is undermined by unsatisfactory results in the digital agenda (22nd) as ICT is not fully used, both by businesses (24th) and individuals (23rd with only 53% of population using the Internet). Also the impact of ICT is limited (20th) and needs to be further developed. Education and training and the availability of research and training (23rd) are other areas of improvement. Lastly, environmental sustainability does not seem to be a priority as it ranks 24th, especially due to low renewable energy production (26th) and excessive CO<sub>2</sub> emissions (26th).

### **Malta**

Ranked 18th in the Index, Malta presents some similarities with the Cyprus profile. It performs well in terms of the inclusive measures, led by one of the lowest youth unemployment levels in Europe (4th), relatively low income inequality (11th) and widespread access to healthcare (11th). Compared to Cyprus, Malta has a sounder digital agenda (13th) with excellent government prioritization of ICT (2nd) and sizeable access to basic online services (5th). The enterprise environment ranks 15th with mixed results between comparatively high availability of finance (5th) and a somewhat competitive environment (11th), but low cluster development (17th). Education and training could also be better harnessed for the country's competitiveness, especially by increasing the availability of research and training (21st). The low score obtained in the environmental pillar represents the main limiter of Malta's performance, especially due to little commitment to international environmental treaties (27th) and concerns about the quality of the natural environment (26th).

### **Latvia**

Latvia ranks 19th behind Malta and ahead of Lithuania. While the country outperforms most of the 27 EU economies on the sustainable dimension (4th), Latvia is not sufficiently geared towards a knowledge-based economy (23rd). Despite efficient labour markets (5th), considerable segments of society do not benefit from rising prosperity (25<sup>th</sup> on social inclusion). Putting growth on a more stable footing will require reforms and investments in a number of areas. In particular, Latvia's low innovative capacity does not bode well for the future (24th). It is constrained by a lack of scientists and engineers (27th) and inefficiencies related to scientific output, which is not recognized internationally. At the same time, competitiveness would benefit from more sophisticated businesses practices, such as marketing (25th), which would enable the local business sector to move up on the value chain (19th). Over the longer term, moving towards a knowledge-based economy will require considerable efforts in education in order to increase participation, in particular at the tertiary level, as well as quality.

### **Lithuania**

Following Latvia, Lithuania occupies the 20th position on the Index, but its profile is considerably different. Lithuania's moderately efficient labour market (15th) ensures comparatively high employment in the country (7th) and benefits from the largest share of women in the labour force in the EU. The cornerstones of the country's productivity are the progressive digital agenda (11th), which ensures that the latest technologies have the desired impact (9th), as well as solid results on education and training (17th), reflecting in particular the country's high enrolment in tertiary institutions (4th). However, Lithuania's good labour market outcomes do not translate into high levels of social inclusion, with the highest level of income inequality in the EU and a low overall rank on social inclusion (26th). Improving educational quality (22nd on the OECD Programme for International Student Assessment, PISA) and removing administrative obstacles to entrepreneurial activity are two areas that would help the country move towards a knowledge-based economy while increasing social inclusion. The country would in general benefit from an overhaul of its enterprise environment, which remains stifled by low levels of competition (24th), and limited access to finance to fund business growth as well as start up activity (24th).

### **Italy**

Italy is ranked 21st in the Index, dropping two positions since 2010. Notwithstanding its low overall performance, Italy still has some strengths in its enterprise environment (14th), in particular its well developed clusters (1st), broad presence in the value chain (8th) and corporate activity spread among many firms (7th), ensuring competition. Also, Italy is characterized by good innovation potential, ranked 5th both for the number of industrial designs produced and its ability to compete based on its unique products and processes rather than on low costs or natural resources. Additionally, Italy ranks 12th for its capacity for innovation and number of citations in scientific articles, and achieves a relatively high tertiary enrolment rate (10th). However, Italy's potential is not fully leveraged due to lack of competition within its enterprise environment (22nd), with burdensome government regulation and red tape (27th), representing important obstacles to competitiveness. Further, the country's innovation capacity is not fully exploited, as R&D expenditure (1.2% of the GDP) and the absorption of technology at firm level (25th) are not in line with the country's advanced stage of development. Moreover, Italy's competitiveness is hindered by an inefficient labour market (27th) with a misalignment between the cost of labour and its productivity, low participation rates and high youth unemployment.

### **Slovak Republic**

Slovakia ranks 22nd among the 27 EU countries, performing somewhat better on the sustainable (17th) and inclusive (20th) dimensions than in the "smart" category (24th). The country's enterprise environment (20th) benefits from higher levels of competition (18th), better functioning clusters (19th) and a better framework for entrepreneurship (15th) than many other European economies. However, putting the country on a higher and more stable growth path will require more support for innovative activity and measures to more fully

implement the digital agenda. The capacity for innovation is among the lowest in the EU and enterprises tend to produce on the lower end of the value chain (27th). And while ICT usage is increasingly common (15th), its impact remains low (25th) and the supporting environment for ICT is the lowest in the EU (27th). A third area that needs to be addressed to move the country towards a knowledge-based economy over the longer term is education. Educational outcomes trail behind most EU countries in terms of quantity and quality, and vocational training is well behind EU standards.

### **Poland**

Poland occupies the 23rd position on the Index. Competitiveness is supported by the country's relatively good educational outcomes (14th) reflected in rather high tertiary enrolment rates and high quality of education, as assessed by the OECD's PISA study, as well as by a training system that benefits from numerous training institutions and enterprises providing on the job training to their employees. Compared with other EU members, Poland also performs fairly well in terms of labour market indicators, which mainly stems from a close link between pay and productivity. Making progress towards the Europe 2020 Agenda will require Poland to further intensify efforts in a number of areas, in particular by catching up with the EU in terms of social inclusion. It is more difficult for Polish citizens than their peers from other countries to access quality healthcare (26th) and social safety net protection is the weakest in the entire EU. Addressing social inclusion should go hand in hand with measures aimed at improving the smart dimension (21st) to ensure stable growth performance based on knowledge-intensive sectors going into the future. In this respect, despite its solid results on education, Poland has not yet managed to develop strong innovative capacity (22nd). Patent applications are few, firms are less able to adopt new technology within their operations and latest technologies are more difficult to access in Poland than in other EU countries. In addition to building a more robust innovative capacity, Poland should continue improvements to the business environment (22nd), for example by making it easier and less expensive to start businesses in the country, as well as fostering the use of digital technologies (23rd).

### **Hungary**

Hungary ranks 24th, right after Poland, in terms of progress towards Europe 2020 goals, showing a competitiveness landscape that is significantly different from Poland. Hungary's traditional strengths in innovation and ICTs are mirrored by good results in these two areas (innovative Europe and digital agenda). The country benefits from a good availability of scientists and engineers (12th), some collaboration between universities and industry (14th), and a capacity for innovation that is higher than in most East European economies (18th). The country's relatively strong innovative and technological capacity is complemented by an environment that is somewhat favourable to entrepreneurship (11th) and relatively efficient labour markets (11th), providing a base for the creation and growth of high value-added enterprises. Moving towards the Europe 2020 goals will require Hungary to address a number of important challenges that currently constrain productivity. Important gaps in the country's education and training systems (23rd) should be addressed as they may undermine its innovative and technological capacity in the future. Fostering on the job training (24th) and supporting the growth and creation of training services (24th) are key to success in this respect. Moreover, access to finance remains an important obstacle to enterprise growth, ranked low at 26th. Measures to foster economic growth need to be complemented by more and better protection of the environment, a dimension on which Hungary ranks 25th, significantly lower than other countries from the region.

### **Greece**

Greece ranks 25th in the overall Index, the lowest of the EU15 countries. Although Greece demonstrates some good performances on individual indicators (ranking 6th on availability of scientists and engineers, 2nd for the tertiary enrolment rate and 9th in terms of environmental protection efforts), it struggles in achieving both smart (25th) and inclusive growth (27th). The Greek business environment is weak on all four dimensions of the enterprise environment pillar, lacking competition (26th) and entrepreneurship (25th), with poor cluster development (26th) and a lack of availability of finance (23rd), the latter of which certainly deteriorated in the wake of the recent financial crisis. In addition, Greece's digital agenda, which could help address some of the traditional inefficiencies, trails behind most European economies (25th) with one of the lowest scores in terms of ICT usage (26th) both in individual and business terms. Inclusive growth is limited by labour market inefficiencies (24th) and by particular difficulties in participating in the labour market for women (25th) and youth (24th).

### **Romania**

Romania ranks 26th overall on the Index with a relatively better performance in the area of sustainable growth (23rd), thanks to a comparatively acceptable level of renewable energy production (9th) and CO<sub>2</sub> intensity (16th). At the same time, it attains the lowest performance in the EU in the smart category (27th). Romania trails almost all EU economies in most of the pillars, with only a few relatively better results in the

labour market and employment pillar where it ranks 20th. Romania's labour market is flexible (ranking 10th in terms of hiring and firing practices), with a relatively strong relationship between pay and productivity (14th) and an above average participation of women in the private sector (12th). In terms of "smart growth", the performance of Romania shows that the country still needs to concentrate on developing sound institutions and market structures before it will become as competitive as the most advanced economies. Romania ranks only 26th in the enterprise environment pillar, and 27th in the digital agenda and innovation pillars. Despite a positive entrepreneurial attitude (6th), improvements need to be made on the competition front (25th), the development of clusters (27th) and availability of finance (19th) to generate a more conducive business environment. Also, performance on the digital agenda and the innovative Europe pillars needs to be reinforced. Romania's ranking is 27th on both, with few specific indicators ranking above the 20th position. Taking a holistic approach to building up different areas of development is necessary to enable Romania to close the gap between its competitiveness and European targets.

### **Bulgaria**

Bulgaria ranks 27<sup>th</sup> overall, attaining the lowest position in the Europe 2020 Competitiveness Index. Similar to Romania, Bulgaria is still in the process of reinforcing its institutions. The labour market and employment area (15th) represents Bulgaria's main strength. Flexibility in hiring and firing practices (6th) and a healthy relationship between pay and productivity (11th) make the labour market relatively efficient (14th), while the relatively high participation of women in the labour force (10th) is a competitive strength. Bulgaria also can count on a relatively sound environment for entrepreneurship (13th), characterized by a somewhat accepting attitude towards entrepreneurial failure (14th) and non-distortive taxation (11th). However, Bulgaria trails other EU countries in terms of competition policy (ranking 27th), as well as in the use and impact of ICT, which reflect low performance on the digital agenda pillar (26th). Education and training are other relevant area for improvement, ranking 27th on both of the sub-pillars, indicating that it is necessary to work on both the access to education and the quality of the system. Its environmental performance is also the lowest in the EU, with a particularly low assessment of the capacity to enforce environmental regulations (26th) and concerns about the quality of the natural environment (27th).

### **Iceland**

In general, accession and candidate countries, with the exception of Iceland, depict a competitiveness profile that is similar to that of the least competitive countries in Europe. This lag is virtually similar in all seven dimensions analysed. Preparing them for accession will require addressing their specific competitiveness weaknesses. The competitiveness profile of each of these countries is described below. An official candidate country since 2010, Iceland distinguishes itself from the other candidate countries through its membership in the European Economic Area, through which the country has been participating in the European single market since 1994. As a result, a large number of community laws have already been incorporated into the country's legislation. Since the official start of the negotiation meetings in June 2011, 11 chapters of the EU acquis have been opened, of which eight are officially closed, among those Chapter 25 on Science and Research and Chapter 26 on Education and Culture. Iceland's frontrunner role in these areas is corroborated by its outstanding performance in the areas of innovative Europe and education and training, where the country performs on par with the Nordics as well as the Netherlands and Germany. Iceland's great strength is in the environmental sustainability, as well as the labour market and employment components of the Index, which are characterized by a highly efficient labour market and very strong labour participation in particular. With regards to areas for improvement, Iceland performs below the EU27 average in the area of enterprise environment, driven by limited access to finance and poor performance in the competition sub-dimension. The country also needs to scale up efforts to improve its digital agenda, where its score is being particularly dragged down by low e-participation.

### **Turkey**

In a customs union with the EU since 1995, Turkey holds strong trade ties with the EU: half of its trade takes place with the EU and there is already some alignment with EU policies, such as competition and intellectual property law. Since the beginning of the accession negotiations in October 2005, 12 chapters have been opened, including those on company law, enterprise and industry, and one – Science and Research – has been closed. With regards to the Europe 2020 Strategy, Turkey performs close to the EU average in the area of enterprise environment, driven by intense local competition and low barriers to the creation of new businesses, as evidenced by a low number of procedures and limited amount of time it takes to start a business. The country has also experienced a notable improvement in its digital agenda since 2010, driven by increased government prioritization of ICT as further reflected in its progress in the use of government online services since 2010. However, important steps remain to be taken to catch up with the EU average. Turkey needs to build its human resource base by advancing its education and training system, as well as improving its labour market efficiency and raising opportunities for its citizens to participate in the labour market, particularly for women and youth. In parallel, investing in innovation-led growth is critical. While

Turkish companies do well in absorbing the latest technology, a stronger focus on innovation-led investments and innovative products would provide important impetus towards improving long-term productivity and could be leveraged by its solid enterprise environment. Turkey faces the challenge of embarking on significant efforts with regards to environmental sustainability, particularly the ratification of environmental treaties as well as lowering its CO<sub>2</sub> emissions and improving its air quality in order to converge to the EU average.

### **Croatia**

Croatia is scheduled to become the 28th EU Member State on 1 July 2013 after six years of negotiations. While the country's performance is close to the EU average in terms of environmental sustainability, it faces many challenges to strengthen its competitive environment and to converge towards the EU along all other pillars. This holds particularly true for the smart Europe sub-index. Despite some modest improvements since 2010 along all pillars in this component, the country has a long way to go towards becoming a more knowledge-based economy. Increased competition is particularly hampered by a weak enterprise environment that is characterized by difficulties in obtaining finance and weak competition in the local market. The private sector considers cumbersome government regulation and an inefficient tax system and labour market as among the many impediments, indicative of the myriad reform efforts that will be needed to increase Croatia's competitiveness. The education and training system will also require reforms to develop the country's human resources base – which is currently a recipient of about a tenth of EU financial aid granted under the Instrument for Pre-Accession Assistance (IPA) – to lay the groundwork for an innovative economy that would allow both the public and private sectors to engage in innovation-oriented investments. As well as addressing inefficiencies in the labour market, as evidenced by the high level of youth unemployment and low overall participation rate, Croatia must work towards improving its overall accessibility to healthcare services and ramp up its social safety net in order to achieve not only smart, but also inclusive growth.

### **Montenegro**

In Montenegro, a candidate country since 2010, EU accession negotiations are scheduled to be opened in June 2012. In terms of its performance along the Europe 2020 Competitiveness Index, Montenegro performs on par with Malta and Cyprus and ahead of most members of the EU12. Its economy is characterized by an enterprise environment almost at par with the EU average and well ahead of other candidate countries, fostered by few administrative procedures and little time required to start a business. The country has also advanced its digital agenda along all sub-dimensions compared with 2010 and performs slightly above the EU average in the labour market and employment pillar. Going forward, further steps towards building its knowledge-base economy would be needed, including improvements captured by the “innovative Europe” pillar, where it registers the largest difference to the EU average, as well as the education and training pillar. EU financial assistance has so far focused on building institutional capacity (accounting for almost 90% of financial aid), but as of 2012 the allocation of funds covers all five areas, with the EU providing assistance of about EUR 9 million to improve the country's education and training system.

### **Serbia**

Serbia is the most recent EU candidate country as of March 2010. To increase its competitiveness, significant efforts along all pillars of the Europe 2020 Competitiveness Index will be needed. Serbia scores lower than its neighbouring peers, including the member states of Bulgaria and Romania, in all areas captured by the Index. While the country made notable improvements in its digital agenda compared to 2010, raising its performance to a level comparable to those of Bulgaria and Romania, comprehensive reform efforts are required to improve the enterprise environment and education and training as a basis for smarter growth. Nonetheless, a first priority will be to build the institutional capacity in the country, an area to which the largest part of EU financial aid is being allocated. Considerable room for improvement also remains along the “inclusive Europe” dimension in view of severe rigidities in the labour market (characterized by a mismatch between productivity and pay, weak labour-employer relations and a high youth unemployment rate) as well as within the environmental sustainability pillar.

### **FYR Macedonia**

For Macedonia, FYR, a candidate country since 2005, accession negotiations have yet to be opened. Similar to its neighbouring peers, the country's most imminent challenge will be to advance its institutional capacity as a basis towards a knowledge-based economy. The country achieves scores similar to its candidate peers for its enterprise environment, where the private sector has seen slight improvements in obtaining financial resources since 2010. Improvements in ICT infrastructure, such as mobile phones and Internet bandwidth and use, have helped the country advance its digital agenda. However, Macedonia faces multiple challenges in the areas of education and training, innovation and environmental sustainability. It is also notable that Macedonia registered deterioration along the inclusive Europe sub-index, driven by a dramatic rise in youth

unemployment and the business sector perceiving a worsening in labour-employer relations and pay and productivity alignment since 2010.