

## **The Lisbon Review 2006**

### Measuring Europe's Progress in Reform



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# The Lisbon Review 2006: Measuring Europe's Progress in Reform

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## Introduction

At the beginning of the decade, Europe's heads of state set for themselves a ten-year timeline and defined a series of specific policy measures to make the EU "the most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth with more and better jobs and greater social cohesion." This became known as the Lisbon Strategy of economic and structural reforms, named after the host city of the March 2000 European Council in which it was launched.

Specifically, the Lisbon Strategy is an action and development plan aimed at improving Europe's productivity and competitiveness through the formulation of various policy initiatives. The main areas of concern have been defined as achieving an information society for all, establishing a European area of research and development, creating a business-friendly start-up environment, completing the single market, establishing efficient and integrated financial markets, building a knowledge society, ensuring more and better jobs for Europe, modernizing social protection, promoting social inclusion and enhancing sustainable development.

The year 2005 marked the midpoint in the ten-year period set out by Europe's leaders, and the EU took the opportunity to take stock of the situation, carrying out a detailed midterm review. The results of the review were not very reassuring. Not nearly enough progress had been made in most areas and Europe was still far from reaching its goals, with stagnant growth and continuing high unemployment in many member countries. Although some of the difficulties were linked to the overall downturn in the world economy, Europe was recovering more slowly than other regions.

In this context, and given mounting global competition and the challenges posed by ageing populations, the EU's leaders realized that action was necessary to get the Lisbon process back on track. Based on the Kok Report, which found that the agenda had been overloaded, with poor coordination and conflicting priorities,<sup>2</sup> the Barroso Commission and the European Council decided to streamline the Lisbon Strategy in the Spring of 2005 in order to focus specifically on those elements increasing

growth and jobs,<sup>3</sup> with the social and environmental aspects seen as longer-term goals.<sup>4</sup> Further, member states would need to become more involved in the strategy to ensure ownership of the project at the level at which many of the reforms must take place.<sup>5</sup>

The benefits of reaching the Lisbon goals are potentially quite significant. A recent study by the European Commission estimated that, if Europe were able to reach the Lisbon goals, gross domestic product (GDP) could increase 12-23% and employment could increase by as much as 11%.<sup>6</sup> Even if these estimates are highly optimistic, implementing the strategy offers significant potential gains. Given the many demographic and economic challenges facing the EU, and despite recent improvements in Europe's overall economic outlook, it would seem that there is no time to lose.

This review is the third edition of a biennial study carried out by the Global Competitiveness Network of the World Economic Forum, aimed at gauging Europe's progress towards its goals. The aim of this study is threefold. First, it compares the performance of individual EU economies against one another to provide a sense of which countries are presently making the most progress and which are lagging behind. It also takes stock of the change in relative performance of individual countries since the last Lisbon Review in 2004 in order to gauge the countries' relative progress.

Second, the study assesses the extent to which the 25 EU member countries are competitive vis-à-vis an international standard, using the United States and the average performance of five of the most competitive economies in East Asia as international benchmarks. This allows a comparison with economies that are widely seen as being among the world's most competitive, particularly with regard to market efficiency, entrepreneurship and technological progress, all critical elements of the Lisbon Strategy.

Third, given the continuing enlargement to include countries to Europe's east, the study evaluates how well the present EU accession and candidate countries are faring with regard to the Lisbon criteria, to get a sense of how well prepared they are to operate within a highly

competitive EU. Although the process will be halted temporarily (for institutional reasons) following next year's accession of Bulgaria and Romania, a number of south-east European countries remain on the EU's official candidate list for accession.

What differentiates this study from those that have been regularly carried out by the EU or other organizations<sup>7</sup> following in the EU reform process is that it is based in large part on the Executive Opinion Survey, which is carried out among CEOs and top executives in each of the countries under analysis. This means that the results can be interpreted as the business community's perspective on Europe's relative performance in meeting the Lisbon goals. Since business leaders make many of the investment decisions in their economies, their perceptions are clearly related to the prospects for economic growth.

## The Lisbon Agenda: Dimensions of Reform

For the purpose of analysis and based on the methodology used in the last two editions, the Lisbon Strategy is evaluated in eight distinct dimensions, which usefully capture the areas highlighted by Europe's leaders as critical for reaching the goal of becoming the most competitive economy in the world. The eight dimensions are:

### Creating an Information Society for All

This dimension measures the extent to which an economy has harnessed the new information and communication technologies (ICT) for sharing knowledge and enhancing the productivity of its industries. Countries with companies that aggressively integrate these new technologies into their production processes, such as the US, have seen better productivity improvements than others. In order to create a true information society, all stakeholders in the economy (individuals, businesses and governments) must use these tools. This concept is captured by variables such as the prioritization of ICT by the government, ICT penetration rates (Internet, PCs), Internet usage by business and the extent to which students have Internet access in school.

### Developing a European Area for Innovation, Research and Development

The Lisbon Strategy includes a variety of policy measures to enhance innovation and technological diffusion. Innovation is critical, especially for those countries that have moved very close to the technology frontier, as is the case of most EU countries. As well as making the maximum use of existing technologies, countries must have the necessary framework to ensure that they are at the forefront of innovation in products and processes. This requires sufficient business investment in research and development (the EU has set an R&D goal of 3% of GDP), high quality scientific research institutions, collaboration in research between universities and industry, protection of intellectual property and innovation stimulation through government procurement.

### Liberalization: Completing the Single Market/State Aid and Competition Policy

The "four freedoms" protect the free movement of goods, services, capital and labour within the internal market of the European Union. This dimension captures aspects related to the free flow of goods and services, which is critical for the competitiveness of European industry. Although much progress has been made in completing the single market for goods, the market remains fragmented, particularly with regard to services and other protected industries. A reduction in the impediments to trade in services has been proposed, which would follow a "country of origin" principle,<sup>8</sup> although Europe's leaders have recently agreed to water it down due to concerns raised by some countries about its impact on Europe's

social model. Substantial productivity increases are clearly not possible if the services sector, representing some 70% of the European economy, remains hampered by regulatory obstacles to market entry and trade. Reducing state aid to national industries, ensuring a level playing field for local and foreign investors and carrying out a proper competition policy are key elements of liberalization.

### **Building Network Industries: in Telecommunications, Utilities and Transportation**

Among the Lisbon Strategy's measures for improving the functioning of markets are critical measures aimed at liberalizing and building network industries. These industries, like services discussed above, continue to be fragmented. The telecommunications and aviation markets have been liberalized, but there has been little progress in other areas, such as electricity and postal services, although the Commission has recently proposed fully opening EU postal markets to competition by 2009 (in line with the target date set out in the current Postal Directive). Building up these industries at an EU level would promote greater efficiency and quality of service and better support a competitive economic environment.

### **Creating Efficient and Integrated Financial Services**

An efficient financial services market would reduce the cost of accessing capital and improve the allocation of capital across the EU, giving firms increased opportunities to access markets in other member states and carry out business effectively on a cross-border basis. Efficient financial markets make capital available for business investment from such sources as credit from a sound banking sector, well-regulated securities exchanges or venture capital. The EU has a number of policy objectives and specific measures designed to improve the single market for financial services. Some progress has been made Europe-wide, most notably within the context of the Financial Services Action Plan, which sets out specific objectives for developing a single market in financial services; many of these have been implemented. However, the quality of financial services continues to vary significantly across EU countries.

### **Improving the Enterprise Environment: Business Start-ups/Regulatory Framework**

Improving the prospects of growth and employment in the EU also requires improving the overall enterprise environment for budding businesses. The Lisbon Strategy aims to stimulate entrepreneurship by reducing the administrative impediments to business creation and improving the quality of legislation. This requires actions such as reducing distortionary or burdensome taxes, reducing the time and red tape required to start a business and ensuring access to capital for new businesses.

### **Increasing Social Inclusion: Bringing People to the Workforce, Upgrading Skills and Modernizing Social Protection**

Creating jobs and bringing more people into the workforce is one of the main tenets of the refocused Lisbon Strategy, with the EU's target of 70% employment (compared with an EU average of 63.8% in 2005, according to Eurostat). With a rapidly ageing European population, this is critical for ensuring the ability to pay for growing pension expenditures and will require high quality formal education and on-the-job training to ensure that the population has the necessary skills to compete in the rapidly changing business environment. Facilitating the ability of women and older people to remain in or to re-enter the workplace by providing services such as sufficient and affordable childcare and training programmes is also critical. Modernizing social protection by dealing directly with issues of social exclusion and poverty is another important aspect of social inclusion.

### **Enhancing Sustainable Development**

Ensuring sustainable growth and development is a long-term Lisbon goal. This can be demonstrated by the extent to which countries ensure that improvements in the quality of life for the present generation proceed steadily and do not come at the expense of future generations. Clear and stringent environmental regulations and companies that take steps to preserve the ecosystems on which they depend are vital to success.

The first six dimensions, and most aspects of the seventh, continue to capture the various growth and jobs elements of the refocused Lisbon Strategy. In addition, we continue to include within the seventh pillar a measure of "modernizing social protection",<sup>9</sup> as well as the eighth dimension (enhancing sustainable development) because, although these issues have been lowered on the short-term priority list, they remain critical long-term Lisbon goals and fundamental objectives of the European Union.<sup>10</sup> Further, by using the same dimensions as in past editions of the Lisbon Review, the methodological continuity allows inter-temporal comparisons that track progress made by the EU as a whole, as well as that of individual countries, since the 2004 assessment.<sup>11</sup>

## Country Coverage

At the core of the analysis are the 25 current member countries of the European Union, which are meant to be striving towards the Lisbon goals. These are Austria, Belgium, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Poland, Portugal, the Slovak Republic, Slovenia, Spain, Sweden and the United Kingdom. Their performance according to the Lisbon criteria is compared among the others in order to assess which are the leaders in achieving the Lisbon goals, and which are the countries lagging behind.

As in past years, the United States is a key benchmark with which to place the performance of the EU countries into an international context, as it is considered one of the most competitive economies in the world by a variety of assessments.<sup>12</sup> In addition, this year the average performance of five competitive East Asian economies – Japan, Hong Kong, Republic of Korea, Singapore and Taiwan – is also included. This second comparison provides a sense of how Europe measures up to a highly dynamic and competitive region that has been able to greatly increase its productivity and prosperity over the years.

4 The competitiveness of the six accession and candidate countries to the EU has also been analysed in order to assess how their performance compares to each other, as well as to the EU average. These countries include the two accession countries scheduled to enter the EU in January 2007, Bulgaria and Romania, as well as four candidate countries: Croatia, Macedonia, Serbia & Montenegro<sup>13</sup> and Turkey. This provides a sense of the extent to which these countries are prepared to compete in an expanded EU.

## Data and Methodology for Calculating the Lisbon Scores

As in past years, the assessment of Europe's competitiveness is based on publicly available hard data (such as Internet penetration rates, unemployment rates, etc.) and data from the World Economic Forum's Executive Opinion Survey (EOS). The EOS is a survey of business leaders that is carried out annually in well over 100 countries and provides data for a variety of qualitative issues for which hard data does not exist (e.g. the quality of the educational system, the government's prioritization of information and communications technologies, etc.). The EOS also allows us to capture the critical perspective of business leaders on the state of their operating environments on a variety of issues. Most of the hard data dates from the end of 2005, which is the most recent end-of-year data available. The EOS was carried out in the Spring of 2006.

The overall Lisbon scores for each country are calculated as an unweighted average of the individual scores in the eight dimensions. We have maintained the same index model as in the 2004 Lisbon Review, which makes it possible to carry out an inter-year comparison. Details behind the specific hard and survey data used in making the calculations are shown in the Appendix B of this review.

## The Lisbon Review Rankings 2006

### Performance of the EU25

Table 1 shows this year's rankings and scores of the 25 EU member countries, as well as the 2004 rankings<sup>14</sup> for comparison. The scores are on a scale from one to seven, with larger values indicating stronger performance. As the table shows, the three top-ranked countries – Denmark, Finland and Sweden – retain their places as the countries best meeting the Lisbon goals to date, with Denmark overtaking Finland this year as the top-ranked country. Within the top ten performers, despite some small shifts among them, the overall list remains the same, with Austria making the most notable improvement, up two places to seventh overall.

The results of the EU15 members (members prior to the May 2004 accession) remain quite stable, with a few notable movements. On the positive side, there is progress in Portugal's performance, up four places to 13th, with particular improvements in the enterprise environment due, for example, to significantly lowered time and cost of starting a new business in the country. On the other hand, Italy shows by far the largest change of any country, with a staggering decline of 10 places down to 24th, now in second to last place, followed only by Poland. Compared with the other EU members, Italy has seen a significant deterioration in a number of areas, including liberalization

(down from 15th to 23rd), network industries (from 13th to 20th), financial markets (from 15th to 20th) and social inclusion (from 17th to 24th). This assessment of Italy's performance is echoed by the analysis of a number of other studies on the Lisbon goals<sup>15</sup> and is mirrored by the overall weak economic performance of the country in recent years. Of course, it is important to note that the data used to calculate the present rankings predate the current government.

The table also shows that a number of the EU10 accession countries (of May 2004) have improved their comparative performance over the past couple of years with, most notably, the Czech Republic moving up five places to 14th, Hungary moving up three places to 17th and the Slovak Republic moving up five places to 18th, putting these countries ahead of many longer-standing EU members. In particular, Estonia ranks 12th, just outside of the top ten. More generally, the rankings imply that a number of these recent members are already closer to meeting the Lisbon goals than many of the original EU15 members. This is perhaps not surprising since, for more than a decade, the countries of Central and Eastern Europe have been engaged in a process of reform aimed at adopting the institutions and mechanisms of modern market economies, which has been reinforced within the context of EU accession negotiations. The improving performance of a number of these countries according to the Lisbon criteria provides evidence of the benefits of this reform process, although continued improvements in the economic realm will clearly depend on their ability to foster a stable political environment that is conducive to business activity in the future.<sup>16</sup>

More generally, the large differences in the underlying scores demonstrate the extent to which the performance of individual countries is mixed in meeting the Lisbon goals. As in past years, the Nordic countries top the list with high scores in all areas, while southern European and some of the recent members continue to lag behind. Table 2 presents the details driving the overall ranks and scores of the 25 EU countries in each of the eight Lisbon dimensions. The table shows that the top positions of the three Nordic countries are attributable to strong performance across all dimensions, particularly in measures of innovation, social inclusion and sustainable development.

With regard to innovation, these three countries are among the top of all countries measured by the aggressiveness of their companies in adopting new technologies, the quality of their scientific research institutions, private sector spending on R&D, business collaboration with universities, intellectual property protection and issues of this nature. In terms of social inclusion, the Nordic countries have top-notch educational systems and companies that invest heavily in training, excellent wage equality among men and women,

**Table 1:**  
**Ranking and Scores of EU Countries - 2006 and 2004**

Country EU 25	2006		2004
	Rank	Score	Rank*
Denmark	1	5.76	2
Finland	2	5.74	1
Sweden	3	5.74	3
Netherlands	4	5.59	5
Germany	5	5.53	6
United Kingdom	6	5.50	4
Austria	7	5.30	9
Luxembourg	8	5.29	7
France	9	5.21	8
Belgium	10	5.15	10
Ireland	11	5.09	11
Estonia	12	4.93	12
Portugal	13	4.64	17
Czech Republic	14	4.53	19
Spain	15	4.49	13
Slovenia	16	4.44	15
Hungary	17	4.40	20
Slovak Republic	18	4.38	23
Malta	19	4.38	18
Lithuania	20	4.31	21
Cyprus	21	4.28	-
Latvia	22	4.25	16
Greece	23	4.19	22
Italy	24	4.17	14
Poland	25	3.76	24
EU25 Average		4.84	

\* Rank of all 24 countries covered in 2004 report

**Table 2: Ranking and Scores of EU Countries**

Country EU 25	Final Index		Subindexes															
			Information Society		Innovation and R&D		Liberalization		Network Industries		Financial Services		Enterprise		Social Inclusion		Sustainable Development	
	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score
Denmark	1	5.76	4	5.53	4	5.15	5	5.58	2	6.24	5	6.28	1	5.63	1	5.49	3	6.17
Finland	2	5.74	6	5.41	1	5.90	4	5.58	8	5.93	4	6.29	4	5.24	2	5.35	1	6.23
Sweden	3	5.74	1	5.93	2	5.73	6	5.43	5	6.14	3	6.36	7	5.07	3	5.09	4	6.15
Netherlands	4	5.59	2	5.63	5	4.82	2	5.62	6	6.01	6	6.23	2	5.48	4	5.06	6	5.87
Germany	5	5.53	10	4.98	3	5.31	1	5.71	1	6.38	2	6.39	12	4.69	10	4.53	2	6.23
United Kingdom	6	5.50	3	5.61	6	4.82	3	5.59	7	5.97	1	6.47	5	5.13	9	4.74	8	5.69
Austria	7	5.30	7	5.24	9	4.55	7	5.35	9	5.87	8	6.15	15	4.43	8	4.75	5	6.09
Luxembourg	8	5.29	9	5.05	12	3.96	9	5.26	4	6.16	9	6.14	8	4.91	5	5.05	7	5.82
France	9	5.21	11	4.91	8	4.66	11	5.17	3	6.18	7	6.19	9	4.87	15	4.25	10	5.44
Belgium	10	5.15	14	4.44	7	4.67	10	5.25	10	5.84	11	5.91	11	4.77	6	4.83	9	5.47
Ireland	11	5.09	12	4.55	10	4.47	8	5.34	18	4.95	10	6.13	3	5.35	7	4.82	11	5.10
Estonia	12	4.93	5	5.49	11	4.06	12	4.98	17	5.01	12	5.72	6	5.10	12	4.37	16	4.69
Portugal	13	4.64	17	4.06	17	3.81	15	4.74	12	5.37	13	5.66	14	4.50	17	4.10	14	4.90
Czech Republic	14	4.53	15	4.10	16	3.85	13	4.96	13	5.16	21	4.84	21	3.99	11	4.44	13	4.90
Spain	15	4.49	20	3.93	15	3.89	16	4.62	11	5.41	14	5.65	16	4.33	23	3.63	18	4.48
Slovenia	16	4.44	13	4.50	13	3.96	22	4.30	15	5.07	20	4.88	23	3.76	19	4.02	12	5.00
Hungary	17	4.40	23	3.74	14	3.92	17	4.55	21	4.80	17	5.22	19	4.18	16	4.16	17	4.61
Slovak Republic	18	4.38	19	3.97	23	3.44	14	4.82	22	4.76	22	4.84	17	4.33	18	4.09	15	4.76
Malta	19	4.38	8	5.22	25	3.23	19	4.46	23	4.64	15	5.44	22	3.83	13	4.35	25	3.84
Lithuania	20	4.31	18	3.97	20	3.69	24	4.18	19	4.86	19	4.96	13	4.57	20	3.95	21	4.26
Cyprus	21	4.28	21	3.90	24	3.30	18	4.46	16	5.02	18	5.12	18	4.25	14	4.30	24	3.86
Latvia	22	4.25	22	3.76	21	3.63	20	4.32	24	4.57	24	4.79	10	4.78	21	3.87	20	4.29
Greece	23	4.19	25	3.17	18	3.77	21	4.32	14	5.09	16	5.27	20	4.14	22	3.79	23	3.98
Italy	24	4.17	16	4.06	19	3.73	23	4.29	20	4.82	23	4.80	24	3.71	24	3.54	19	4.40
Poland	25	3.76	24	3.32	22	3.57	25	4.02	25	3.86	25	4.23	25	3.60	25	3.41	22	4.10
EU25 Average	--	4.84	--	4.58	--	4.24	--	4.92	--	5.36	--	5.60	--	4.59	--	4.40	--	5.05
United States	--	5.45	--	5.63	--	6.01	--	5.21	--	5.72	--	5.97	--	5.21	--	4.58	--	5.26
East Asia*	--	5.28	--	5.41	--	5.23	--	5.13	--	5.96	--	5.54	--	5.11	--	4.87	--	5.02

\* East Asia refers to the average of five competitive East Asian economies: Japan, Hong Kong, Republic of Korea, Taiwan and Singapore

widely available government-provided childcare that facilitates keeping women in the workforce, and unemployment rates that are among the lowest in Europe.

In terms of sustainable development, their environmental regulations are extremely stringent and transparent and their businesses concern themselves greatly with the protection of the environment, compared with international peers. Combined with similarly strong performances in the five other dimensions measured, the Nordic countries are assessed as the most competitive countries in Europe according to the Lisbon criteria.

The performance of the other countries in the top ten of the ranking is more mixed, although many demonstrate clear strengths in individual areas. For example, Germany is the top performer in terms of liberalization and network industries, and second in financial services and sustainable development. The United Kingdom is the best performer in financial services, which one would expect given London's position as a major international financial hub. However, its overall ranking is brought down by weaknesses in the areas of social inclusion and sustainable development. On the other hand, France is among the top performers in the development of its network industries (to be expected given its excellent infrastructure) but it suffers from weaknesses in developing an information society and general liberalization in the economy. Ireland,

although ranked just outside the top ten countries at 11th overall, has one of the top three enterprise environments in Europe due to the ease of starting a business, good access to capital (through channels such as banks and venture capital) and relatively low levels of administrative red tape. Its excellent enterprise environment has been critical for facilitating the high growth in the economy in recent years.

Among the 10 accession countries, there are also some clear areas of strength. Estonia, ranked 12th overall, has an information society that is assessed as among the top five and an enterprise environment that ranks sixth overall. In terms of the information society, its government is seen as successfully promoting the adoption of the new information and communication technologies and is among the world's best in terms of providing online government services. Estonian businesses are also using these tools to a great extent in their business dealings, as well as individuals (Estonia is ranked seventh in Europe in terms of Internet penetration). Its enterprise environment is characterized as an easy place to start a business, with a low regulatory burden for businesses. Malta, ranked significantly lower overall, benefits from a relatively developed information society (ranked eighth) with one of the highest Internet penetration rates in Europe, while Latvia, ranked a low 22nd in the index, has an enterprise environment that is ranked 10th partly due to the

relatively low number of procedures and time required to start a business or resolve contract disputes in the country, and relatively little red tape compared with several other European countries.

The countries at the bottom of the ranking tend to do quite poorly across the board. This is the case of Greece and Italy, which now find themselves near the very bottom of the rankings along with some of the recent accession countries, most notably Poland, which ranks last overall. Problems in these countries range from the very heavy administrative red tape faced by their companies, low adoption of ICTs, companies that are not aggressively adopting new technologies, low company spending on R&D, lack of competition in the local market, government favouritism in deciding on policies and contracts and insufficiently protected property rights, among others. This demonstrates the extent of work to be done by several old and new members alike to come closer to meeting the Lisbon goals.

In terms of specific country performances, these findings are broadly in line with the EU's own assessment of how countries are faring on the implementation of Lisbon policies. According to the latest analysis carried out by the Commission, countries such as Denmark, Finland and Austria are ranked at the top by the EU, as they have implemented 90-97% of the Lisbon directives, whereas other countries (including Spain, Italy and Greece) are lagging behind on implementation.<sup>17</sup>

## Comparing the EU to the US and East Asia

At the bottom of Table 2 are the scores and rankings of the United States and the average of five competitive East Asian economies, which are included for comparison. As the table shows, the US and East Asia surpass the EU average performance by a wide margin. However, once we look at the detailed performance of individual countries and individual dimensions, the performance is more nuanced.

Figures 1-26, shown in the appendix of this review, provide a visual representation of the scores in Table 2 and compare individual country performances and the average performance of the EU vis-à-vis the US and East Asia benchmarks.<sup>18</sup> A country with a perfect performance in any of the eight dimensions would have a score of seven. Since an ideal country would have a diamond reaching all the way to the edges of the figure, the smaller a diamond is, the less competitive the country as measured by the Lisbon criteria. In each figure, the individual country's performance is represented by a black line, that of the US is in dark blue and that of East Asia is in grey. Dimensions in which the individual country's line extends further out than that of the US or East Asia indicate areas where the country outperforms these benchmarks.

Specifically, the US is outperformed overall by the six best performing countries: Finland, Denmark, Sweden, the Netherlands, Germany and the United Kingdom. However, it is notable that the US outperforms all EU countries by a rather wide margin with regard to innovation and R&D, a critical dimension driving the productivity of countries at advanced stages of development, and one that has been recently highlighted by the EU as a critical priority area. In addition to the top six EU performers, East Asia is outperformed by Austria and is on a par with Luxembourg.

**Table 3: Lisbon Scores Comparing the EU, the US and East Asia**

	EU25 average	United States	East Asia	EU average relative to the US	EU average relative to East Asia
<b>An Information Society for All</b>	<b>4.58</b>	<b>5.63</b>	<b>5.41</b>	<b>-1.05</b>	<b>-0.83</b>
<b>Innovation, Research and Development</b>	<b>4.24</b>	<b>6.01</b>	<b>5.23</b>	<b>-1.78</b>	<b>-0.99</b>
<b>Liberalization</b>	<b>4.92</b>	<b>5.21</b>	<b>5.13</b>	<b>-0.29</b>	<b>-0.21</b>
<b>Network Industries</b>	<b>5.36</b>	<b>5.72</b>	<b>5.96</b>	<b>-0.36</b>	<b>-0.59</b>
Telecommunications	5.59	5.48	5.81	0.10	-0.22
Utilities and Transportation	5.14	5.96	6.11	-0.81	-0.96
<b>Efficient and Integrated Financial Services</b>	<b>5.60</b>	<b>5.97</b>	<b>5.54</b>	<b>-0.37</b>	<b>0.06</b>
<b>Enterprise Environment</b>	<b>4.59</b>	<b>5.21</b>	<b>5.11</b>	<b>-0.63</b>	<b>-0.52</b>
Business Start-up Environment	4.96	5.94	5.11	-0.98	-0.15
Regulatory Environment	4.21	4.49	5.11	-0.28	-0.89
<b>Social Inclusion</b>	<b>4.40</b>	<b>4.58</b>	<b>4.87</b>	<b>-0.18</b>	<b>-0.47</b>
Returning People to the Workforce	4.35	4.77	5.08	-0.41	-0.73
Upgrading Skills	4.61	5.17	5.23	-0.56	-0.62
Modernizing Social Protection	4.23	3.81	4.29	0.43	-0.05
<b>Sustainable Development</b>	<b>5.05</b>	<b>5.26</b>	<b>5.02</b>	<b>-0.21</b>	<b>0.03</b>
<b>Overall Lisbon Score</b>	<b>4.84</b>	<b>5.45</b>	<b>5.28</b>	<b>-0.61</b>	<b>-0.44</b>

Table 3 makes more detailed comparisons between the performance of the EU with the US and East Asia on the eight dimensions and sub-dimensions. The table shows that the US outperforms the EU average in all areas except for telecommunications and modernizing social protection, while the East Asian economies, on average, outperform the EU in all dimensions except – just barely – for financial services (where a great deal of progress has been made in Europe) and sustainable development.

On average, the greatest gaps between the EU's performance and those of the comparators is in the development of an information society, innovation and R&D and enterprise environment, all areas in which both East Asia and the US outperform the EU by a wide margin. The analysis thus indicates that these areas require urgent attention for Europe to reach its goal of becoming the most competitive economy in the world.

These policy areas are broadly consistent with those highlighted by the EU in its own assessment, as noted in the Presidency Conclusions of the Spring 2006 Council. Specifically, the Council highlighted innovation and R&D and improving the enterprise environment as areas for priority action. With regard to the former, it highlighted the importance of investing more in innovation and knowledge by increasing the amount and improving the quality of R&D spending for innovation. With the latter, it placed the accent on improving the business environment, especially for small- and medium-sized companies.

## The Accession and Candidate Countries

The previous section analysed how well the existing 25 EU members are meeting the Lisbon goals and highlighted the work that still needs to be done in a variety of areas. But the EU25 are not the only countries to which the Lisbon goals apply. Despite what can be characterized as increasing enlargement fatigue and recent talk of “absorption capacity”, accession of additional countries to the east remains a reality. Bulgaria and Romania will join the EU in January 2007 (albeit with a number of caveats and restrictions)<sup>19</sup> and four others – Croatia, Macedonia, Serbia & Montenegro<sup>20</sup> and Turkey – remain on the candidate list.

Table 4 shows the ranks and scores of the accession and official candidate countries of the EU, with the average EU25 score shown at the bottom of the table for comparison. As in the case of the EU25, there is considerable variation in performance among the accession and candidate countries overall and across the various dimensions. The table quite strikingly shows that Romania and Bulgaria, the two countries that have recently been given the green light to join the EU, are not the top performers in reaching the Lisbon goals. The top two are, in fact, Croatia and Turkey, two countries for which no entry date has been agreed. Looking at the underlying scores, we see that Croatia's and Turkey's scores are very close to each other and well ahead of the next best performer, Romania. What is perhaps more remarkable is that both Croatia and Turkey score higher overall than Poland, a present EU member.

Croatia is by far the best performer in the development of the information society, network industries and sustainable development, whereas Turkey is the leader in terms of liberalization, financial services and the enterprise environment. In the enterprise environment, Turkey is not far behind the EU average (at 4.21 compared with 4.59). This is explained by the relative ease of starting a business in Turkey compared with many other European countries.<sup>21</sup>

**Table 4: Ranking and Scores of Potential EU Member Countries**

Country	Final Index		Subindexes							
	Rank	Score	Information Society	Innovation and R&D	Liberalization	Network Industries	Financial Services	Enterprise	Social Inclusion	Sustainable Development
Croatia	1	3.93	3.69	3.32	4.07	4.65	4.53	3.81	3.40	3.96
Turkey	2	3.92	3.22	3.27	4.46	4.12	4.91	4.21	3.52	3.66
Romania	3	3.59	3.21	3.17	3.89	3.51	4.19	3.81	3.62	3.33
Bulgaria	4	3.31	3.09	2.92	3.49	3.86	3.80	3.43	2.87	3.00
Macedonia, FYR	5	3.28	2.51	2.79	3.56	3.71	3.98	3.51	3.17	3.04
Serbia and Montenegro	6	3.14	2.80	2.94	3.50	3.39	3.77	3.32	2.80	2.59
<b>EU25 Average</b>		<b>4.84</b>	<b>4.58</b>	<b>4.24</b>	<b>4.92</b>	<b>5.36</b>	<b>5.60</b>	<b>4.59</b>	<b>4.40</b>	<b>5.05</b>

Romania and Bulgaria, ranked third and fourth respectively, have much weaker performances, much lower than the average performance of the EU25 across all areas measured. They particularly lag behind in areas such as market liberalization and the state of network industries. This demonstrates the progress that must be made to bring these countries, soon to be members of the EU, up to European standards. Bulgaria's position behind Romania also echoes a recent assessment made by the Commission which indicated that Bulgaria has a longer list of problem areas to be addressed in order to ensure admission on 1 January 2007.<sup>22</sup>

Macedonia and Serbia & Montenegro round out the bottom of these rankings. These countries trail far behind the EU average and overall performance of the other countries shown in the table. It is notable that Macedonia outperforms Bulgaria in all but three areas (information society, innovation and R&D and network industries). Similarly, Serbia & Montenegro just outperform Bulgaria in two areas: innovation and R&D and liberalization.

Table 5 compares the performance of these six countries with the EU's performance. The table makes four comparisons:

- 1) The average score of the six accession and candidate countries to the average of all 25 EU members
- 2) The three best accession countries relative to the EU25 average
- 3) The average score of the six accession and candidate countries to the four worst-performing EU countries
- 4) The three best accession and candidate countries relative to the four worst-performing EU countries

The first column of Table 5 shows that, on average, the six accession and candidate countries score significantly lower than the EU average in all Lisbon dimensions shown. However, given the variety of performances among the individual EU25 and candidate countries, this overall average masks important distinctions in terms of performance in individual dimensions. Within the second column in the table, which compares the performance of the three best accession/candidate countries to the EU average, the differences are less striking, particularly in the enterprise environment and bringing people back to the workforce. Although these countries still trail the EU average in these areas, the differences are much slimmer.

The third column of Table 5 takes this idea further, comparing the performance of the four worst performers among the EU25 to the six-country average. Here we see that the accession and candidate countries fare better on average than the selected EU countries in some areas, namely the business start-up environment and returning people to the workforce, while they are almost on a par in the regulatory environment.

The last column compares the three best-performing accession/candidate countries to the four worst-performing EU countries. Here the accession/candidate countries outperform the EU countries in all areas of the enterprise environment, returning people to the workforce and upgrading skills. In terms of the other dimensions, although they continue to be surpassed by the EU worst-performers, the difference is very slim in most areas (with the largest lags in utilities and transportation, modernizing social protection and sustainable development).

**Table 5: Lisbon Scores - Comparing the EU and the Accession Countries**

	3 best accession performers	4 worst EU performers	6 country average* relative to the EU average	3 best accession performers relative to the EU average	6 country average* relative to 4 worst EU performers	3 best accession performers relative to 4 worst EU performers
<b>Information Society</b>	Croatia, Romania, Turkey	Greece, Hungary, Latvia, Poland	-1.49	-1.21	-0.41	-0.12
<b>Innovation, Research and Development</b>	Croatia, Romania, Turkey	Cyprus, Malta, Poland, Slovak Republic	-1.17	-0.98	-0.32	-0.13
<b>Liberalization</b>	Croatia, Romania, Turkey	Italy, Lithuania, Poland, Slovenia	-1.09	-0.78	-0.37	-0.06
<b>Network Industries</b>	Bulgaria, Croatia, Turkey	Latvia, Malta, Poland, Slovak Republic	-1.49	-1.16	-0.59	-0.25
Telecommunications	Bulgaria, Croatia, Turkey	Latvia, Lithuania, Poland, Slovak Republic	-1.11	-0.85	-0.30	-0.05
Utilities and Transportation	Bulgaria, Croatia, Turkey	Hungary, Italy, Malta, Poland	-1.87	-1.46	-0.71	-0.29
<b>Efficient and Integrated Financial Services</b>	Croatia, Romania, Turkey	Italy, Latvia, Poland, Slovak Republic	-1.40	-1.06	-0.47	-0.12
<b>Enterprise Environment</b>	Croatia, Romania, Turkey	Italy, Malta, Poland, Slovenia	-0.90	-0.64	-0.04	0.22
Business Start-up Environment	Croatia, Romania, Turkey	Cyprus, Czech Republic, Greece, Malta	-0.69	-0.33	0.15	0.51
Regulatory Environment	Croatia, Macedonia, FYR, Turkey	Hungary, Slovenia, Italy, Poland	-1.12	-0.84	-0.05	0.23
<b>Social Inclusion</b>	Croatia, Romania, Turkey	Greece, Italy, Poland, Spain	-1.17	-0.89	-0.36	-0.08
Returning People to the Workforce	Romania, Macedonia, Turkey	Greece, Italy, Poland, Spain	-0.76	-0.33	0.16	0.59
Upgrading Skills	Croatia, Macedonia, FYR, Romania	Greece, Italy, Portugal, Spain	-0.97	-0.76	-0.11	0.10
Modernizing Social Protection	Croatia, Romania, Turkey	Latvia, Lithuania, Italy, Poland	-1.78	-1.40	-0.64	-0.26
<b>Sustainable Development</b>	<b>Croatia, Romania, Turkey</b>	<b>Cyprus, Greece, Malta, Poland</b>	<b>-1.79</b>	<b>-1.40</b>	<b>-0.68</b>	<b>-0.29</b>

\* The six-country average refers to the average performance of the six potential accession countries included in this study: Bulgaria, Croatia, Macedonia, Romania, Serbia & Montenegro and Turkey.

Overall, the findings suggest that, based on economic criteria as defined by the EU's own Lisbon Strategy, Croatia and Turkey are better prepared to contribute to a competitive EU than some of the other countries that will join earlier, and better than one (Poland) that is already a member. Still, it is clear that much remains to be done across all of these countries to bring them up to the average competitiveness level of the present EU membership.<sup>23</sup>

## Conclusions

The Lisbon Strategy aims to make the EU a highly dynamic and competitive region, capable of ensuring gainful employment and rising prosperity to its citizens. Our analysis suggests that there continues to be much variation in the performance across the EU25 countries, with the Nordic countries doing very well, while some southern European and recent accession countries trail behind. The 2004 accession of 10 new members has already increased the extent of such variation and this will clearly continue to increase with the upcoming accession of Romania and Bulgaria.

Regarding the eight Lisbon dimensions under analysis, on average, the greatest gaps between the EU's performance and those of the comparators are in the development of an information society, innovation and R&D, and in the enterprise environment, all areas in which both East Asia and the US outperform the EU by a wide margin. Our analysis thus indicates that these areas require urgent attention for Europe to reach its goal of becoming the most competitive economy in the world.

With respect to the accession and candidate countries, our analysis shows that much remains to be done to bring all of them up to the average competitiveness level of the present EU membership. As among the current EU members, however, there is quite a bit of variation in their performances. In particular, Croatia and Turkey are performing better according to the Lisbon criteria than Bulgaria and Romania, countries that have been granted an entry date at the beginning of next year. Perhaps more surprising, Croatia and Turkey slightly outperform Poland, a current EU member.

More generally, for many present and future EU members, there is still a long way to go to reach the Lisbon goals. The EU is fully cognizant of the challenges that lie ahead, and has streamlined the short-term agenda following the midterm review last year in order to focus on the new Growth and Jobs Strategy. Continuing enlargement has made it all the more important to bring all countries up to higher levels of competitiveness. The EU itself noted that it is unlikely that the targets will be reached by 2010, as initially planned. But given the potential benefits, it seems clear that it would be useful to continue to pursue these policies beyond the 2010 deadline. Even if the goals are not achieved within the next four years, the strategy set in Lisbon continues to represent a very useful policy framework in itself.

Overall, it is hoped that the renewed Lisbon process will give new life to the reform process and bring it closer to the EU's citizens, taking the EU closer to the goal of making the region much more competitive and thus providing its citizens with sustainable prosperity.

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## Notes

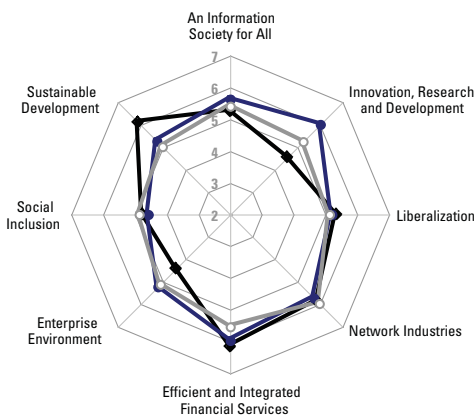
- <sup>1</sup> The author would like to thank Thierry Geiger and Tamara Gomes for their excellent research assistance.
- <sup>2</sup> European Communities, 2004.
- <sup>3</sup> The heads of state and government at the Lisbon summit set a 3% average economic growth target and the creation of 20 million jobs by 2010, identifying the main steps necessary to achieve this. Policy reforms at the European and national levels were elaborated in areas such as enterprise, research and development, the opening of markets and environmental sustainability. The streamlined version produced one set of policy guidelines from those existing previously, and set two main EU targets: an R&D investment rate of 3% and an employment rate of 70%.
- <sup>4</sup> This is not to say that they dropped the environmental and social aspects, but rather that they recognized that these goals would be achieved more readily once the growth and jobs issues had been tackled. In fact, they have been clear to point out that the Lisbon Strategy still aims for sustainable jobs and growth without sacrificing environmental protection. The Growth and Jobs Strategy, which is a medium-term strategy, is meant to be complemented by the EU's Sustainable Development Strategy, which is wider and more long-term.
- <sup>5</sup> The integrated guidelines also include a series of macroeconomic measures to be achieved for growth and jobs, in line with the Maastricht criteria. Although the importance of fiscal responsibility and good macroeconomic management is clearly a continuing priority for EU member countries, this study continues to focus on the original microeconomic measures of the Lisbon Agenda to allow for a more focused analysis and to ensure continuity with our previous work.
- <sup>6</sup> Gelauff and Lejour, 2006.
- <sup>7</sup> See, for example, the Lisbon Scorecard 2006, Centre for European Policy Reform, 2006.
- <sup>8</sup> European Commission, 2004.
- <sup>9</sup> The EU, in the medium term, has stated that the best way to improve social inclusion, which is still a key aspect of the Growth and Jobs Strategy, is to ensure that people have jobs.
- <sup>10</sup> See, for example, the references to the importance of sustainable development in the Presidency Conclusions, Brussels European Council, June 2006.
- <sup>11</sup> In the EU's latest annual progress report, *Time to Move up a Gear*, January 2006, the most urgent challenges were identified as investment for higher education (under "upgrading skills"), innovation, cutting red tape and improving the enterprise environment and bringing people to the workforce. These are all captured in the Lisbon Review model described here, which continues to cover the range of dimensions of the Lisbon Strategy as discussed in the text.
- <sup>12</sup> For example, internationally, the United States ranks sixth in the World Economic Forum's 2006 Global Competitiveness Index. It ranks even higher elsewhere, placing first in Professor Michael Porter's 2006 Business Competitiveness Index, first in IMD's World Competitiveness Scorecard 2006 and third in the World Bank's 2006 Doing Business Report.
- <sup>13</sup> We still include Serbia & Montenegro as one entity in this edition of the Lisbon Review, as the data were collected prior to Montenegro's independence. In the future, they will be included as two separate countries.
- <sup>14</sup> As the Lisbon Review 2004 preceded that year's accession of the 10 new member countries, we did not rank them together with the then EU15 countries. Table 1 shows the 2004 ranking among the 24 EU countries included in the 2004 edition as it would have appeared, based on the underlying scores. Cyprus was not included in 2004 for lack of data availability at the time.
- <sup>15</sup> For example, in the most recent analysis on Lisbon policy adoption carried out by the Commission, Italy was ranked 20th in terms of adopting Lisbon Specific EU Directives, among the worst adopters of all 25 countries. In the 2006 Lisbon Scorecard carried out by the Centre for European Reform, Italy was ranked 23rd, faring particularly badly in terms of financial services, regulatory burden, bringing people into the workforce, modernizing social protection and climate change.
- <sup>16</sup> The political instability now being seen in the Czech Republic, Hungary and Poland is particularly worrisome, as continued economic development will be extremely difficult without stable democratic political environments.
- <sup>17</sup> European Commission, 2005.
- <sup>18</sup> Similar Lisbon Diamonds were shown in past editions of the Lisbon Review, although with only the US as a comparator.
- <sup>19</sup> The European Commission report released on 26 September gave Bulgaria and Romania the go-ahead to join in January 2007, but made clear that both countries will need to carry out significant reform programmes and their progress will be carefully monitored with the threat of withholding EU subsidies should they not maintain the momentum of reform. Further, EU countries will have the right to restrict the admission of Romanian and Bulgarian workers for up to seven years. The Commission also made clear that this enlargement will be the last for at least a few years, and that Croatia, which is the next in line, will have to wait until the EU carries out institutional reforms, following the rejection of the EU constitution by French and Dutch voters.
- <sup>20</sup> Serbia & Montenegro were affirmed as potential candidates for EU accession in 2003. However, after a negative assessment on the state of cooperation with the International Criminal Tribunal for Yugoslavia (ICTY), the Commission decided to call off the negotiations at the beginning of May 2006. Following the independence referendum in Montenegro on 21 May 2006, the Commission announced that it intends to submit a proposal for an amended negotiating mandate for a stabilization and association agreement (SAA) with Serbia, once again contingent on cooperation with the ICTY. The Commission will also submit a proposal for a new SAA negotiating mandate for talks with the newly formed Republic of Montenegro.
- <sup>21</sup> It is important to note that Turkey's agricultural sector, which still accounts for about one-third of the workforce, continues to be characterized by significantly lower productivity than in many other European countries, and also lower productivity than in its own industry and services sectors. Further, while Turkey has made important progress on the structural microeconomic issues covered by the Lisbon criteria, it still faces a number of macroeconomic and institutional challenges which need to be met in order to satisfy EU requirements for membership. In particular, although improved compared with its own past performance, the country continues to suffer from fiscal imbalances, high government debt and inflation rates that are high compared to the EU average. It will also need to continue to make progress in the institutional elements of the Copenhagen criteria ensuring human rights and the protection of minorities.
- <sup>22</sup> Monitoring Report on the State of Preparedness for EU Membership of Bulgaria and Romania, European Commission, 2006.
- <sup>23</sup> While this provides an interesting picture of the comparative economic performance according to the Lisbon criteria, the actual preparedness for EU accession will also depend on a number of other factors, not least of which is the ability of the candidate countries to meet the political and institutional reforms required under the Copenhagen criteria.

## Appendix A: The Lisbon Diamonds of Country Performance

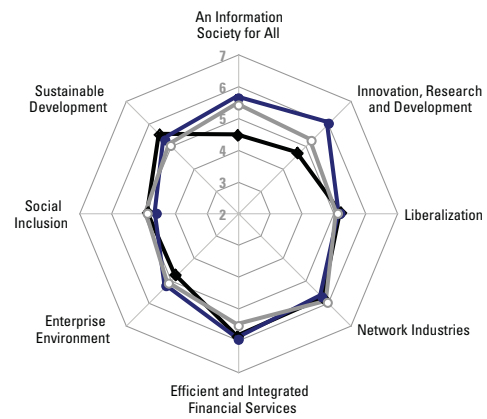
This appendix displays the Lisbon Diamond charts, comparing individual EU country performances, vis-à-vis the US and East Asia benchmarks. As explained in the text, a country with a perfect performance in any of the eight dimensions would have a score of seven, so that the larger a diamond is, the more competitive is the country, as measured by the Lisbon criteria. In each figure, the individual country's performance is represented by a black line, that of the US is in dark blue, and that of East Asia is in grey. Dimensions in which the individual country's line extends further out than that of the US or East Asia indicate areas where the country outperforms these comparators.



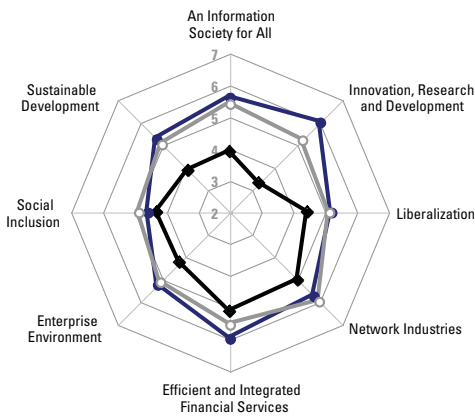
**Figure 1: Country Performance: Austria**



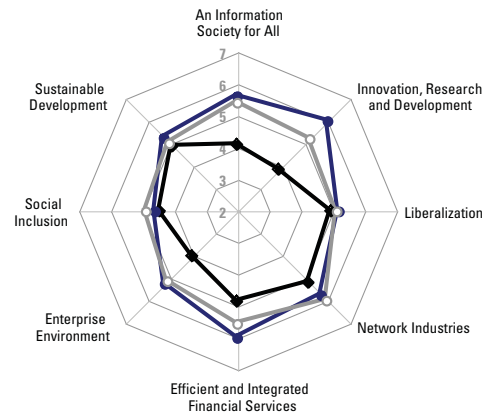
**Figure 2: Country Performance: Belgium**



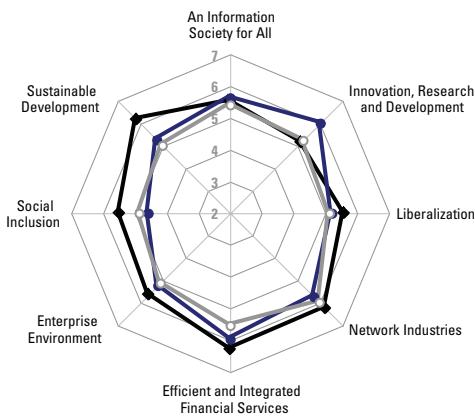
**Figure 3: Country Performance: Cyprus**



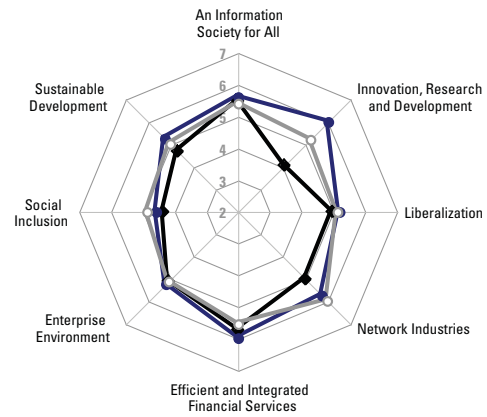
**Figure 4: Country Performance: Czech Republic**



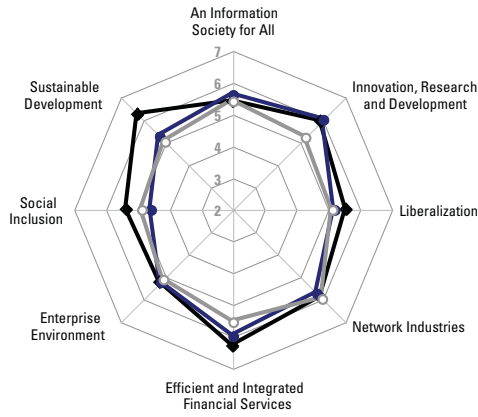
**Figure 5: Country Performance: Denmark**



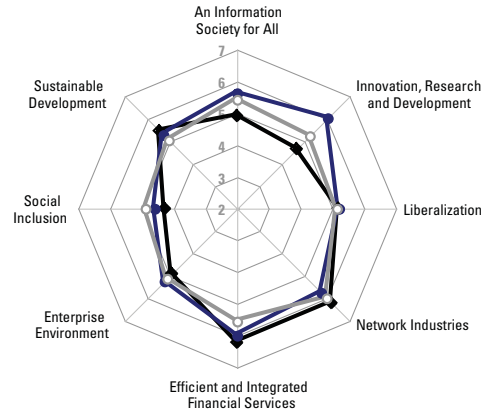
**Figure 6: Country Performance: Estonia**



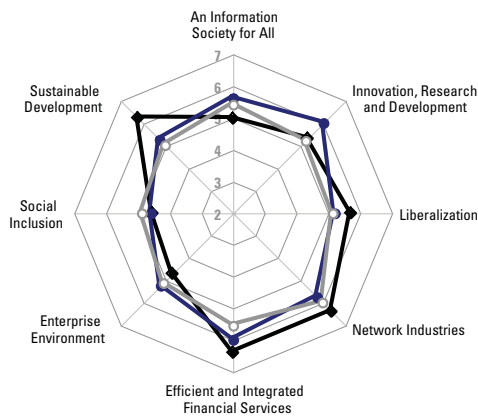
**Figure 7: Country Performance: Finland**



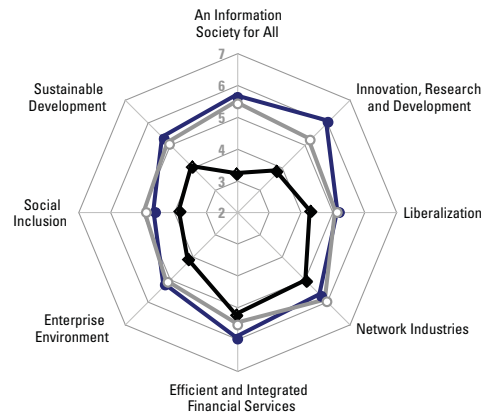
**Figure 8: Country Performance: France**



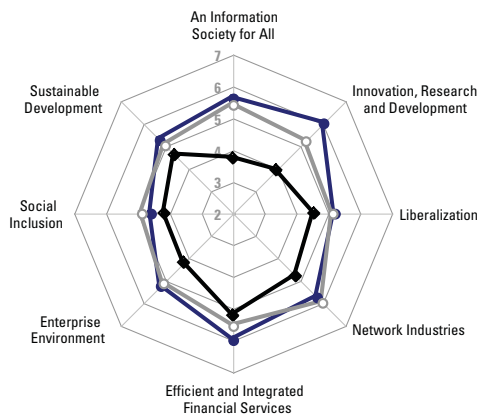
**Figure 9: Country Performance: Germany**



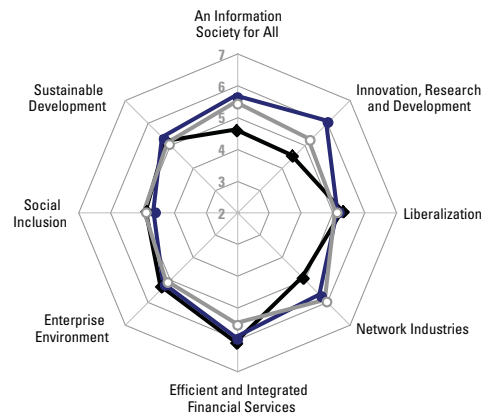
**Figure 10: Country Performance: Greece**



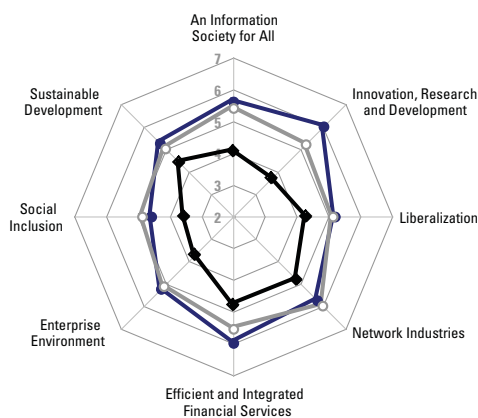
**Figure 11: Country Performance: Hungary**



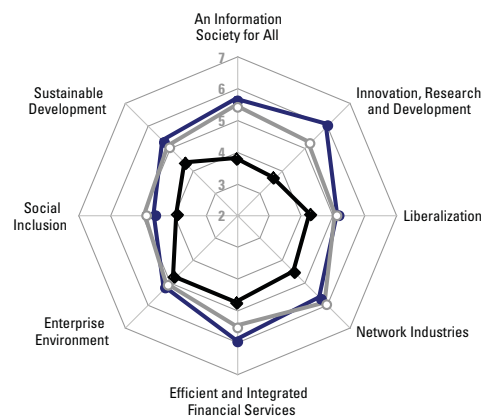
**Figure 12: Country Performance: Ireland**



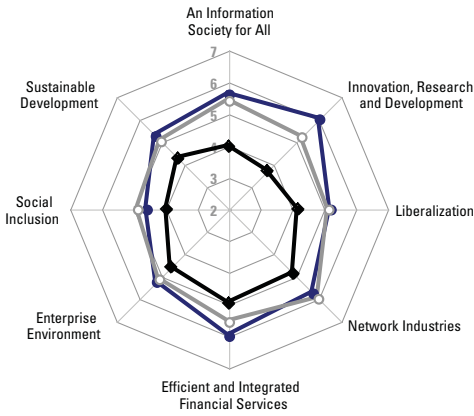
**Figure 13: Country Performance: Italy**



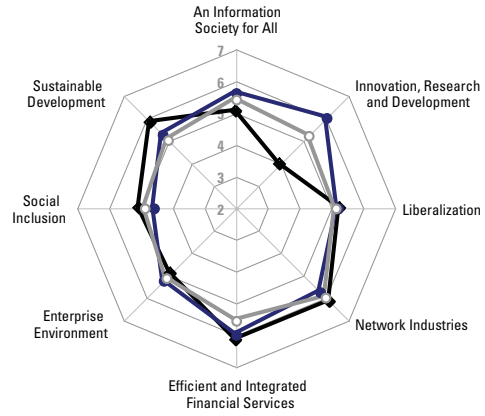
**Figure 14: Country Performance: Latvia**



**Figure 15: Country Performance: Lithuania**



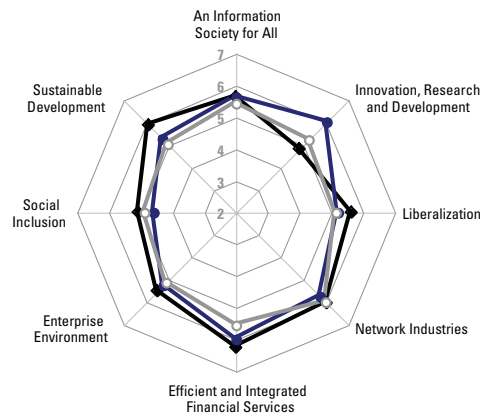
**Figure 16: Country Performance: Luxembourg**



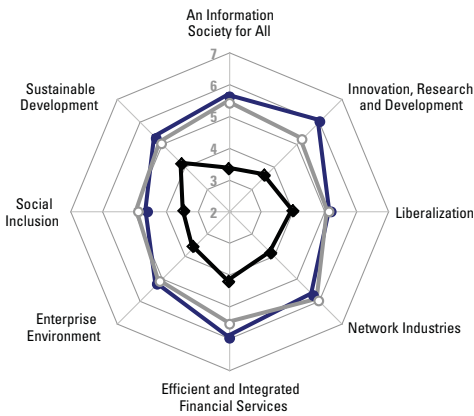
**Figure 17: Country Performance: Malta**



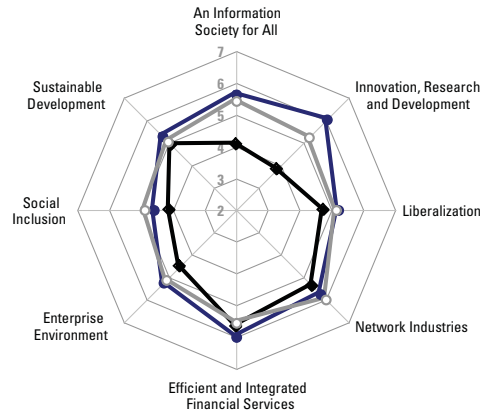
**Figure 18: Country Performance: Netherlands**



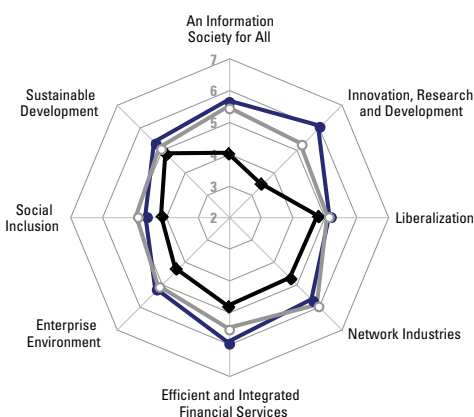
**Figure 19: Country Performance: Poland**



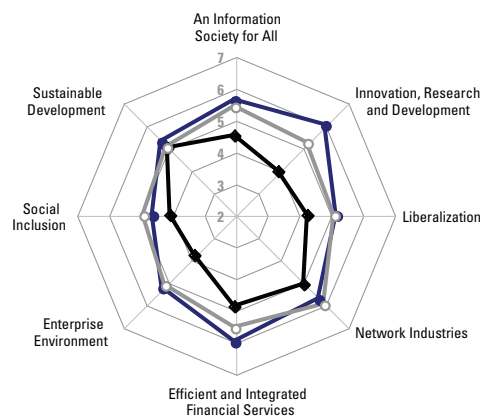
**Figure 20: Country Performance: Portugal**



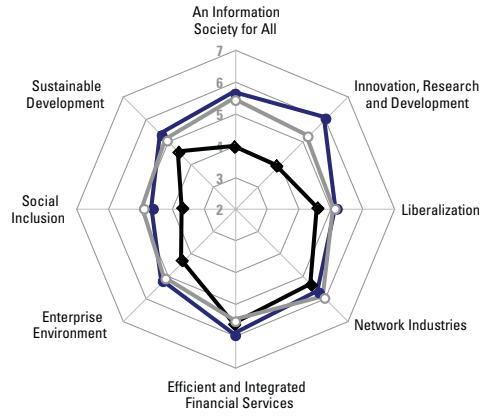
**Figure 21: Country Performance: Slovak Republic**



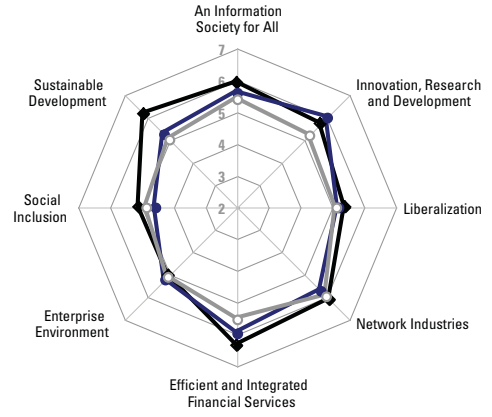
**Figure 22: Country Performance: Slovenia**



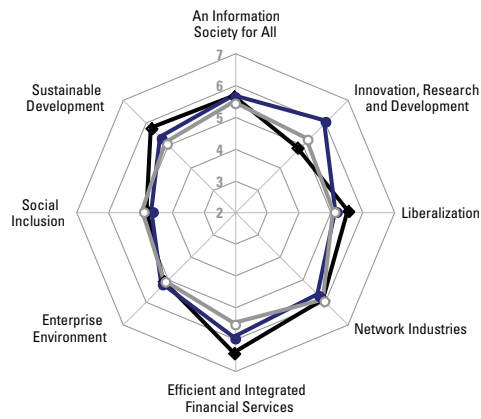
**Figure 23: Country Performance: Spain**



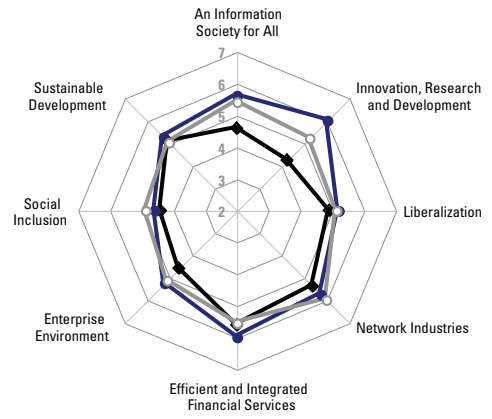
**Figure 24: Country Performance: Sweden**



**Figure 25: Country Performance: United Kingdom**



**Figure 26: Country Performance: EU25 Average**



## Appendix B: Composition and Weighting of the Lisbon Review Index

This appendix provides details on how the Lisbon Review Index is constructed. On the left side are listed the hard and survey data variables used in each of the eight dimensions; on the right side are the specific weightings used to compute the overall index. Please send requests for further information on this index to: [gcp@weforum.org](mailto:gcp@weforum.org).

1. Information Society	1/8
<b>Survey data:</b>	<b>2/3</b>
Information and communication technologies (ICT – computers, Internet, etc.) are an overall priority for the government: 1 = strongly disagree, 7 = strongly agree	
Government programmes promoting the use of ICT are: 1 = not very successful, 7 = highly successful	
In your country, online government services such as personal tax, car registrations, passport applications, business permits and e-procurement are: 1 = not available, 7 = extensively available	
Laws relating to the use of information technology (electronic commerce, digital signatures, consumer protection) are: 1 = non-existent, 7 = well-developed and enforced	
Is there sufficient competition among Internet service providers in your country to ensure high quality, infrequent interruptions and low prices?: 1 = no, 7 = yes, equal to the best in the world	
In your country, companies use the Internet extensively for buying/selling goods and services and for interaction with customers: 1 = strongly disagree, 7 = strongly agree	
Internet access in schools is: 1 = very limited, 7 = extensive - most children have frequent access	
<b>Hard data:</b>	<b>1/3</b>
Internet users per 10,000 inhabitants, 2005 (Source: International Telecommunication Union)	
Personal computers per 100 inhabitants, 2005 (Source: International Telecommunication Union)	
<b>2. Innovation and Research and Development</b>	<b>1/8</b>
<b>Survey data:</b>	<b>2/3</b>
Your country's level of technological readiness: 1 = generally lags behind most other countries, 7 = is among the world leaders	
Companies in your country are: 1 = not able to absorb new technology, 7 = aggressive in absorbing new technology	
Scientific research institutions in your country (e.g. university laboratories, government laboratories) are: 1 = non-existent, 7 = the best in their fields internationally	
Companies in your country: 1 = do not spend money on research and development, 7 = spend heavily on research and development relative to international peers	
In its R&D activity, business collaboration with local universities is: 1 = minimal or non-existent, 7 = intensive and ongoing	
Government purchase decisions for the procurement of advanced technology products are: 1 = based solely on price, 7 = based on technological performance and innovativeness	
Intellectual property protection in your country is: 1 = weak or non-existent, 7 = equal to the world's most stringent	
Companies obtain technology: 1 = exclusively from licensing or imitating foreign companies, 7 = by conducting formal research and pioneering their own new products and processes	
Scientists and engineers in your country are: 1 = non-existent or rare, 7 = widely available	
<b>Hard data:</b>	<b>1/3</b>
US Utility Patents granted per million population, 2005 (Source: USPTO)	
Gross tertiary enrolment rate, most recent available year (Source: UNESCO)	

3. Liberalization	1/8
<b>Completing the Single Market/State Aid and Competition Policy</b>	
<b>Survey data:</b>	
Competition in the local market is: 1 = limited in most industries and price cutting is rare, 7 = intense in most industries as market leadership changes over time	
Local suppliers in your country are: 1 = largely non-existent, 7 = numerous and include the most important materials, components, equipment and services	
The quality of local suppliers in your country is: 1 = poor as they are inefficient and have little technological capability, 7 = very good as they are internationally competitive and assist in new product and process development	
Standards on product/service quality, energy and other regulations (outside environmental regulations) in your country are: 1 = lax or non-existent, 7 = among the world's most stringent	
Anti-monopoly policy in your country is: 1 = lax and not effective at promoting competition, 7 = effective and promotes competition	
Corporate activity in your country is: 1 = dominated by a few business groups, 7 = spread among many firms	
Foreign ownership of companies in your country is: 1 = rare, limited to minority stakes and often prohibited in key sectors, 7 = prevalent and encouraged	
In your country, rules governing foreign direct investment are: 1 = damaging and discourage foreign direct investment, 7 = beneficial and encourage foreign direct investment	
Agricultural policy in your country: 1 = is excessively burdensome for the economy, 7 = balances the interests of taxpayers, consumers and producers	
When deciding upon policies and contracts, government officials: 1 = usually favour well-connected firms and individuals, 7 = are neutral	
In your country, government subsidies and tax breaks seriously distort competition by favouring specific companies, activities, regions or industries: 1 = strongly agree, 7 = strongly disagree	
<b>4. Network Industries</b>	<b>1/8</b>
Telecoms	1/2
<b>Survey data:</b>	<b>1/2</b>
New telephone lines for your business are: 1 = scarce and difficult to obtain, 7 = widely available and highly reliable	
Mobile or cellular telephones for your business are: 1 = not available, 7 = as accessible and affordable as in the world's most technologically advanced countries	
<b>Hard data:</b>	<b>1/2</b>
Cellular mobile subscribers per 100 inhabitants, 2005 (Source: International Telecommunication Union)	
Main telephone lines per 100 inhabitants, 2005 (Source: International Telecommunication Union)	
Utilities and Transport	1/2
<b>Survey data:</b>	
General infrastructure in your country is: 1 = underdeveloped, 7 = as extensive and efficient as the world's best	
Roads in your country are: 1 = underdeveloped, 7 = as extensive and efficient as the world's best	
Railroads in your country are: 1 = underdeveloped, 7 = as extensive and efficient as the world's best	
Passenger air transport in your country is: 1 = infrequent and inefficient, 7 = as frequent, extensive and efficient as the world's best	
The quality of electricity supply in your country (lack of interruptions and lack of voltage fluctuations) is: 1 = worse than most other countries, 7 = meets the highest standards in the world	

5. Financial Services	1/8
<b>Survey data:</b>	
Property rights, including over financial assets are: 1 = poorly defined and not protected by law, 7 = clearly defined and well protected by law	
The level of sophistication of financial markets in your country is: 1 = lower than international norms, 7 = higher than international norms	
Banks in your country are: 1 = insolvent and may require government bailout, 7 = generally healthy with sound balance sheets	
Raising money by issuing shares on the local stock market is: 1 = nearly impossible, 7 = quite possible for a good company	
Financial auditing and reporting standards regarding company financial performance in your country are: 1 = extremely weak, 7 = extremely strong - the best in the world	
Money laundering through the formal banking system in your country is: 1 = pervasive, 7 = extremely rare	

6. Enterprise	1/8
Business Start-up Environment	1/2
<b>Survey data:</b>	
Starting a new business in your country is generally: 1 = extremely difficult, 7 = easy	
How easy is it to obtain a bank loan in your country with only a good business plan and no collateral? 1 = impossible, 7 = easy	
Entrepreneurs with innovative but risky projects can generally find venture capital in your country: 1 = not true, 7 = true	
<b>Hard data:</b>	
Number of administrative procedures to start a business, 2006 (Source: Doing Business, World Bank website)	1/2
Number of days required to register a business, 2006 (Source: Doing Business, World Bank website)	
Regulatory Environment	1/2
<b>Survey data:</b>	
Complying with administrative requirements (permits, regulations, reporting) issued by the government in your country is: 1 = burdensome, 7 = not burdensome	
The level of taxes in your country: 1 = significantly limits the incentives to work or invest, 7 = has little impact on the incentives to work or invest	
Are firms in your country usually informed clearly by the government on changes in policies and regulations affecting your industry?: 1 = never informed, 7 = always informed	
<b>Hard data:</b>	
Number of procedures required to resolve a contract dispute, 2006 (Source: Doing Business, World Bank website)	1/2
Number of days required to resolve a contract dispute, 2006 (Source: Doing Business, World Bank website)	

7. Social Inclusion	1/8
Bringing People Back to Workforce	1/3
<b>Survey data:</b>	
Pay in your country is: 1 = not related to worker productivity, 7 = strongly related to worker productivity	2/3
In your country, for similar work, wages for women are: 1 = significantly below those of men, 7 = equal to those of men	
In your country, government-provided childcare is: 1 = non-existent or very limited, 7 = widely accessible	
<b>Hard data:</b>	
Unemployment rate, 2005 (Source: Economist Intelligence Unit and national sources)	1/3
Upgrading Skills	1/3
<b>Survey data:</b>	
The educational system in your country: 1 = does not meet the needs of a competitive economy, 7 = meets the needs of a competitive economy	
The public (free) schools in your country are: 1 = of poor quality, 7 = equal to the best in the world	
Math and science education in your country's schools: 1 = lag far behind most other countries, 7 = are among the best in the world	
Your country's talented people: 1 = normally leave to pursue opportunities in other countries, 7 = almost always remain in the country	
The general approach of companies in your country to human resources is: 1 = to invest little in training and employee development, 7 = to invest heavily to attract, train and retain employees	
Modernizing Social Protection	1/3
<b>Survey data:</b>	
In your country, the government's efforts to reduce poverty and address income inequality are: 1 = ineffective, 7 = effective	

8. Sustainable Development	1/8
<b>Survey data:</b>	
How stringent is your country's environmental regulation? 1 = lax compared to most countries, 7 = among the world's most stringent	
Environmental regulations in your country are: 1 = confusing and enforced erratically, 7 = stable and enforced consistently and fairly	
In your country, companies that harvest or process natural resources such as food, forest or fishery products: 1 = rarely concern themselves with the degradation of ecosystems, 7 = frequently take steps to preserve the ecosystems they depend on	

Note: The hard data must be normalized to a 1-7 scale in order to blend it with the Survey data. The normalization is performed using the following standard formula:

$$6 \times (\text{country value} - \text{sample minimum}) / (\text{sample maximum} - \text{sample minimum}) + 1$$

*The Lisbon Review 2006 is published by the World Economic Forum within the framework of the Global Competitiveness Network.*

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