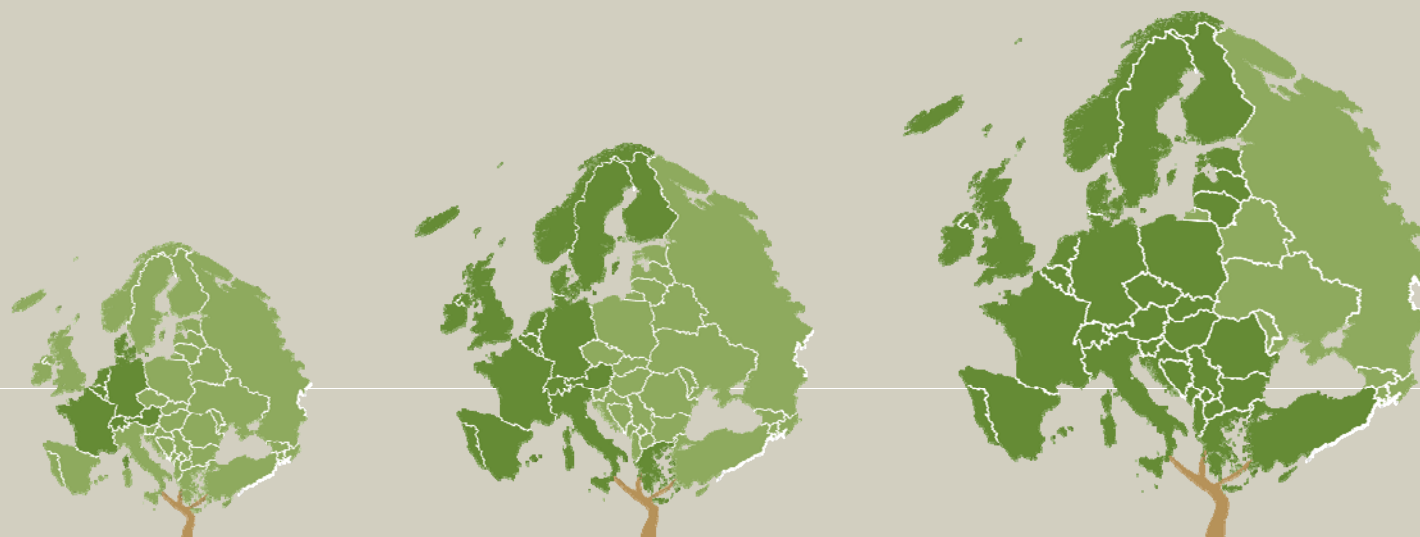


Golden Growth

Restoring the Lustre of the
European Economic Model



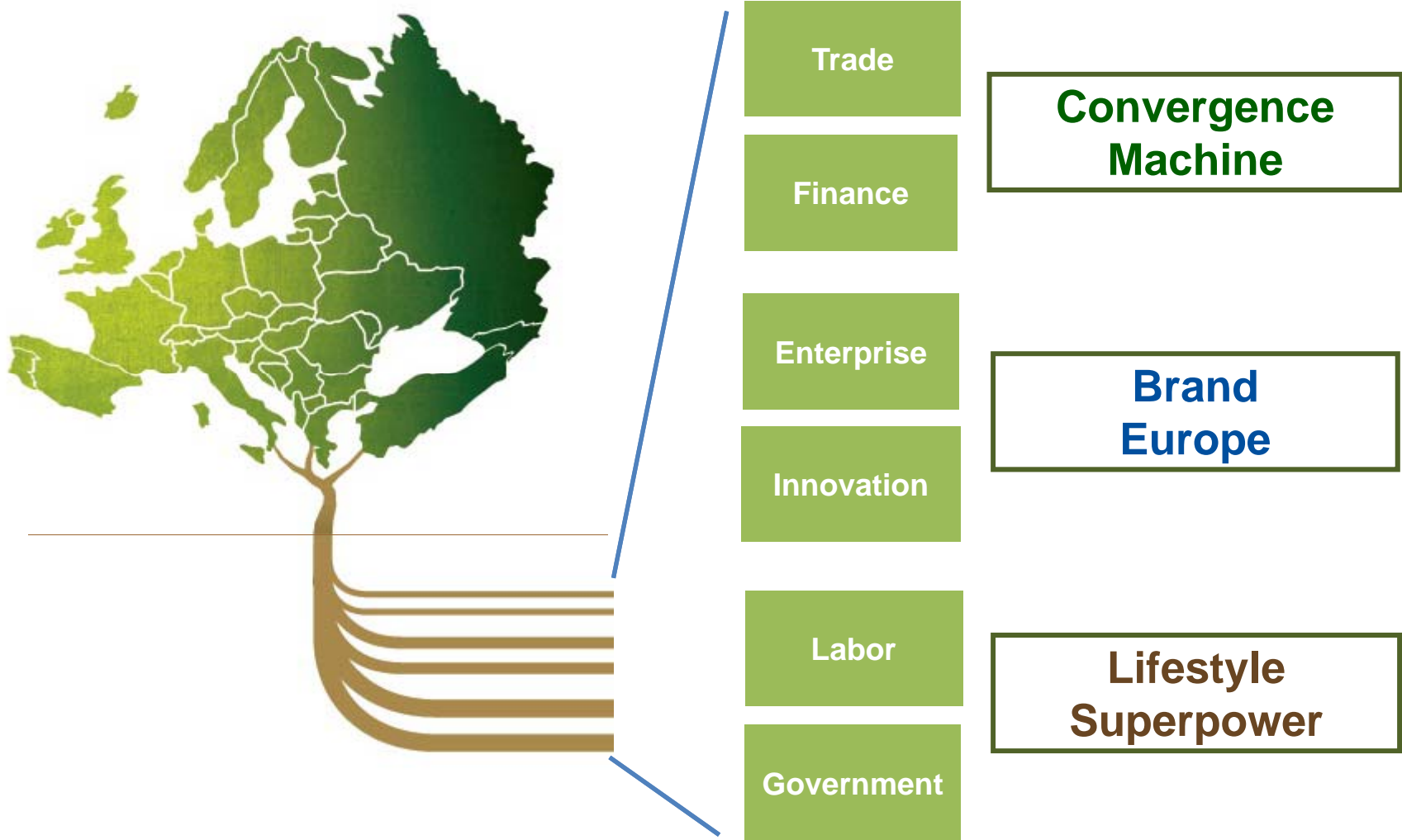
THE WORLD BANK

Available at
WWW.WORLDBANK.ORG/GOLDENGROWTH

The European Economic Model



The achievements



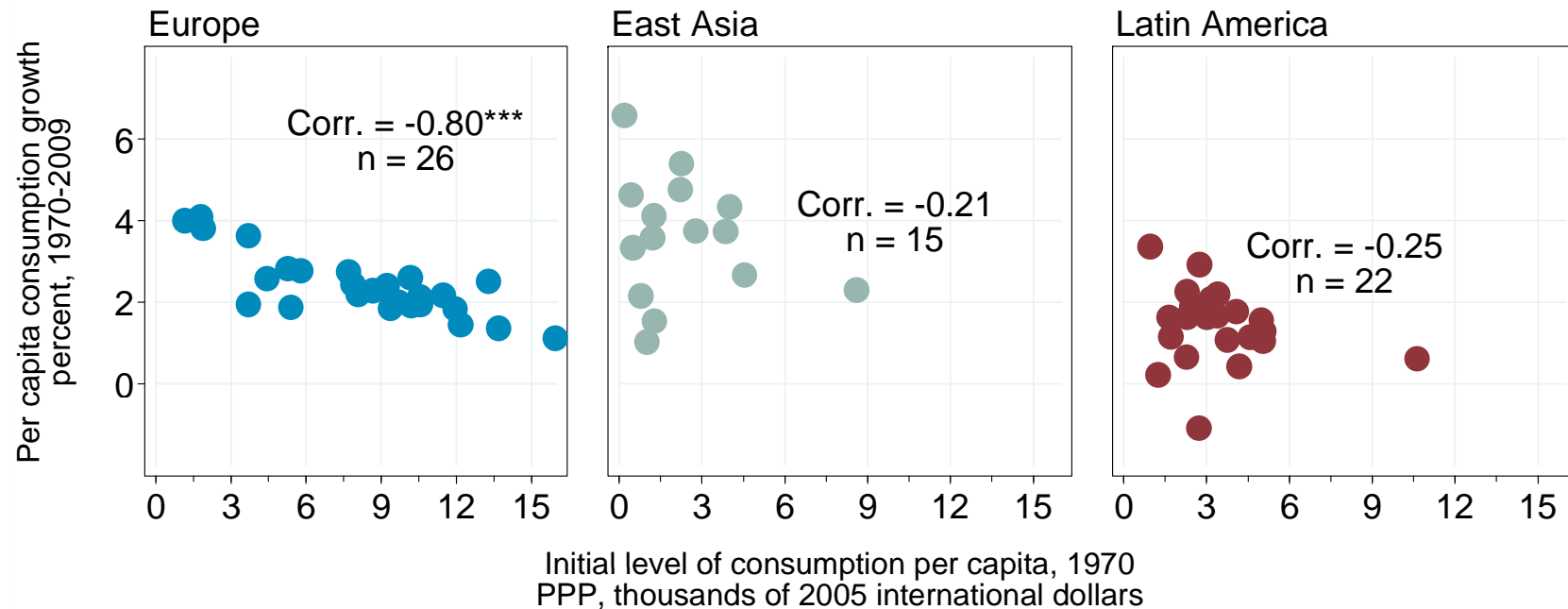


Europe—“Convergence Machine”

The European convergence machine



Figure 1: In Europe, a rapid convergence in living standards—not much elsewhere
(growth of consumption per capita between 1970 and 2009, by level of consumption in 1970)

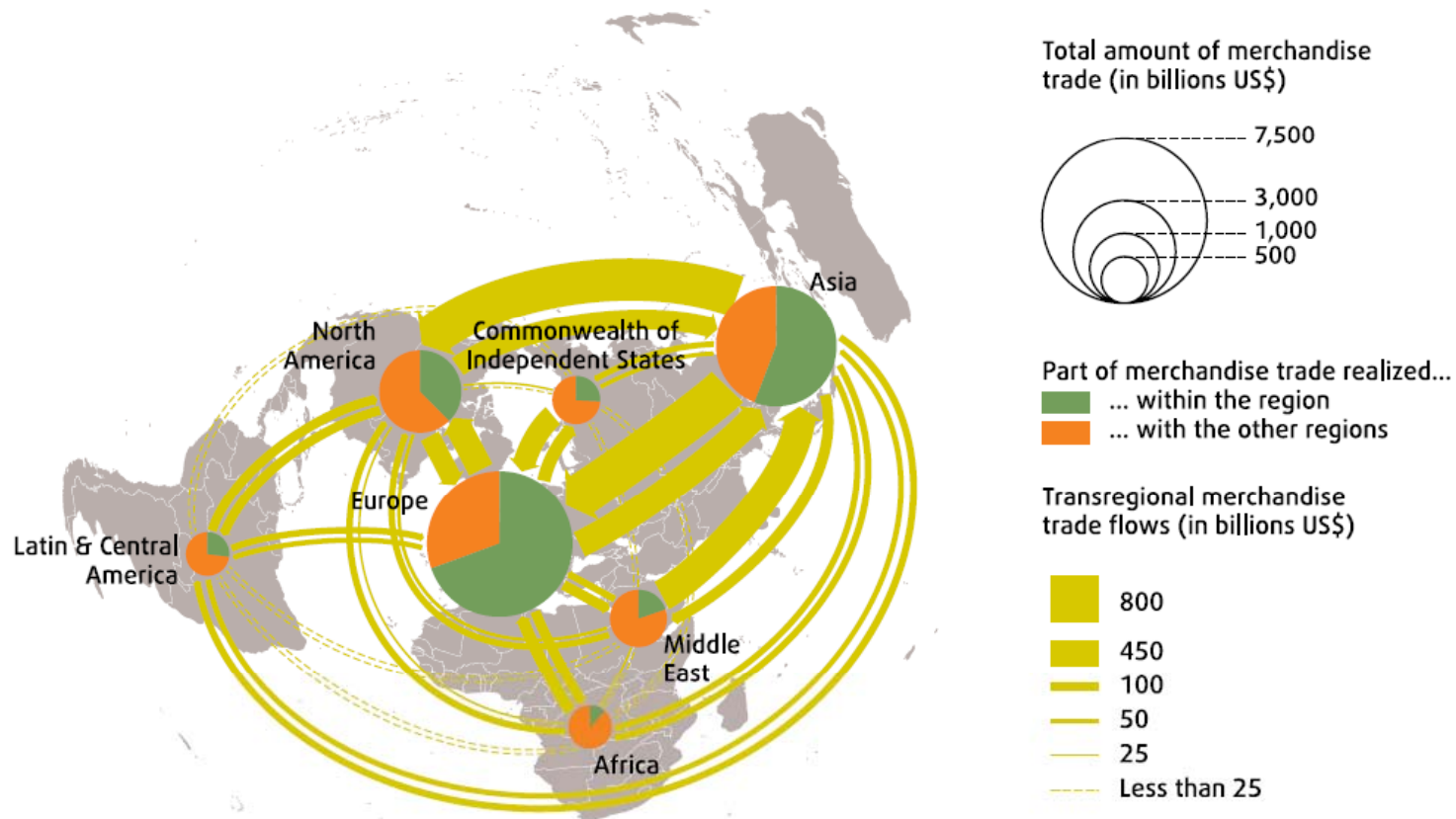


Source: World Bank staff calculations based on Heston et. al. (2011); n=number of countries. See **Chapter 1** for details.

Trade (goods)



Figure 2: Almost half of the global goods trade involves Europe
(merchandise trade in 2008, US\$ billion)



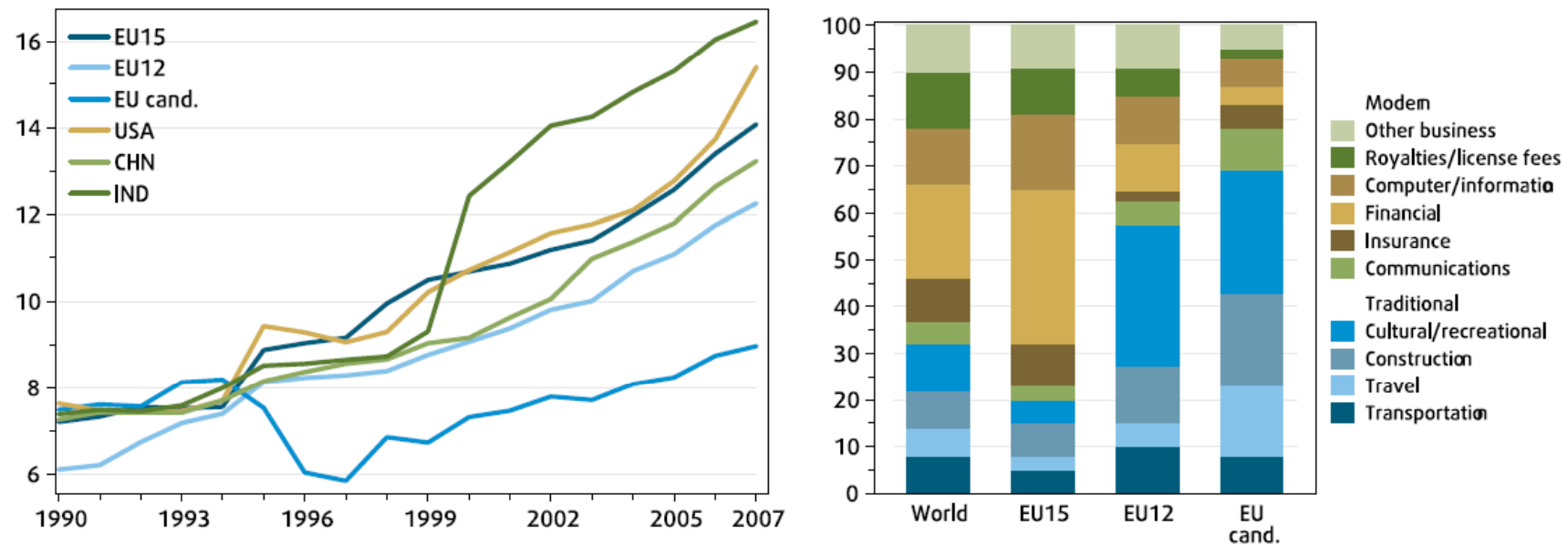
Source: World Bank staff, based on WTO (2009); see **Chapter 2**.

Trade (services)



Figure 2.19: India and the United States have more sophisticated services exports than the European Union members and candidates

(Service EXPY, 1990–2007, and shares in service exports, 2007)



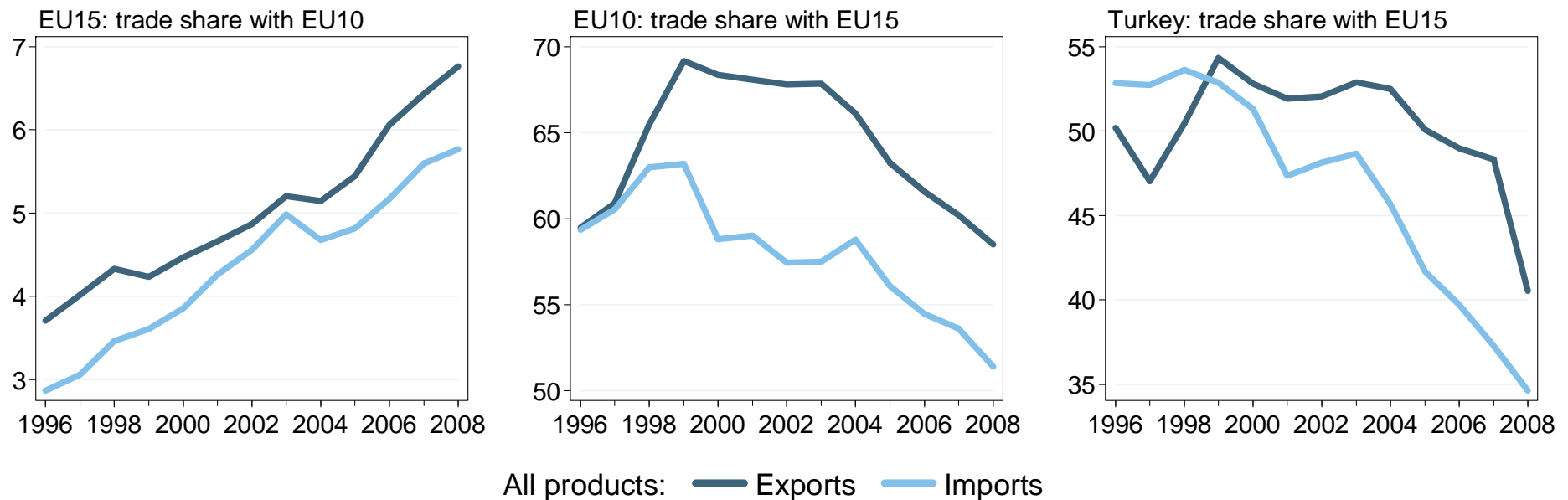
Note: In the right panel, traditional services are in blue shades, modern in yellow and brown.

Source: Lundstrom Gable and Mishra (2011), using IMF Balance of Payments data. See **Chapter 2**.

New members'—and Turkey's—trade has become more diversified



Figure 2.3: The European Union's new members (and Turkey) are more important partners for the EU15, the EU15 less for the new members and Turkey
(shares of regional trade for EU15 and 2004 entrants, 1996–2008)



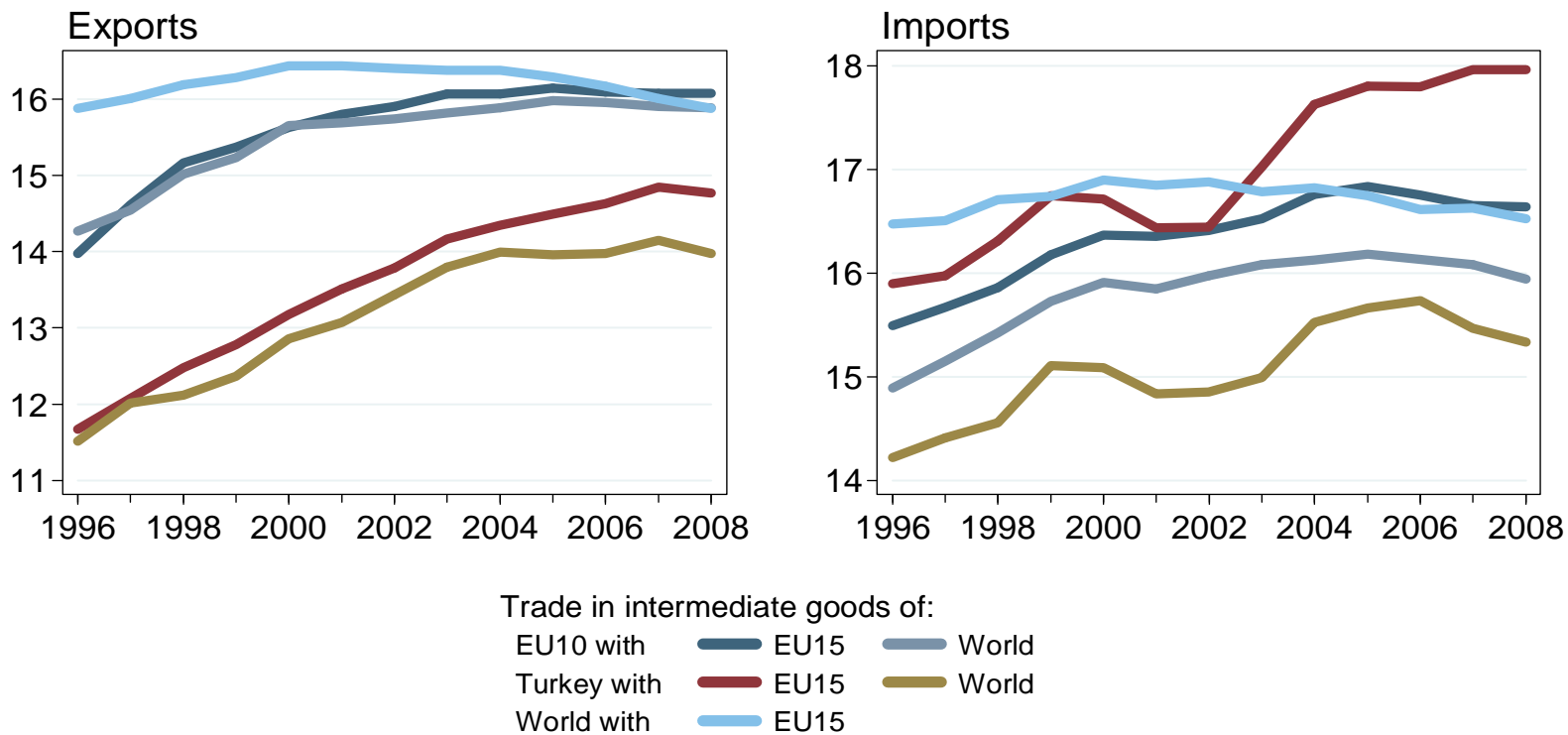
Note: The EU10 includes the EU12 countries, except Cyprus and Malta. See **Chapter 2** for details.

Source: World Bank staff, using UN Comtrade, World Development Indicators, and Broad Economic Categories nomenclature.

Factory Europe has become brainier



Figure 2.9: Advanced and emerging Europe are trading more sophisticated intermediate goods
(EXPY for intermediate goods, thousands of US\$, 1996–2008)

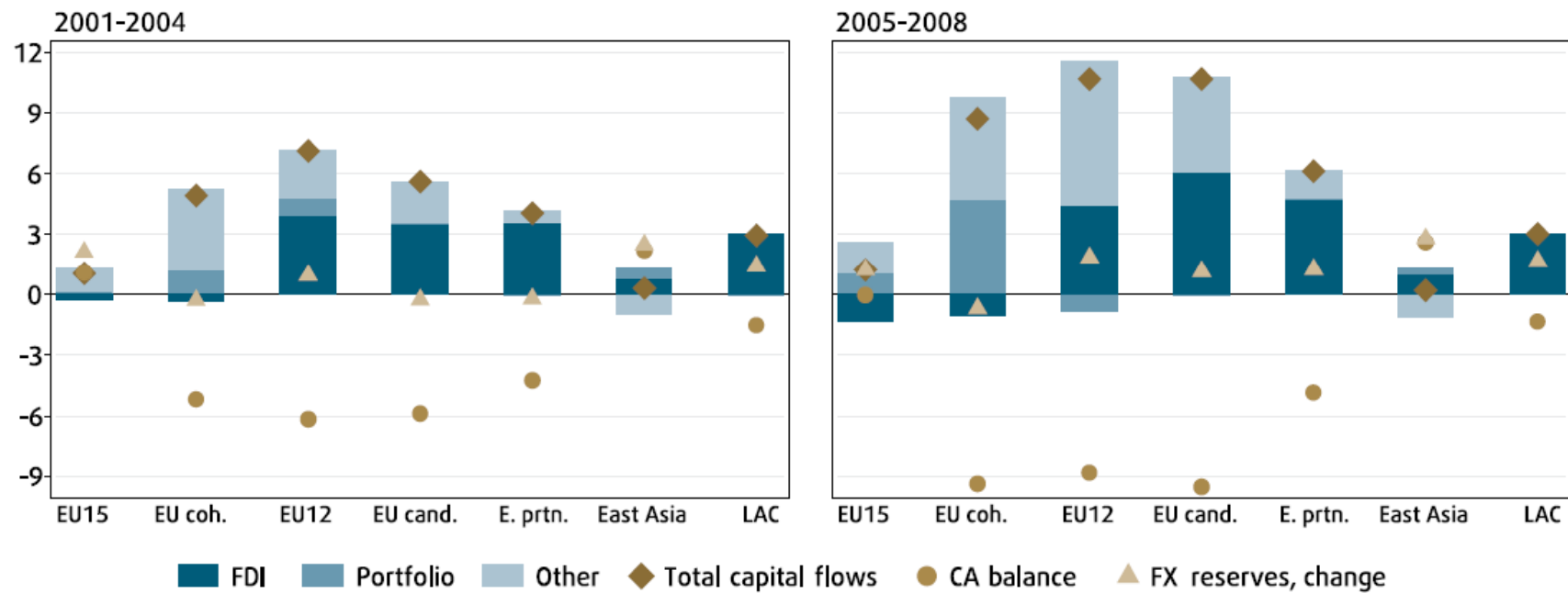


Source: World Bank staff, using UN Comtrade, World Development Indicators, and Broad Economic Categories nomenclature. See **Chapter 2**.

Financial integration



Figure 3.2: Capital flows in emerging Europe are large
(percentage of GDP; period average of group median values)



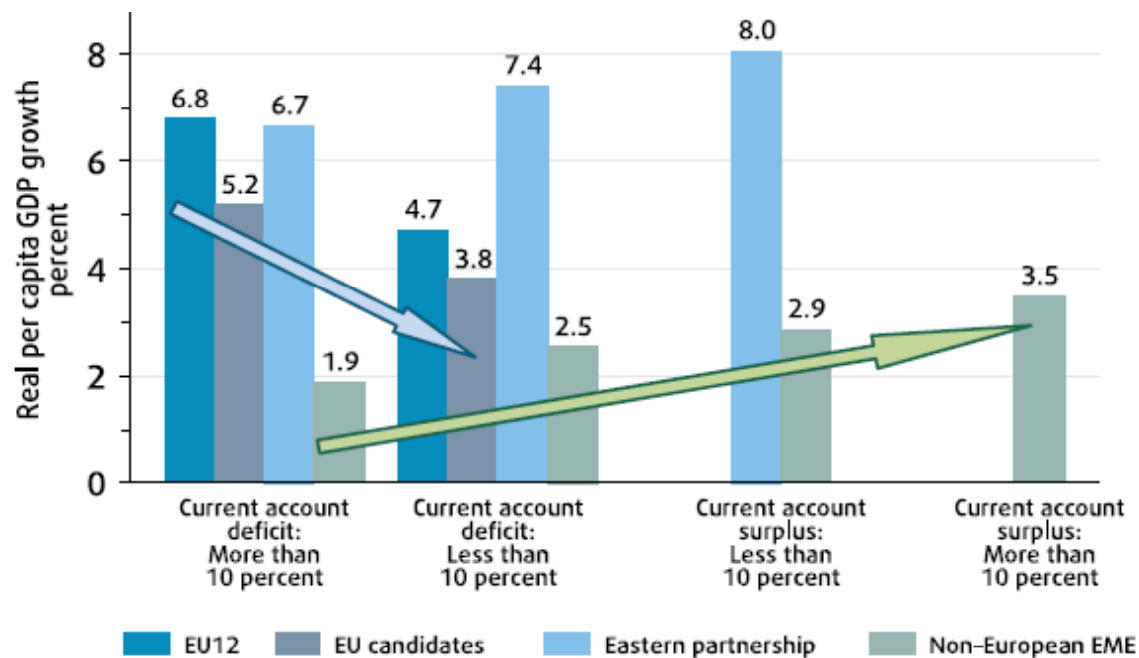
Note: "EU coh." refers to the EU cohesion countries; "EU cand." refers to EU candidate countries; "E. prtn." refers to EU eastern partnership; LAC refers to the Latin America and the Caribbean region. CA stands for current account and FX is foreign exchange.

Source: IMF 2011c; authors' calculations. See **Chapter 3**.

Financial flows have helped in emerging Europe



Figure 4: In Europe, foreign capital has boosted growth in emerging economies
(current account deficits and per capita growth, by groups of countries, percent)



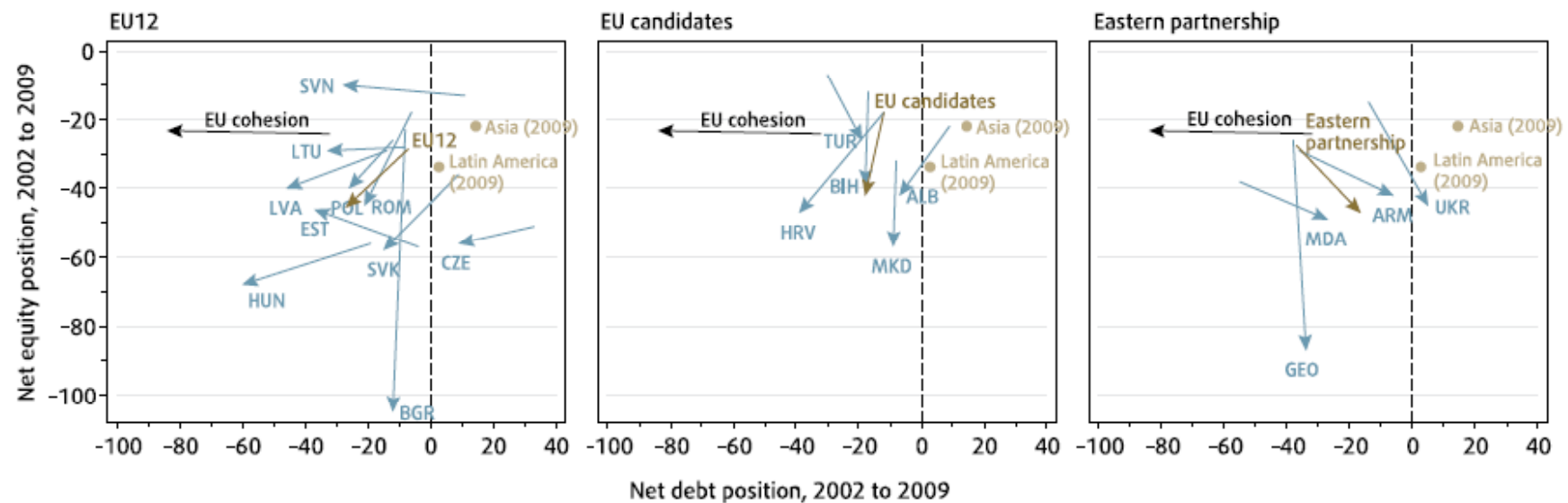
Note: Average growth rates calculated using 3 four-year periods in 1997–2008.

Source: World Bank staff calculations based on IMF World Economic Outlook; see **Chapter 3**.

More equity flows to the east, more debt in the south



Figure 3.14: Greater debt exposure in Southern Europe, more equity exposure in the east
 (aggregate external net equity and net debt exposures, percentage of GDP, 2002–09)



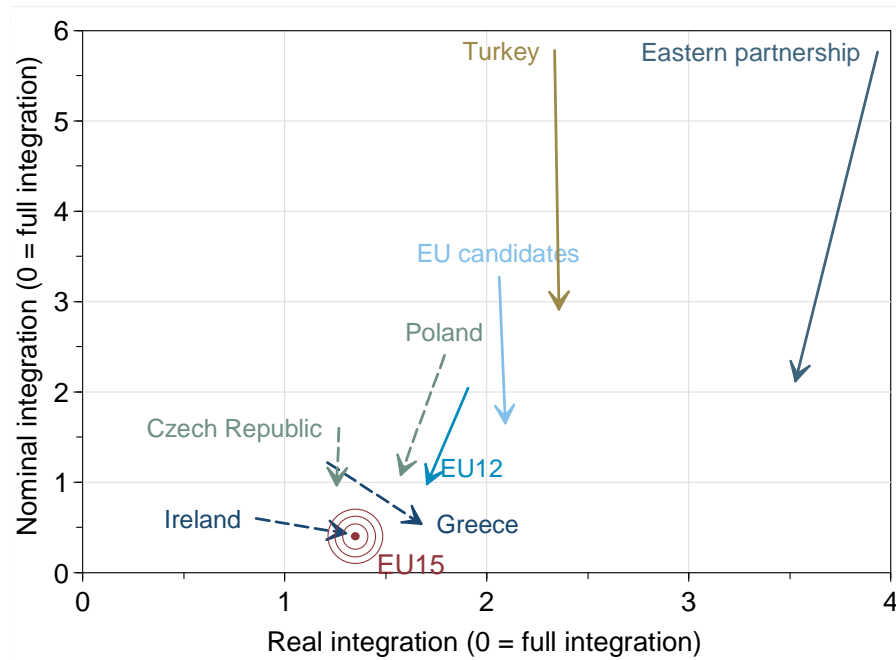
Note: Arrows begin in 2002 and end in 2009. The arrows for each region are median values. The dot is the median value for the referenced group. Ireland is excluded from net debt position (see note for figure 3.13).

Source: Updated and extended version of dataset constructed by Lane and Milesi-Ferretti 2007; authors' calculations. See **Chapter 3**.

Needed: real integration



Box figure 1: More monetary and financial than real integration in Europe during the last decade
(arrows begin in 1997 and end in 2008; the origin indicates complete nominal and real integration)



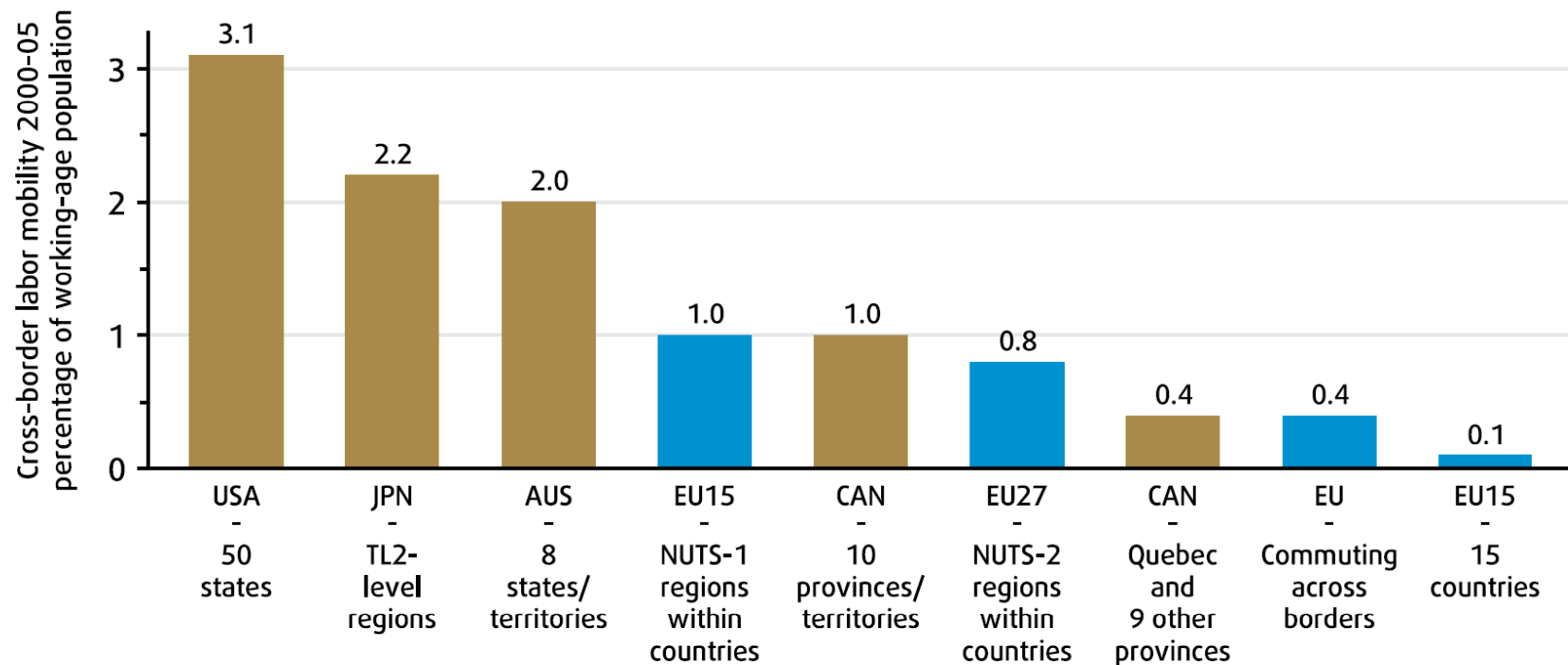
Note: The figure shows the extent of economic integration, using the theory of optimum currency areas (Mundell 1961). The vertical axis combines in one index of dissimilarity three indicators of nominal integration—volatility of exchange rates, convergence in inflation rates, and convergence in interest rates. The horizontal axis does the same with three indicators of real integration—extent of synchronization in business cycles measured by indexes of industrial production, trade integration, and per capita income. The origin in the figure represents perfect economic integration, and the arrows show the integration path of each country or group of countries in 1997–2008.

Source: Sugawara and Zaldueño 2010.

European workers are less mobile



Figure 15: Europeans are less mobile, even within their own countries
(labor mobility, share of working age population that has moved, 2000-2005)



Source: World Bank staff calculations, based on Eurobarometer (2005), U.S. Census Current Population Survey, Eurostat, Statistics Canada and OECD (2005); see **Chapter 6**.



“Europe”—Global Brand

The making of “Brand Europe”



Table 1: Relentless growth in the United States, revival in Asia, and a postwar miracle in Europe
(average annual compound growth rates, 1820–2008, US\$ 1990 Geary-Khamis PPP estimates)

Year	Western Europe	Southern Europe	Eastern Europe	Former Soviet Union	United States	Japan	East Asia	Latin America
1820–1970	1.0	0.6	0.6	0.6	1.3	0.2	-0.1	0.0
1870–1913	1.3	1.0	1.4	1.0	1.8	1.4	0.8	1.8
1913–1950	0.8	0.4	0.6	1.7	1.6	0.9	-0.2	1.4
1950–1973	3.8	4.5	3.6	3.2	2.3	7.7	2.3	2.5
1973–1994	1.7	1.9	-0.2	-1.6	1.7	2.5	0.3	0.9
1994–2008	1.6	2.7	4.0	4.2	1.7	1.0	3.9	1.6

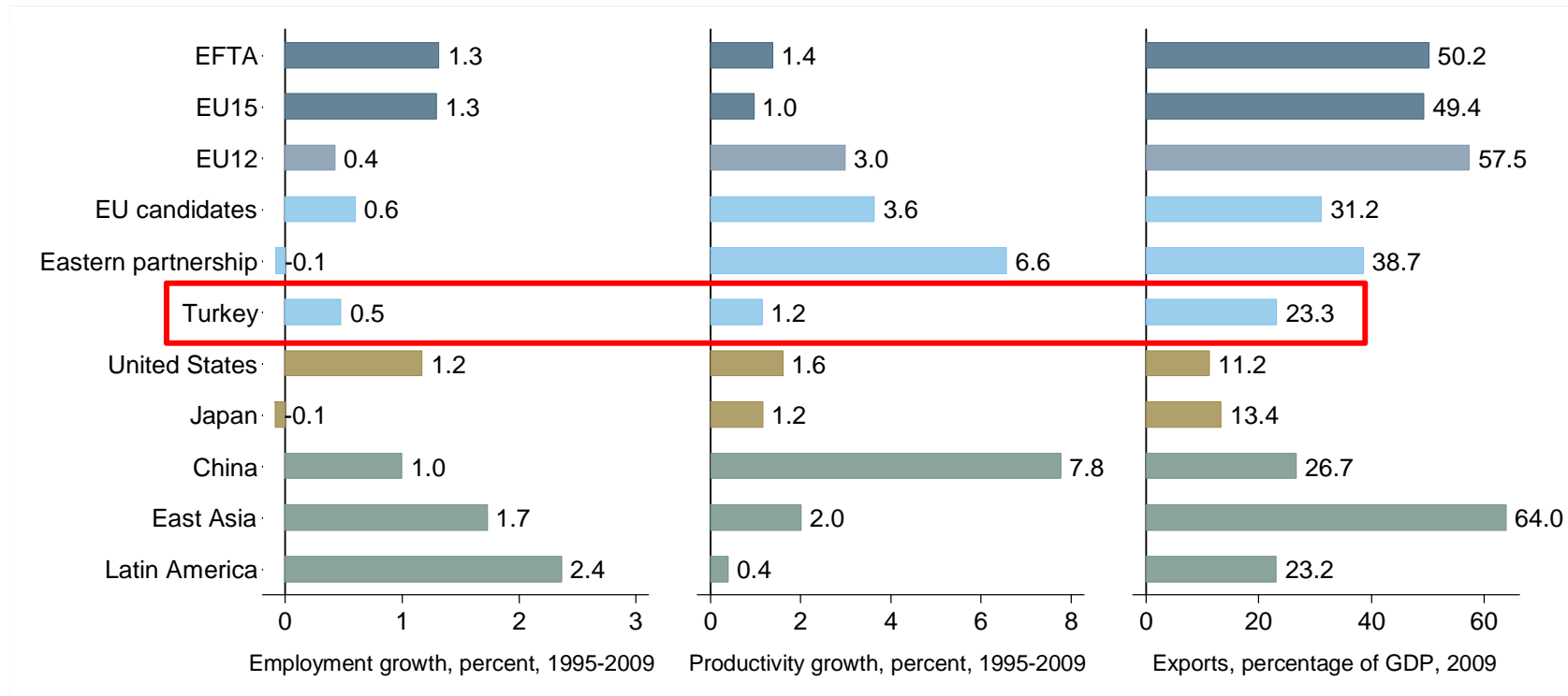
Note: Regional aggregates are population weighted. See **Spotlight One** for details.

Source: Maddison 1996; Groningen Growth and Development Centre and The Conference Board (2011) Total Economy Database.

Jobs, productivity and exports



Figure 5: European enterprises have delivered jobs, productivity, and exports
(performance of European sub-regions and benchmark countries, 1995–2009)



Note: Growth rates in employment and productivity are compound annual growth rates. Average values by group are shown. China and Japan are also included in the calculation of East Asia regional average.

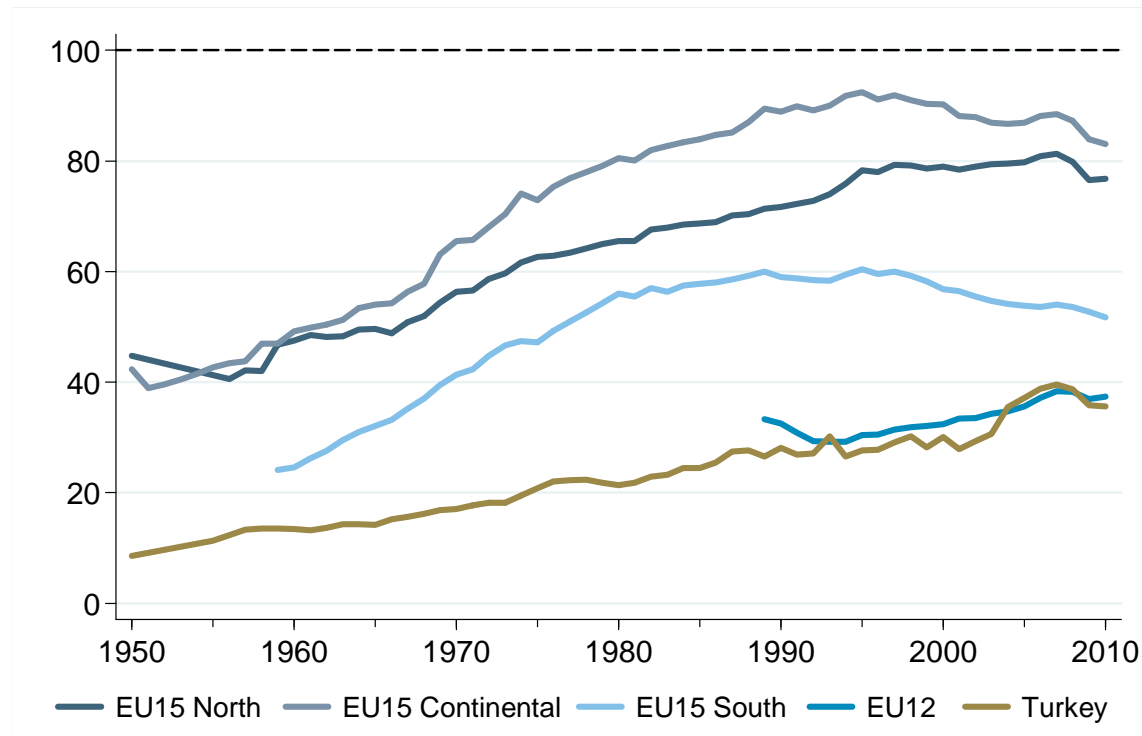
Source: World Bank staff calculations, based on World Bank (2011) and ILO (2011); see **Chapter 4** for details.

Two productivity gaps



Figure 5.1: Gap 1: North vs. South; Gap 2: EU vs. US

(GDP per hours worked in Geary/Khamis \$, United States =100)



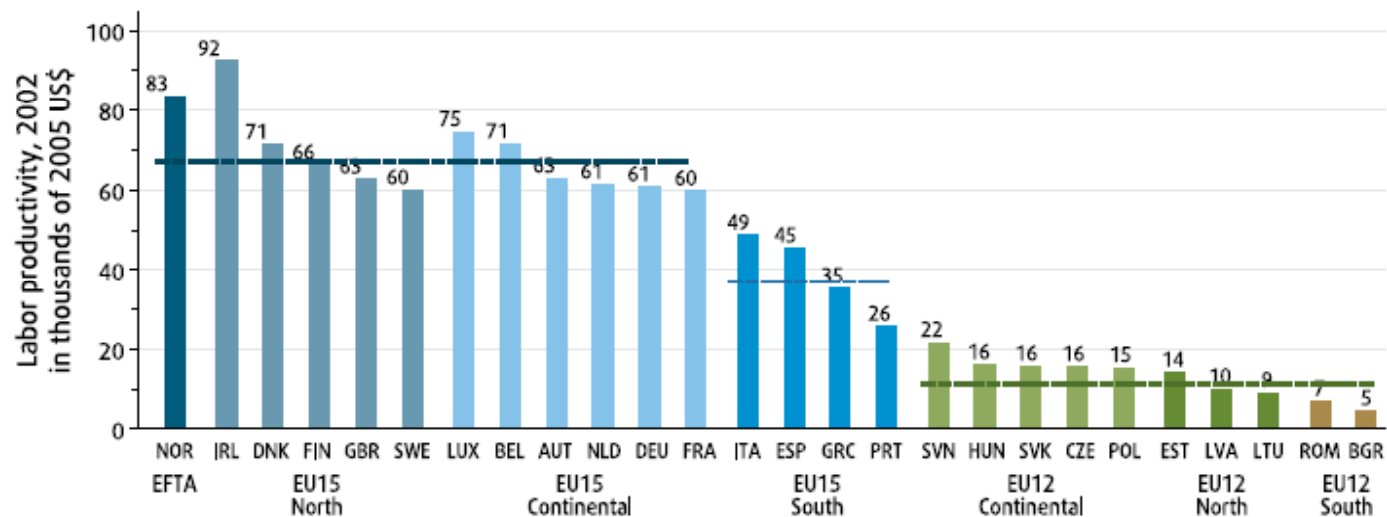
Note: EU15 North = Denmark, Finland, Sweden, and the United Kingdom; EU15 Continental = Austria, Belgium, France, Germany, and the Netherlands; EU15 South = Greece, Italy, Portugal, and Spain.

Source: World Bank staff calculations based on Conference Board 2011., See **Chapter 5**.

Productivity levels differ in Europe— as expected



Figure 6a: Productivity levels were lower in the south, lower still in the east
(productivity levels in 2002, thousands of 2005 US\$)



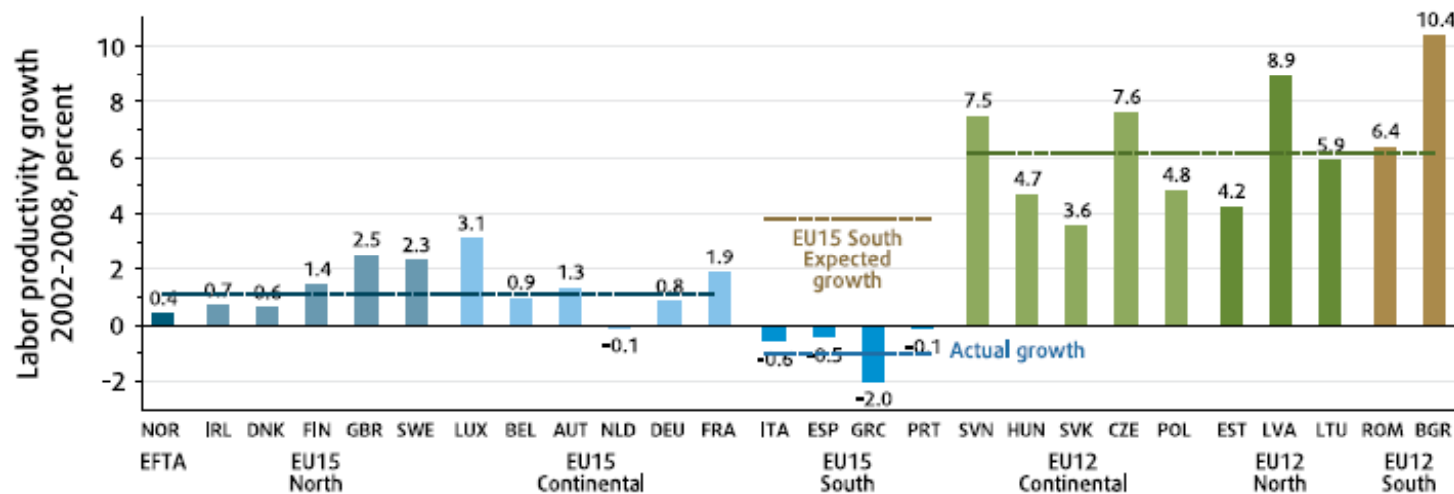
Note: For Belgium, Greece, and Norway, productivity levels refer to 2003 (top panel). In the bottom panel, the period considered varies: Belgium and Norway (2003–08), Greece (2003–07), and Czech Republic, France, Latvia, Romania, and the United Kingdom (2002–07). The three lines in each panel show average values for countries covered by each line. Expected growth for EU15 South is obtained by computing gaps in productivity levels between EU15 South and each of the other two groups and then applying these shares to the difference in growth between the first (that is., EFTA, EU15 North, and EU15 Continental) and the third (EU12) groups.

Source: World Bank staff calculations, based on Eurostat structural business statistics; see **Chapter 4**.

Productivity growth—not exactly what was expected



Figure 6b: Much of Europe is becoming more productive, but the south has fallen behind
(labor productivity growth, 2002–08, annual percentage increase)



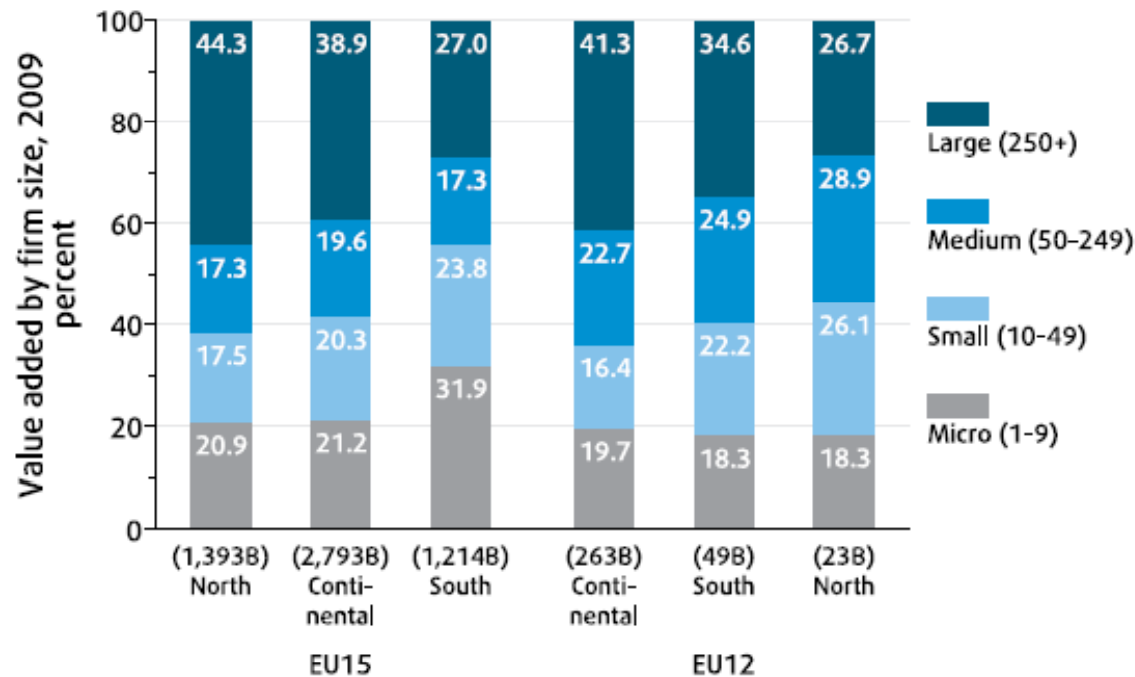
Note: For Belgium, Greece, and Norway, productivity levels refer to 2003 (top panel). In the bottom panel, the period considered varies: Belgium and Norway (2003–08), Greece (2003–07), and Czech Republic, France, Latvia, Romania, and the United Kingdom (2002–07). The three lines in each panel show average values for countries covered by each line. Expected growth for EU15 South is obtained by computing gaps in productivity levels between EU15 South and each of the other two groups and then applying these shares to the difference in growth between the first (that is., EFTA, EU15 North, and EU15 Continental) and the third (EU12) groups.

Source: World Bank staff calculations, based on Eurostat structural business statistics; see **Chapter 4**.

Entrepreneurial structures must be suitable for a big market



Figure 7: Smaller firms contribute half of value added in the EU15 South, a third elsewhere
(contributions to value added by size of enterprises, 2009)



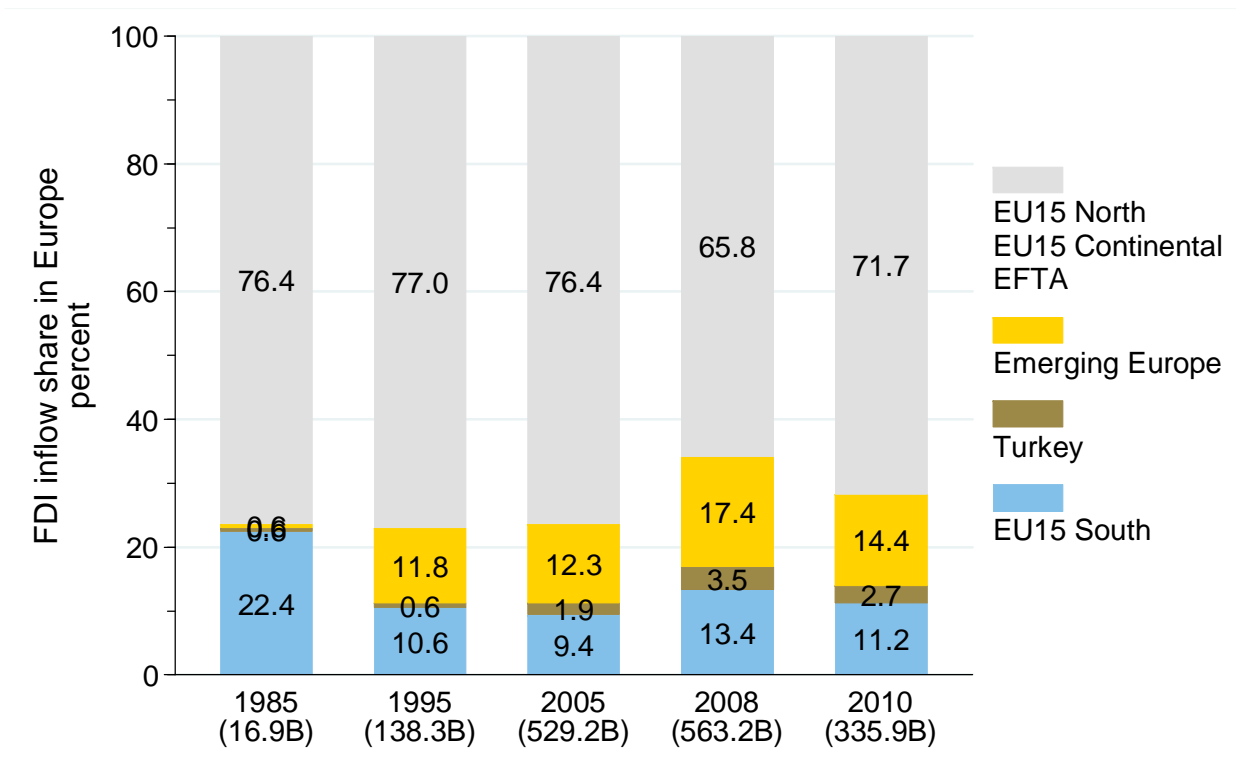
Note: The numbers in parentheses are the total value added expressed in billions of constant 2005 U.S. dollars. The EU15 comprises Denmark, Finland, Ireland, Sweden, and the United Kingdom (North); Austria, Belgium, France, Germany, Luxembourg and the Netherlands (Continental); and Greece, Italy, Portugal, and Spain (South). EU12 comprises Estonia, Latvia, and Lithuania (North); the Czech Republic, Hungary, Poland, the Slovak Republic, and Slovenia (Continental); and Bulgaria, Cyprus, and Romania (South).

Source: World Bank staff calculations, based on Eurostat structural business statistics; see **Chapter 4**.

FDI has turned eastward, away from the south



Figure 8: Western European investors have been looking east
 (foreign direct investment inflows in Europe, percent, 1985, 1995, 2005, 2008, and 2010)



Note: The numbers in parentheses are the amount of inflows expressed in billions of US dollars.

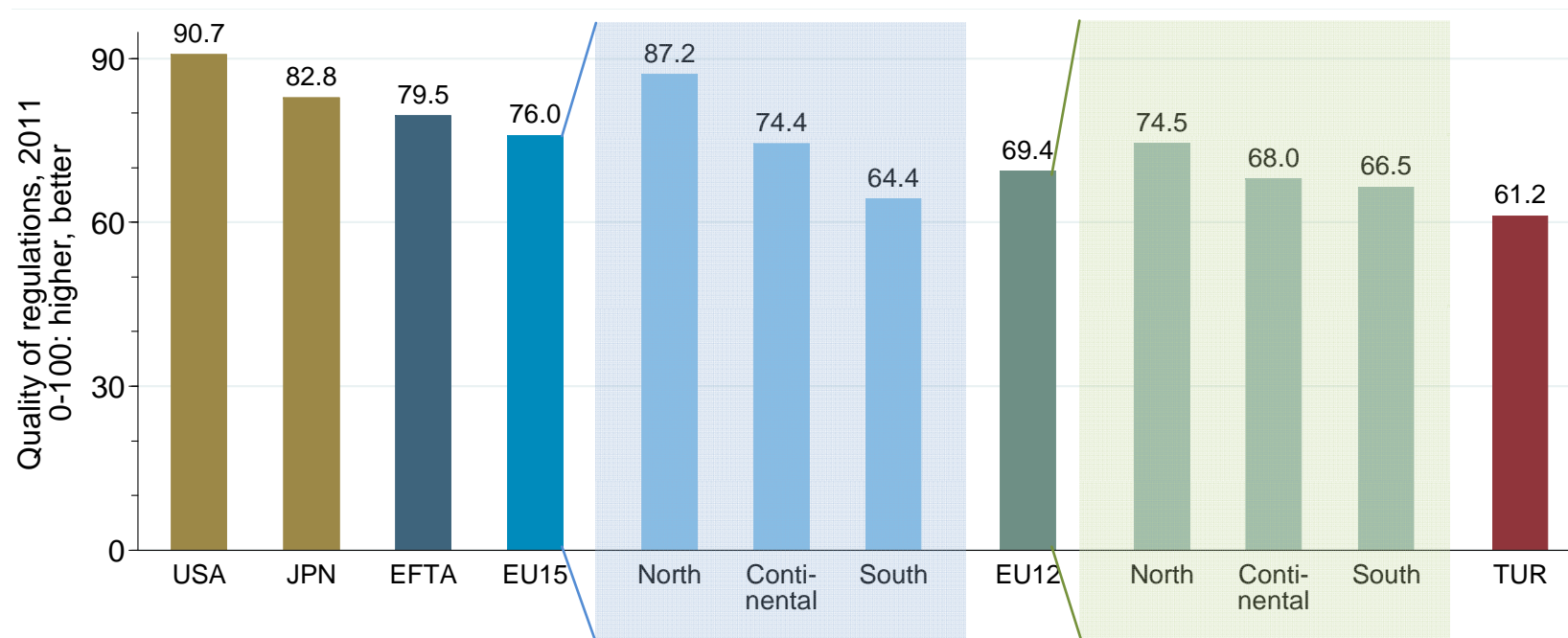
Source: World Bank staff calculations based on UNCTAD (2011); see **Chapter 4**.

Doing business is now most difficult in the EU15 South



Figure 9: Southern and Eastern Europe must make it easier to do business

(principal components index of the ease of doing business in 2011, scaled from 0 [poor] to 100 [excellent])



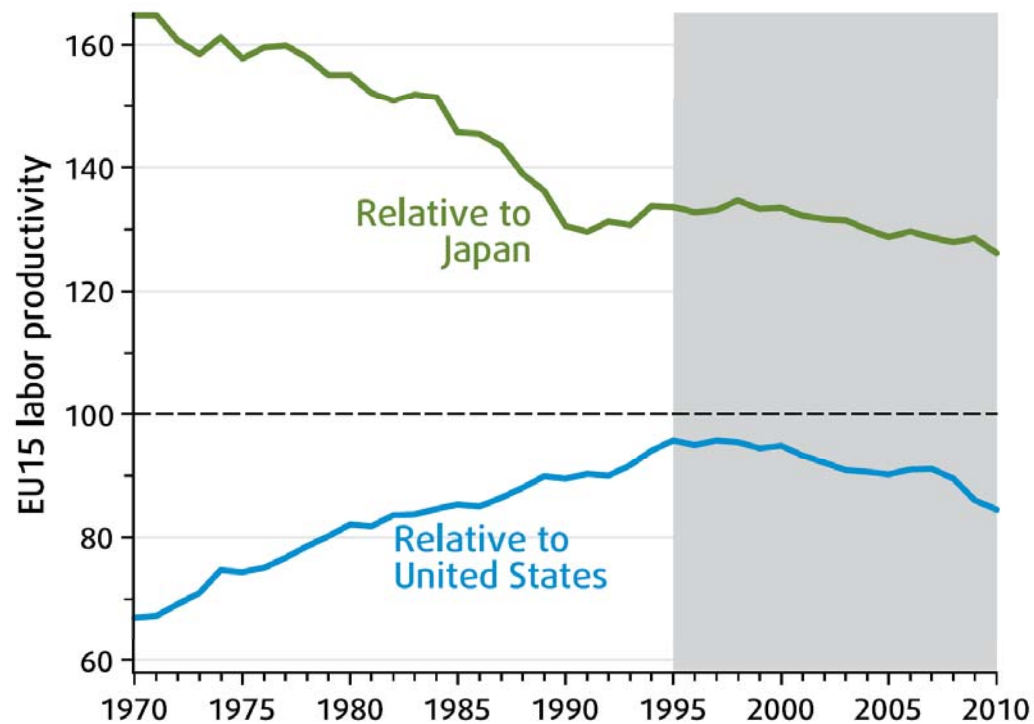
Note: Averages computed using principal component analysis. EFTA here comprises Iceland, Norway, and Switzerland. The EU15 comprises Denmark, Finland, Ireland, Sweden, and the United Kingdom (North); Austria, Belgium, France, Germany, Luxembourg, and the Netherlands (Continental); and Greece, Italy, Portugal, and Spain (South). EU12 comprises Estonia, Latvia, and Lithuania (North); Czech Republic, Hungary, Poland, the Slovak Republic, and Slovenia (Continental); and Bulgaria, Cyprus, and Romania (South).

Source: World Bank staff calculations, based on Doing Business 2012; see **Chapter 4** for details.

Another productivity gap has been growing—between the EU15 and the US



Figure 10: Productivity growth in Europe's larger economies has slowed down since the mid-1990s
(EU15 labor productivity, indexed to the United States and Japan)

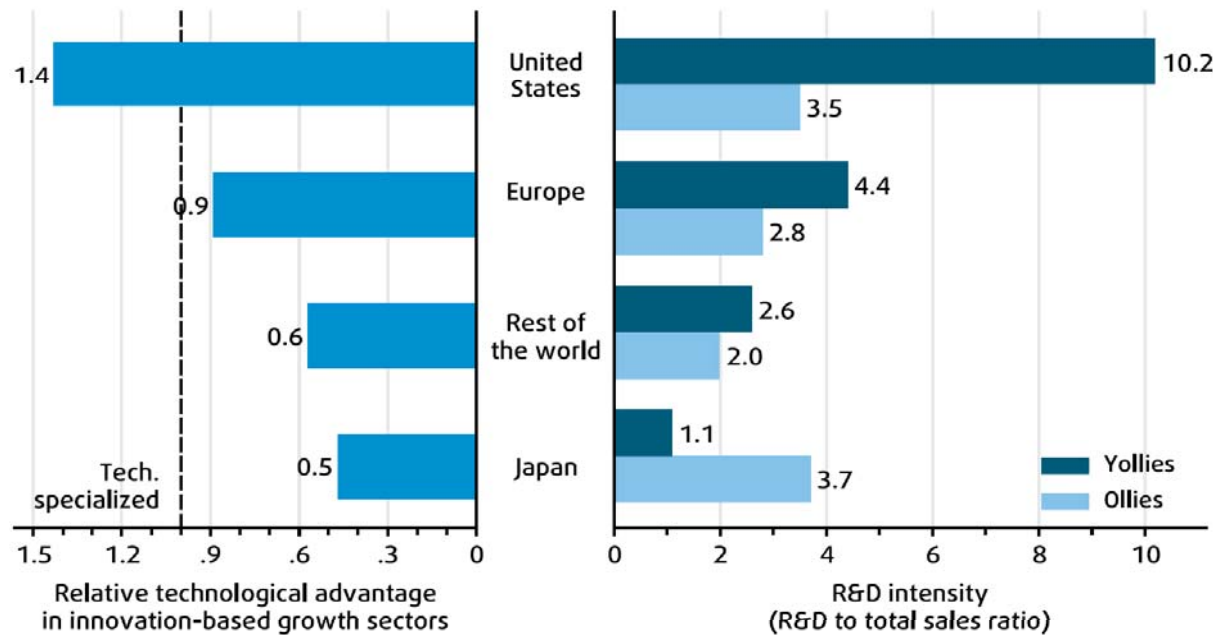


Source: World Bank staff calculations, based on the Organisation for Economic Co-operation and Development; see **Chapter 5**.

Europe specializes in old sectors, the US in new



Figure 11: The United States specializes in younger, more R&D intensive products
 (relative technological advantage and R&D efforts by young and old innovation leaders in the United States, Europe and the rest of the world)



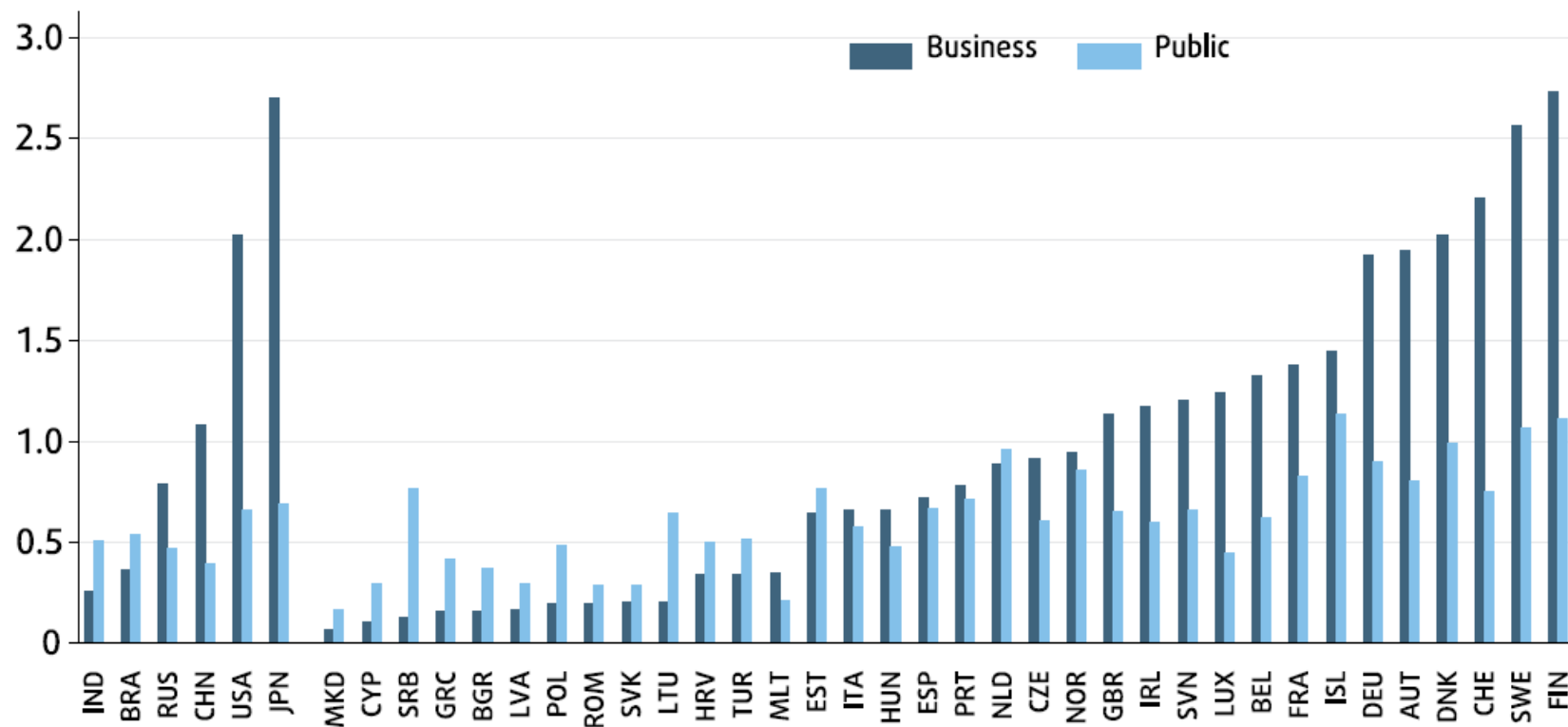
Note: R&D intensity is measured as the ratio of R&D spending to total sales, for firms established after 1975 (young leading innovators or “Yollies”) or before 1975 (“Ollies”). The relative technological advantage is calculated as the share of each region or country (say Europe) in the R&D of a particular sector (say the Internet) relative to the share of Europe in world R&D; values greater than 1 indicate the region is technology specialized in the sector.

Source: Bruegel and World Bank staff calculations based on the Institute for Prospective Technological Studies R&D Scoreboard; see **Chapter 5**.

Some economies are innovative, but they are small



Figure 5.3: Europe's leaders invest as much in innovation as the United States and Japan
(business and public R&D expenditure, percentage of GDP)



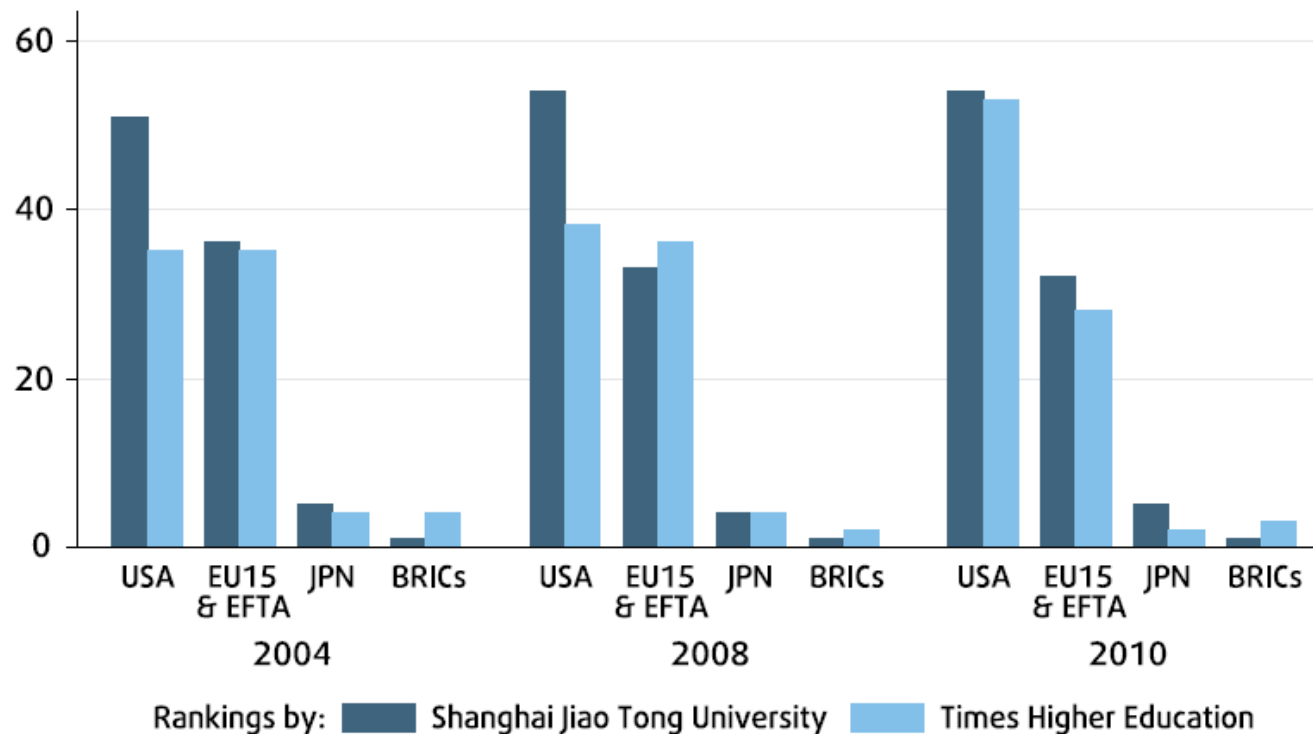
Note: Data refer to different years by country.

Source: European Commission 2011d; UNESCO 2011; IMF 2011; see **Chapter 5**.

And the US lead in top tertiary education is growing



Figure 5.16: Europe is falling behind the United States in top university rankings
(world's top 100 universities)



Source: International Institute for Applied Systems Analysis and Vienna Institute of Demography (IIASA/VID), via World Bank (2011). See **Chapter 5** for details.



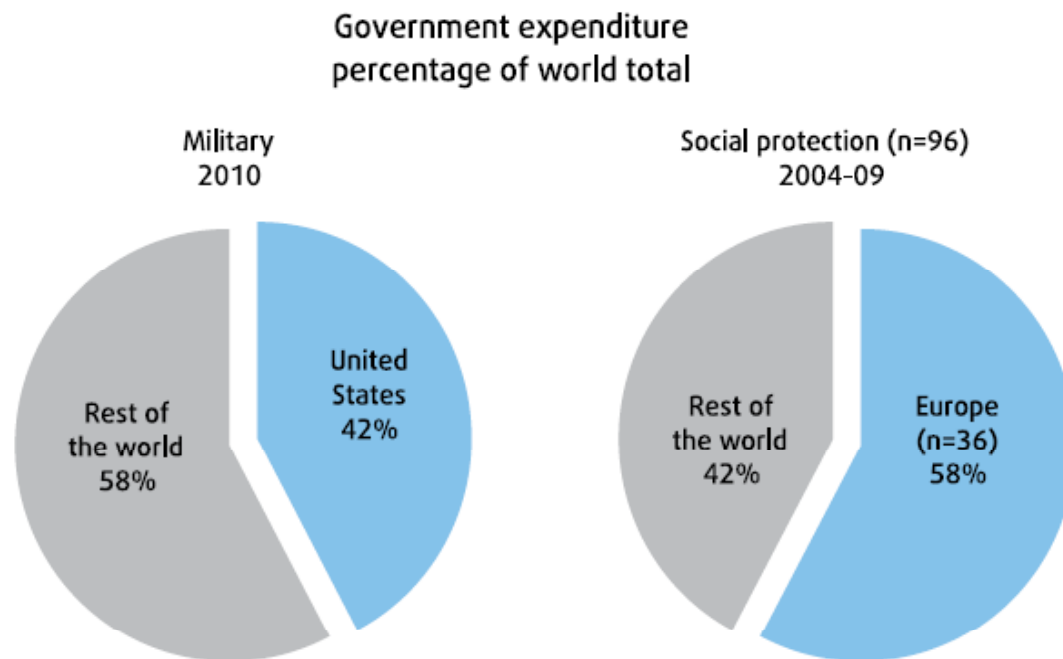
Europe—Lifestyle Superpower

The lifestyle superpower



Figure 12: Outspending the rest of the world

(general government spending on defense [United States] and social protection [Europe], 2004–09, share of total world spending)



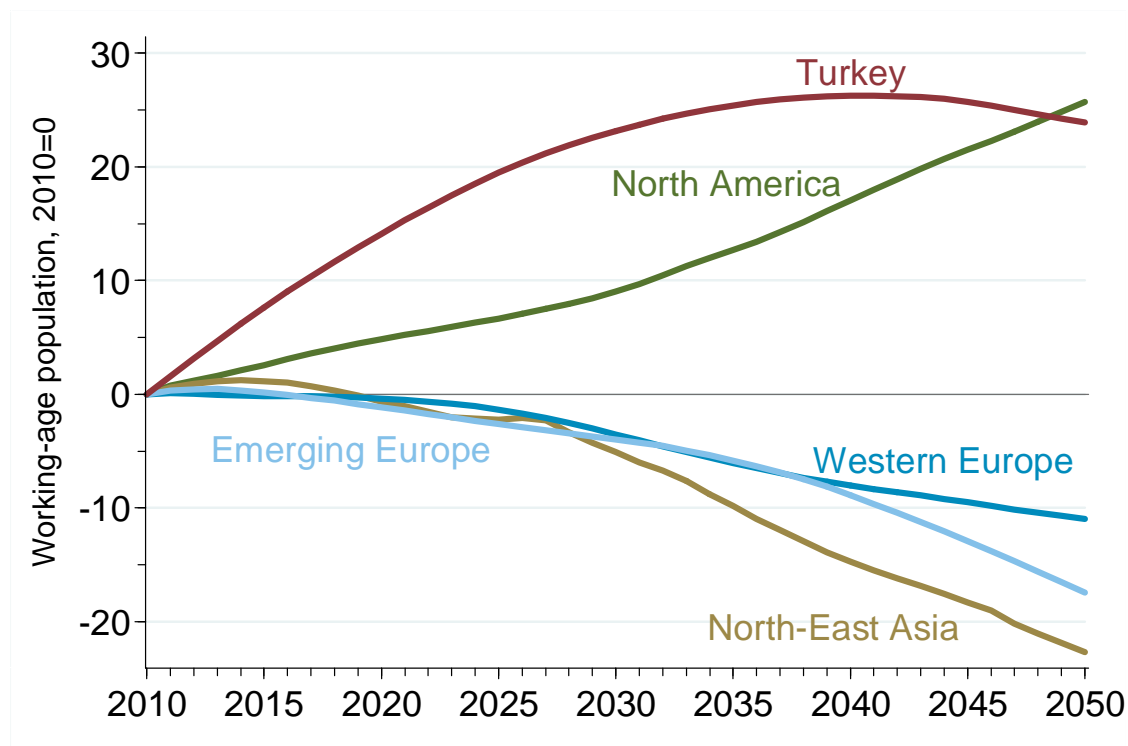
Notes: For social protection spending, due to the data availability, averages over 2004–09 by country are used. n is the number of countries included in the calculations. Data cover general government but, if unavailable, refer to central government only.

Sources: World Bank staff calculations, based on Stockholm International Peace Research Institute (2011), IMF Government Finance Statistics, World Bank World Development Indicators, and Weigand and Grosh (2008).

Fewer workers in Europe, except in Turkey



Figure 14: Europe's labor force will shrink by about a million workers every year
(projected change in working-age population, percent, 2010–50)



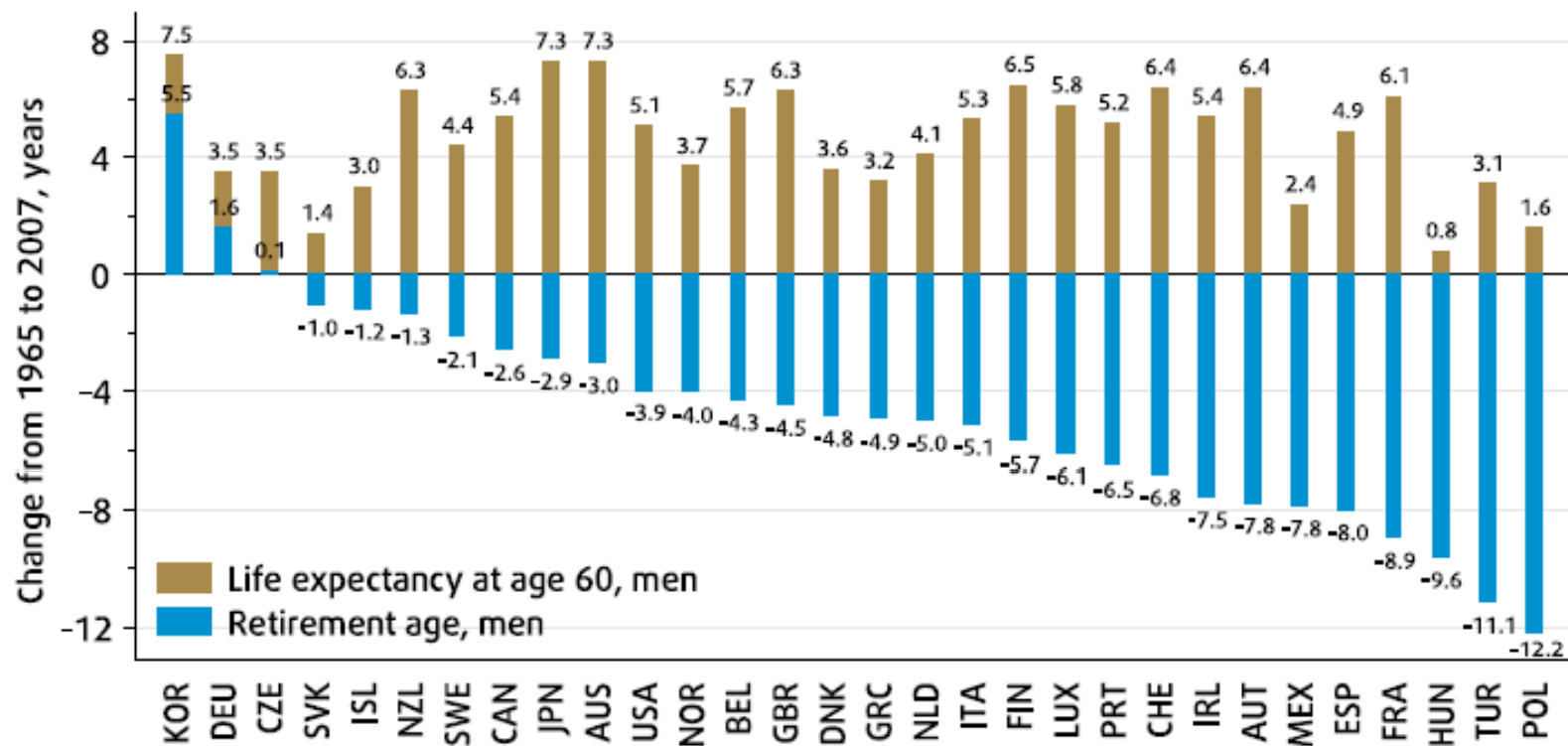
Note: North America is the US and Canada; North-East Asia includes China, Hong Kong (China), Japan, Macao (China), Republic of Korea., and Taiwan (China)

Source: U.S. Census projections. See **Chapter 6** for details.

Europeans are living longer, and retiring earlier—especially in Turkey



Figure 13: Europe’s pension systems have to support people for many more years
(changes in life expectancy at 60 [gold] and effective retirement age [blue], 1965–2007)

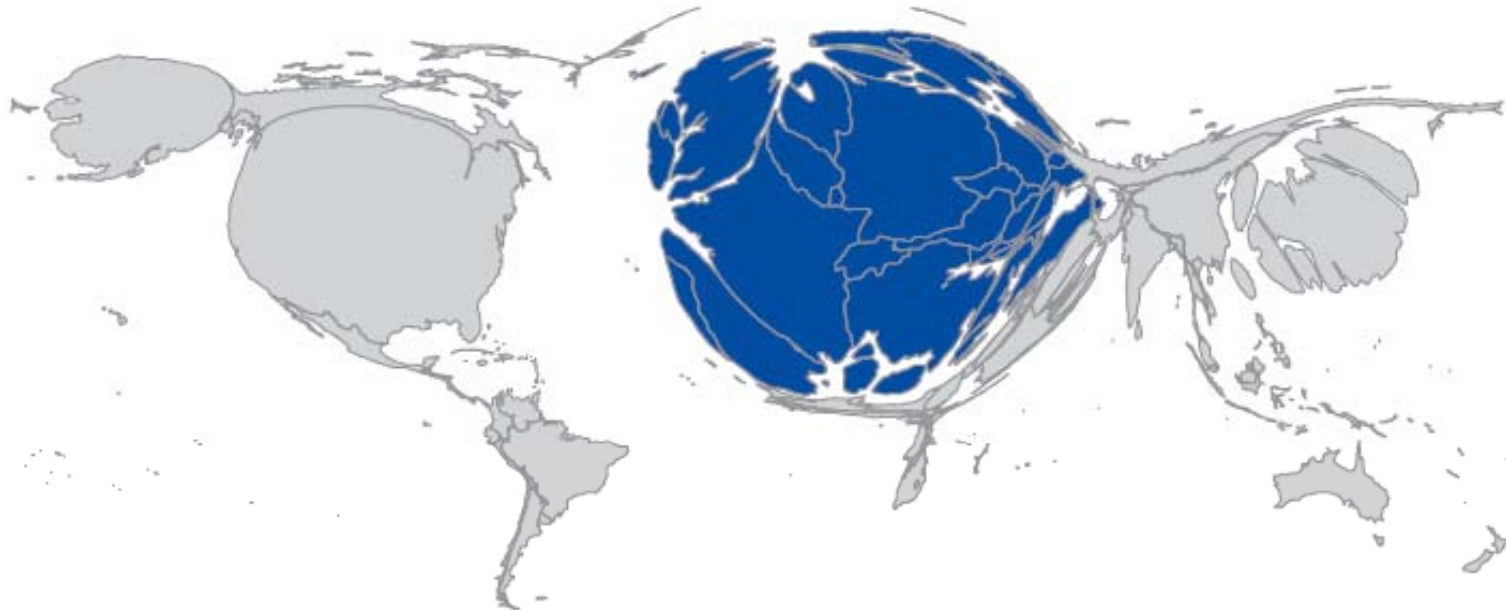


Source: OECD Health Data.

European governments spend about 10 percent of GDP more



Figure 16: Governments in Europe are big
(the world resized by government spending in dollars, 2009)

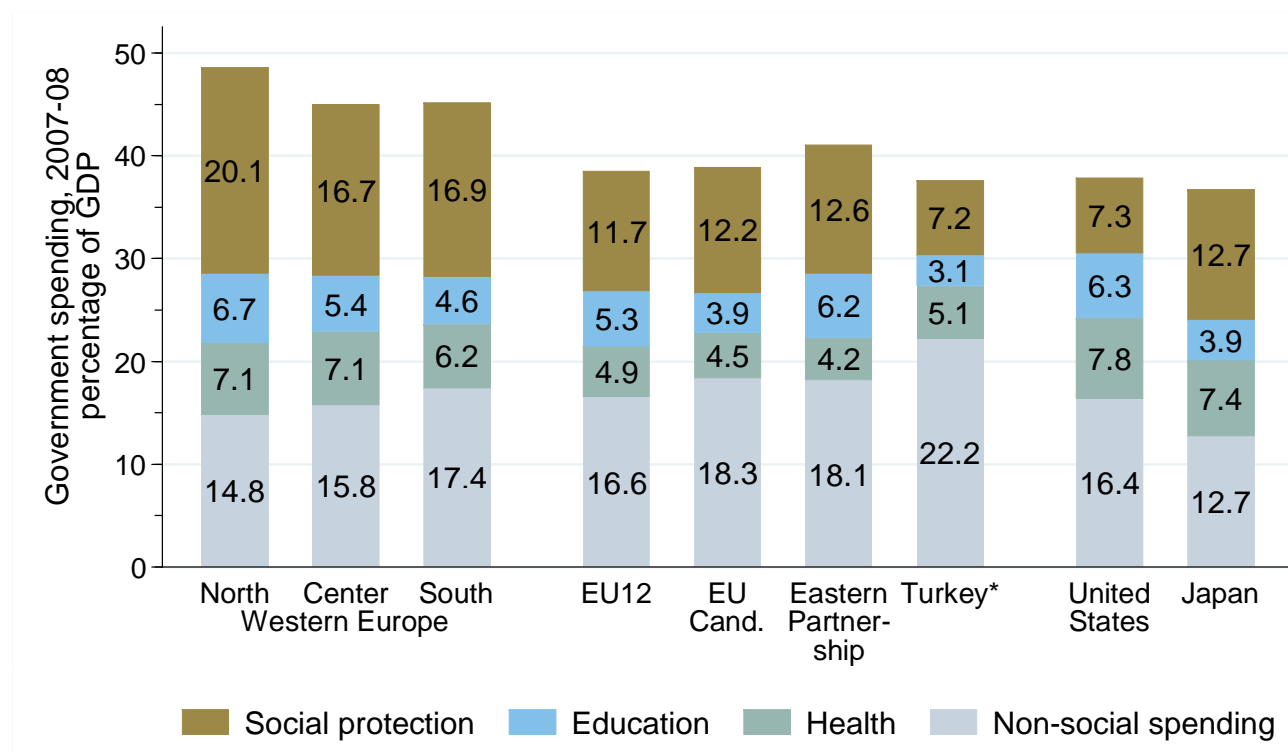


Source: World Bank staff, based on IMF Government Financial Statistics.

Social protection spending is the (only) reason



Figure 17: Social protection is the difference in government size between Europe and its peers
(government spending, percentage of GDP, 2007–08)



Note: "Social protection" includes benefits related to sickness and disability, old age, survivors, family and children, unemployment, and housing.

Data for Turkey are not for 2007-08 but for different periods, which are taken from Selected Indicators in the report.

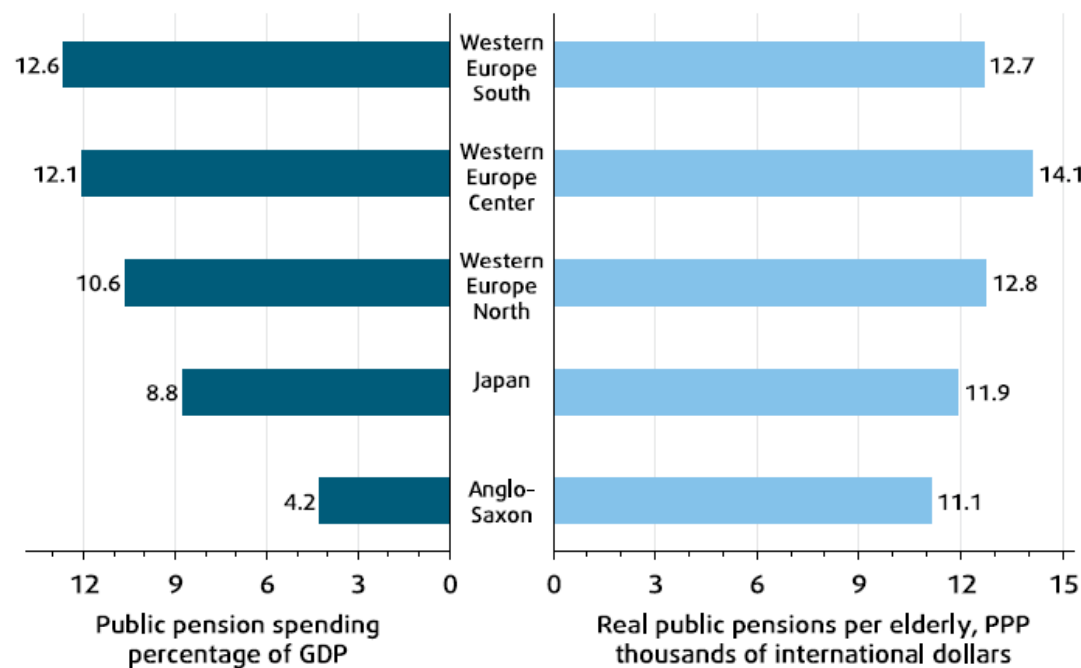
Source: IMF Government Finance Statistics. See **Chapter 7** for details.

Others also subsidize the elderly, but not for nearly as long



Figure 18: Small differences in annual pensions per beneficiary, big in overall public pension spending

(public pension spending in 2007)



Note: Median values by group are shown.

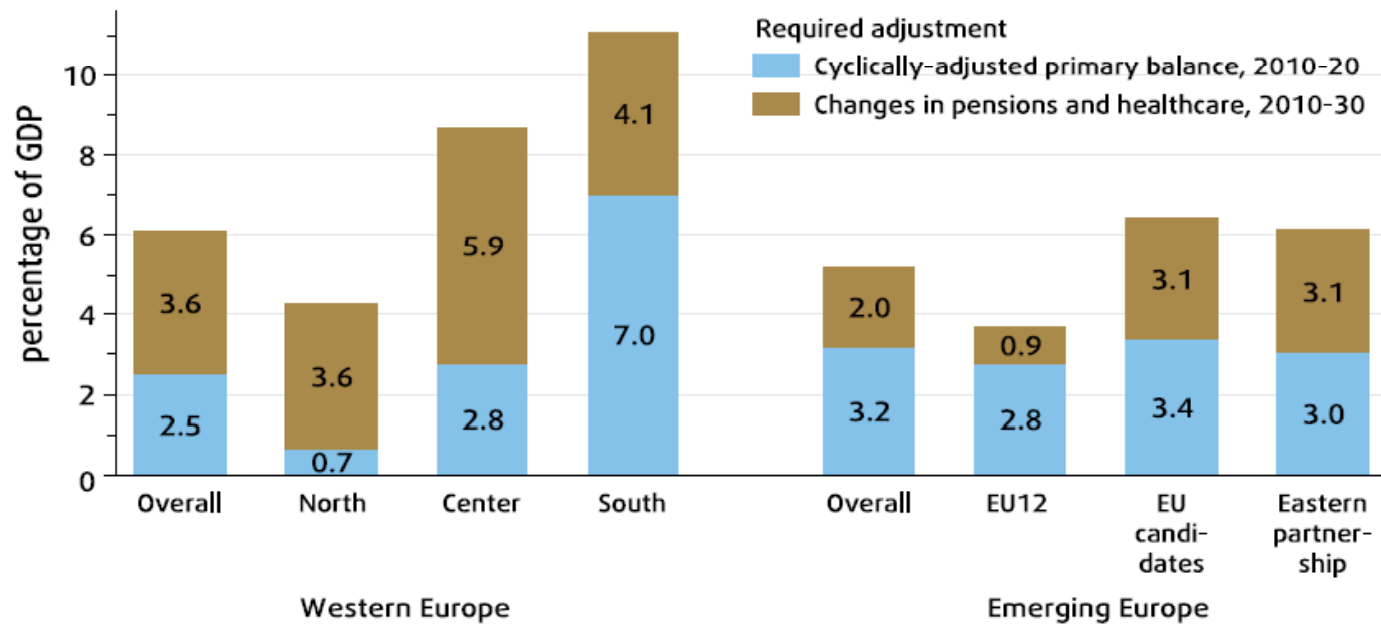
Source: Eurostat; Organisation for Economic Co-operation and Development, see **Chapter 7**.

Big adjustments ahead, because of current imbalances and future health costs



Figure 19: Western Europe has to reduce fiscal deficits by 6 percent of GDP, emerging Europe by less

(illustrative fiscal adjustment needs, 2010–30)



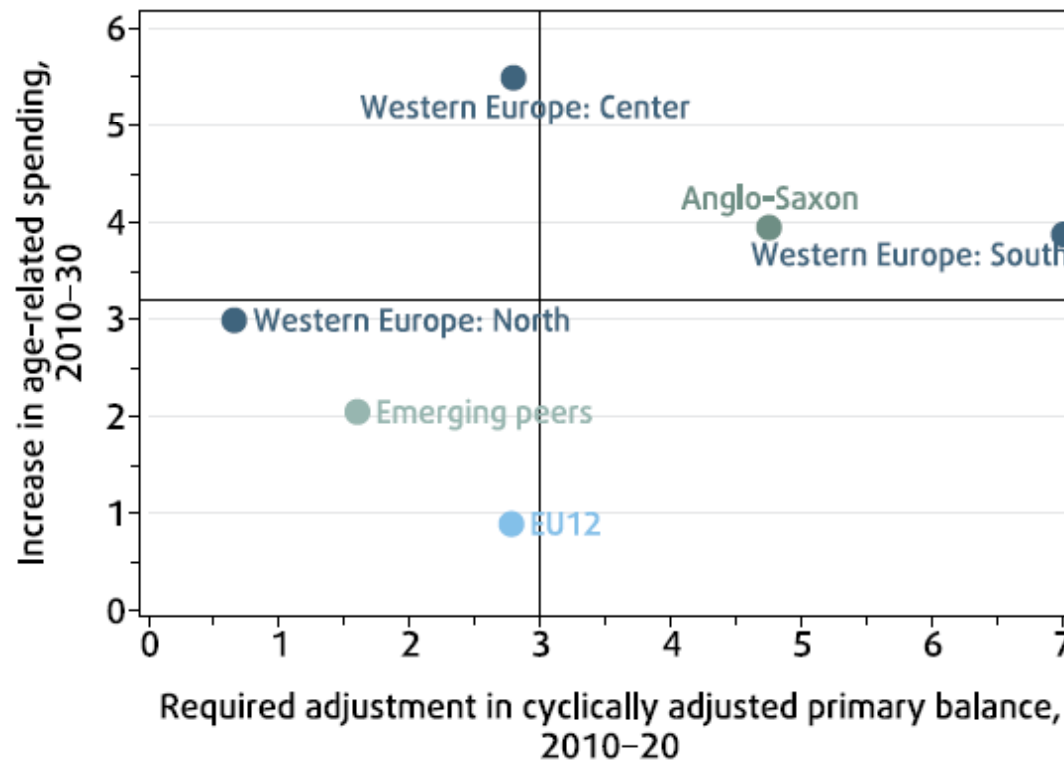
Note: The fiscal impacts of aging on pensions and health care systems are missing for EU candidate and eastern partnership countries. For this exercise, the sum of adjustment in health care spending is assumed to be the same as for the new member states. The adjustment in pension related spending is assumed to be the same as that for southern Europe.

Sources: IMF, Institute of Structural Research (Poland), and World Bank; see **Chapter 7**.

Adjustment needs are most immediate in southern Europe



Figure 7.28: Illustrative adjustment needs and projected age-related spending increases in 2010–30, median, percentage of GDP



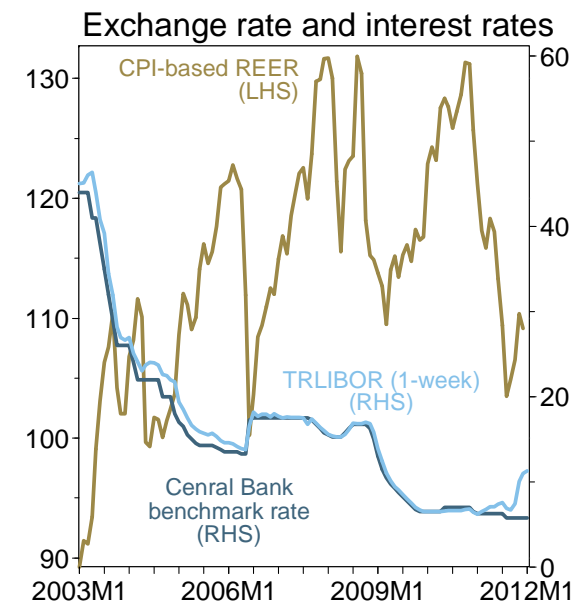
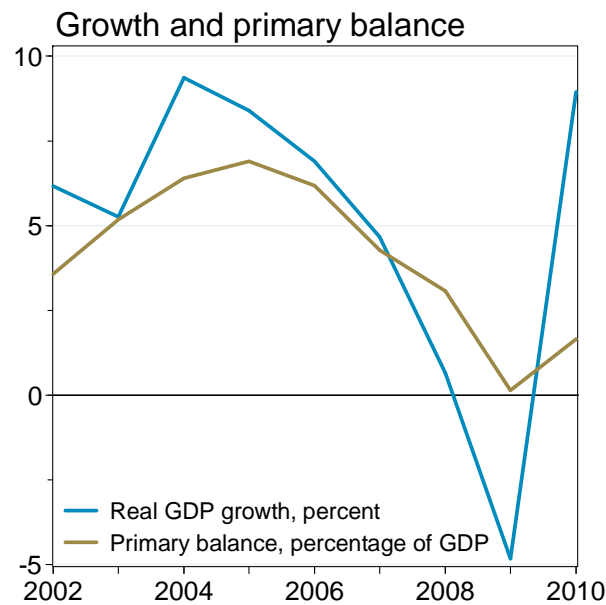
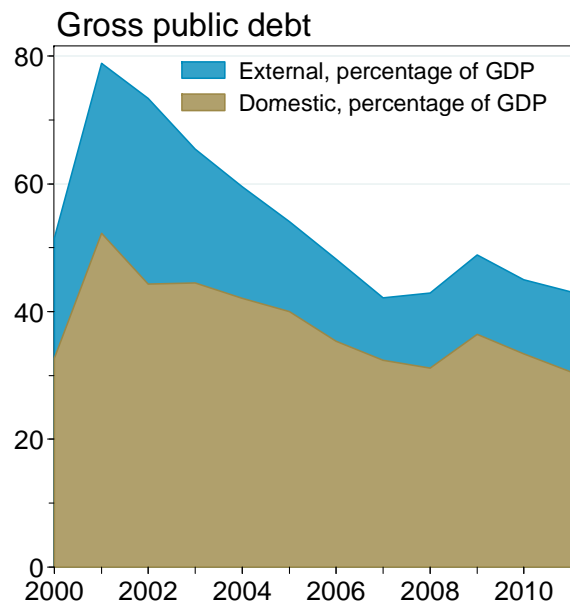
Source: IMF World Economic Outlook database; Institute for Structural Research; World Bank staff calculations; see **Chapter 7**.

Reducing public debt in Turkey



How Turkey reduced its public debt

(Post-2001-crisis development in public debt and selected economic indicators)



Source: Central Bank of the Republic of Turkey, Republic of Turkey Prime Ministry Undersecretariat of Treasury, Banks Association of Turkey, Bloomberg, and IMF World Economic Outlook. See Iwulská (2011); **Country Benchmarks (15. Reducing public debt, for Turkey)** for details.



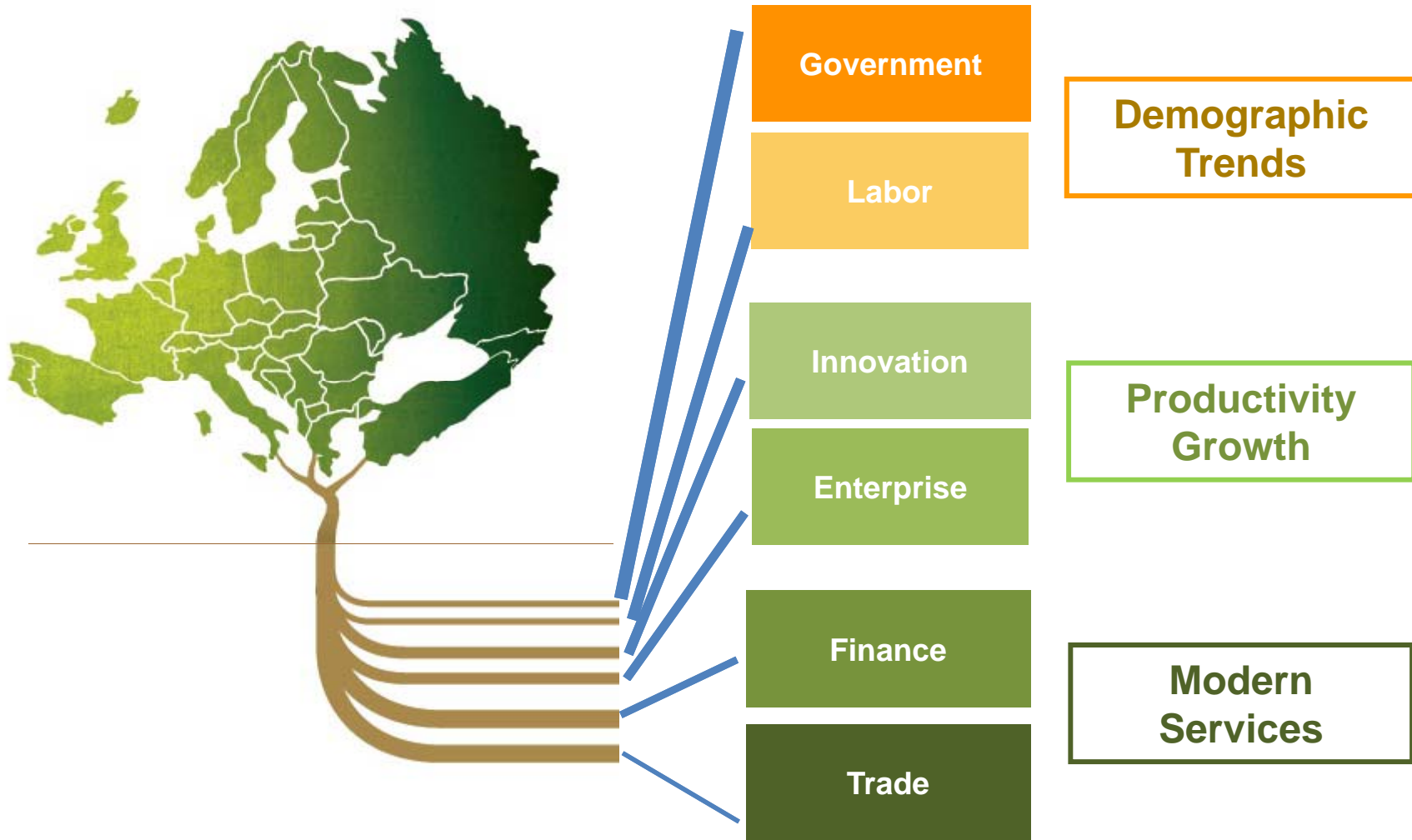
Imperatives

Keeping what has been achieved



- **Restarting the Convergence Machine: Services**
 - Facilitate the **trade** in business services
 - Strengthen regulatory coordination for **finance**.
- **Rebuilding Brand Europe: Productivity**
 - Restart the convergence machine
 - Improve **enterprise** where productivity growth has slowed
 - Download “killer apps” of **innovation** from the United States.
- **Remaining the Lifestyle Superpower: Demography**
 - Restart the Convergence Machine
 - Rebuild Brand Europe
 - Make **labor** markets more competitive, increase labor force participation, and postpone retirement
 - Make **government** more efficient, or make it smaller.

Imperatives, strengths and weaknesses



It's been done before (in Europe)



Table 8.1: Benchmark countries for selected policies

	Policy area	Selected countries	
		Europe	World
1	Restructuring private debt	Sweden	Korea, Rep.
2	Managing financial foreign direct investment	(EU) Poland	(Non-EU) Croatia
3	Crisis-proofing financial integration	Czech Republic	Canada
4	Value-added leaders	Slovak Republic	Singapore
5	Job creation	Ireland	New Zealand
6	Export leaders	Germany	Korea, Rep.
7	R&D policy	Switzerland	United States
8	Tertiary education	United Kingdom	United States
9	Management quality	Sweden	United States
10	Internal mobility	Ireland	United States
11	Labor legislation	Denmark	United States
12	Immigration policies	Sweden-United Kingdom	Canada-United States
13	Social security	Iceland	Japan
14	Social service delivery	Finland	Singapore
15	Reducing public debt	Turkey	New Zealand
16	Green growth policies	Germany	California (US)

Source: Iwulski (2011), available at www.worldbank.org/goldengrowth



Available at
www.worldbank.org/goldengrowth