

Comment
Rethinking European growth
ARC 2011: New growth models for Europe

Restoring the Lustre of the European Economic Model

Indermit Gill and Martin Raiser

with

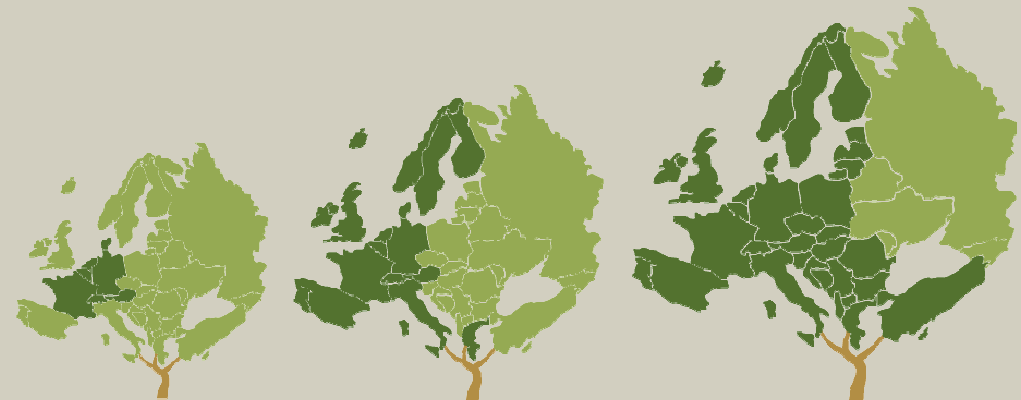
Andrea Dall'Olio, Truman Packard, Kaspar Richter,
Naotaka Sugawara, Reinhilde Veugelers,
Juan Zaldueño and others



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Work in Progress



§ Question One

What is the European growth model?

Principal Components



Trade

Finance

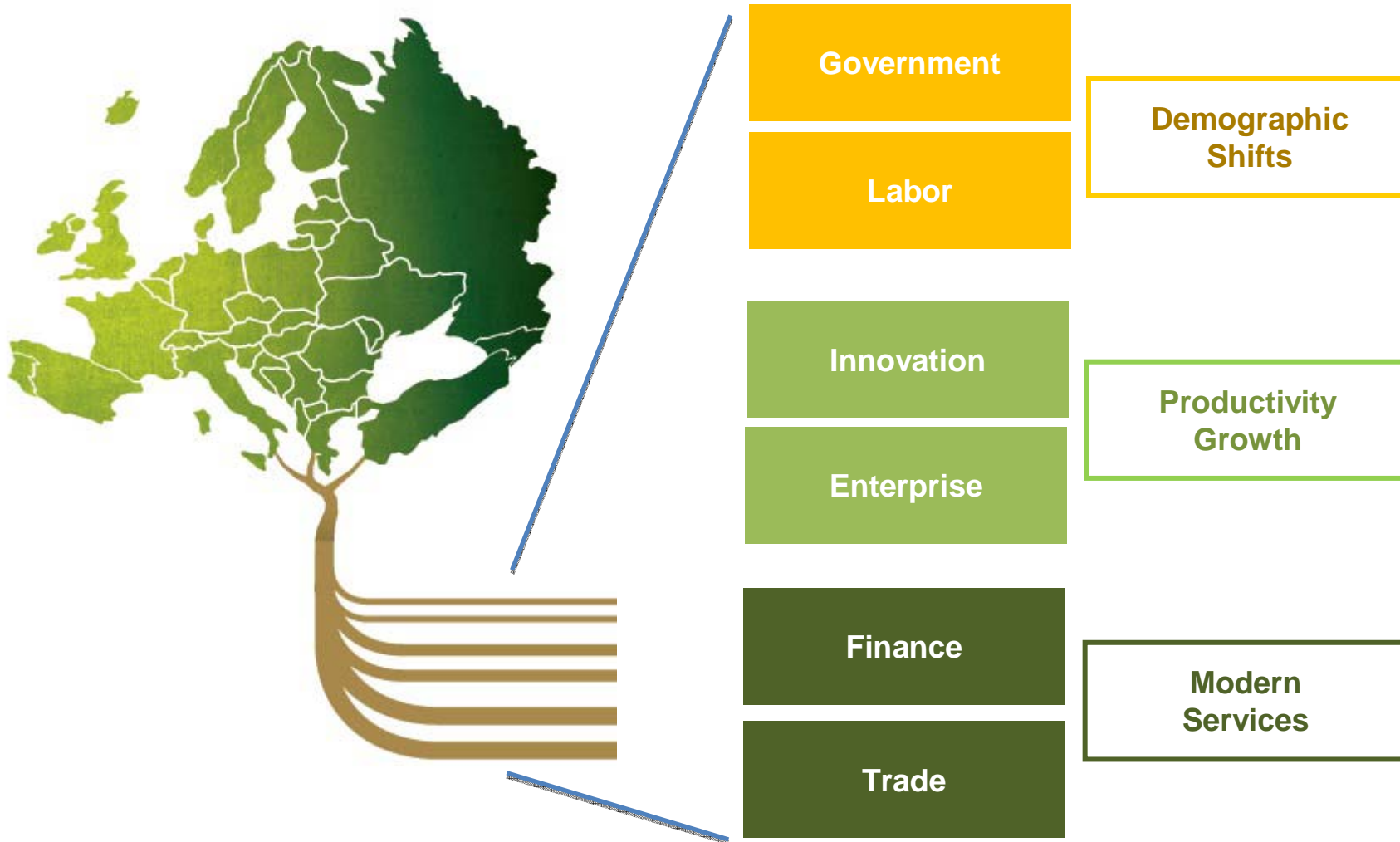
Enterprise

Innovation

Labor

Government

Europe's Growth Agenda?

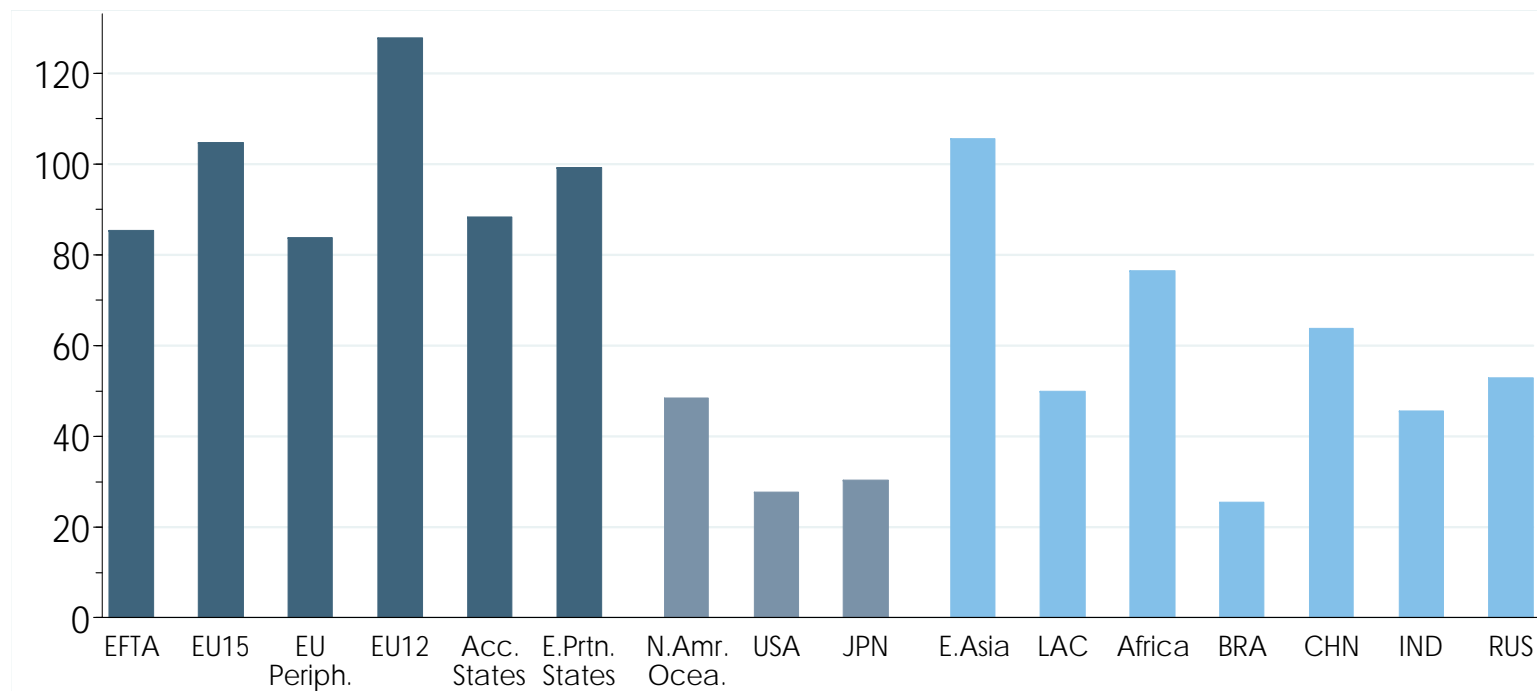


The European Growth Model: Trade



More open

Trade Openness, % of GDP, average of 2005-2009



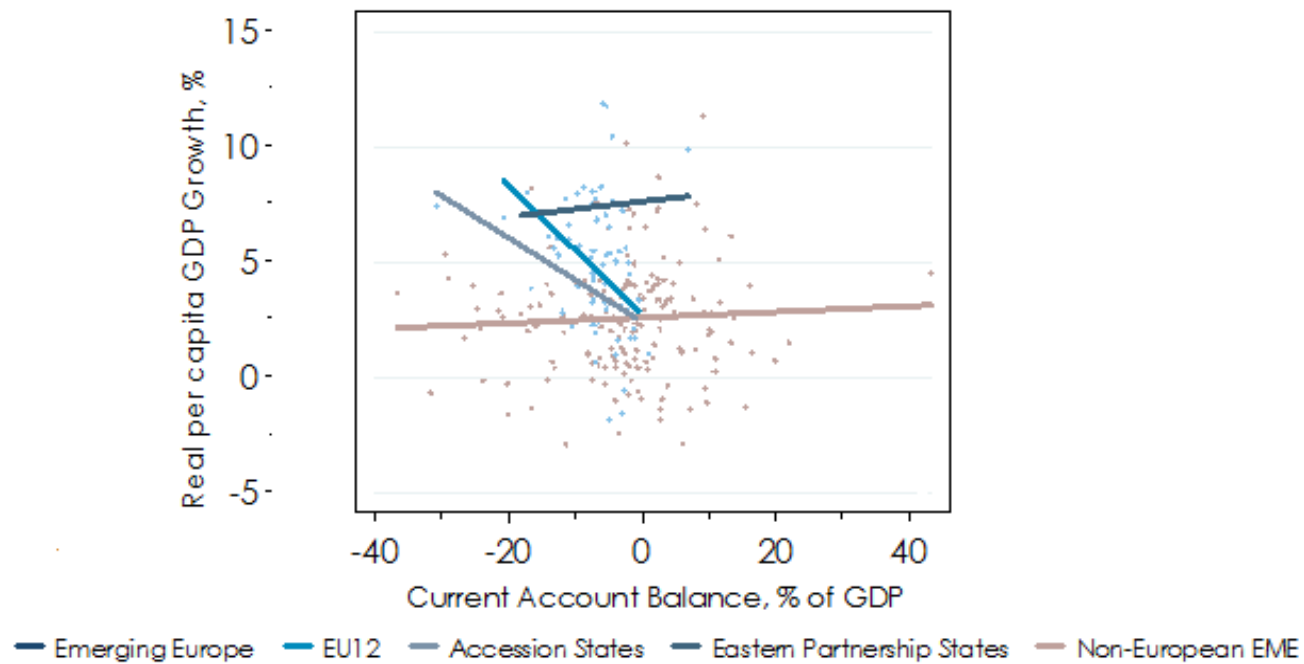
Source: World Development Indicators.

The European Growth Model: Finance



With Capital Flowing the Right Way

Capital inflows (current account deficits) and per capita GDP growth, 1997-2008



Source: World Bank Staff Calculations, based on IMF data..

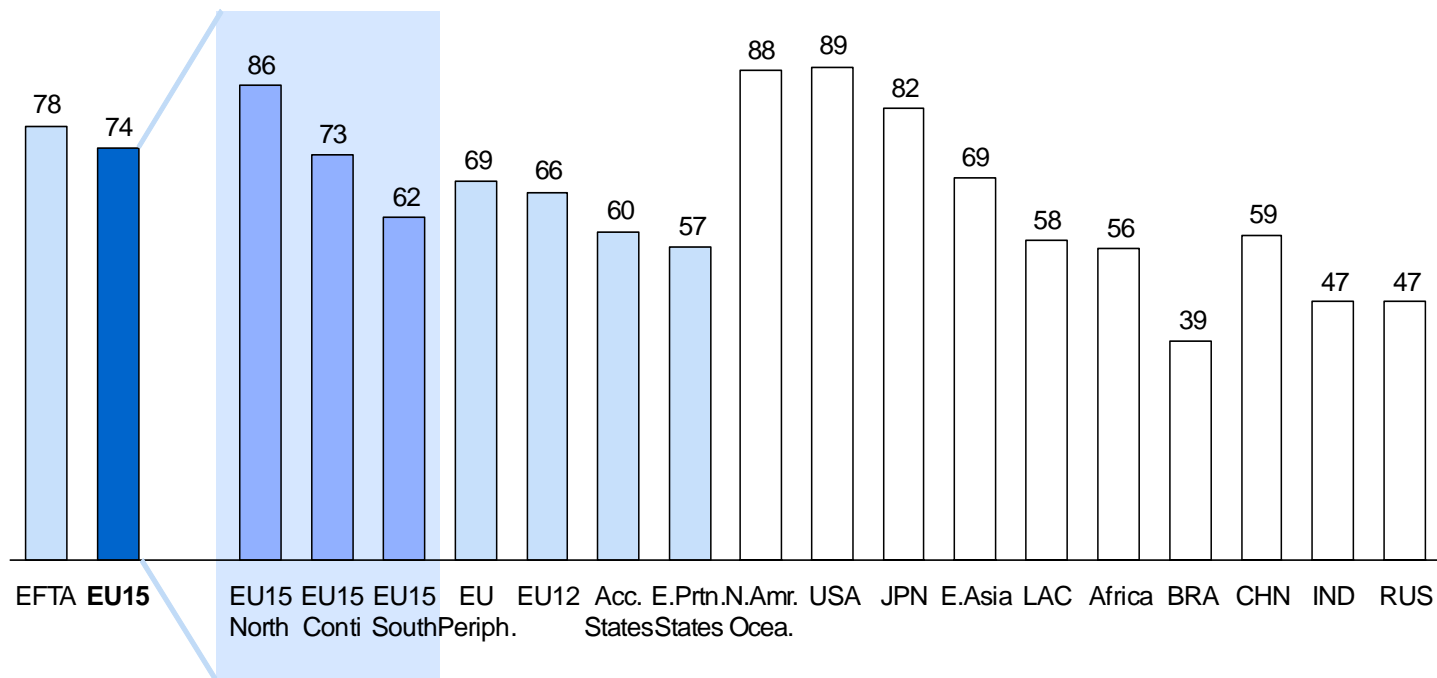
Note: Each dot represents a four-year average during the period covered: 1997-2000, 2001-2004, and 2005-2008.

The European Growth Model: Enterprise



Businesses that seem to have more social responsibilities

Principal Component Analysis Index of Doing Business ratings, 2009



Source: World Bank Doing Business database.

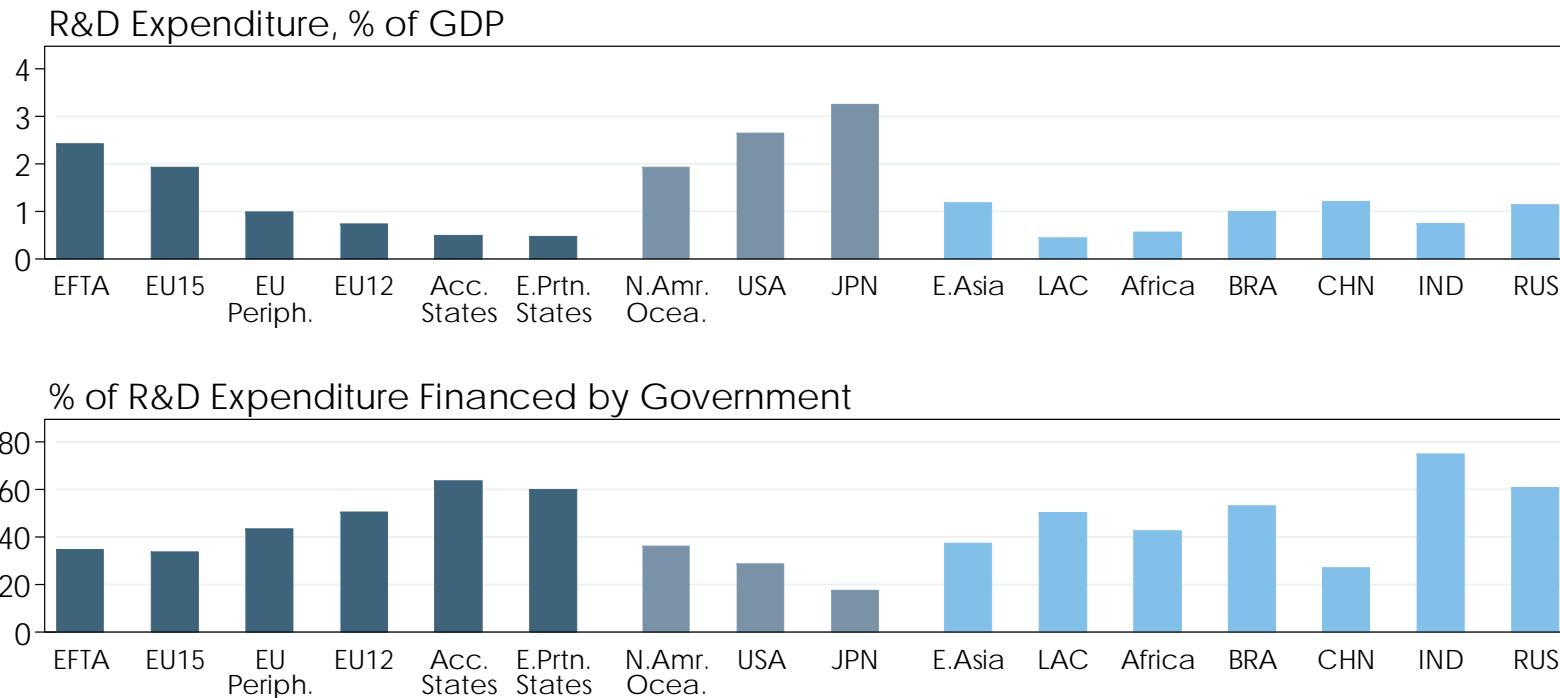
Notes: Averages computed using principal component analysis . Kosovo, Malta and Liechtenstein are not covered by Doing Business, and are not included. Albania and Venezuela are not included because closing business rating is not available for them.

The European Growth Model: Innovation



Governments that see R&D as a public responsibility

Research and Development Expenditure, Share of GDP, and Share Public, 2000-2009



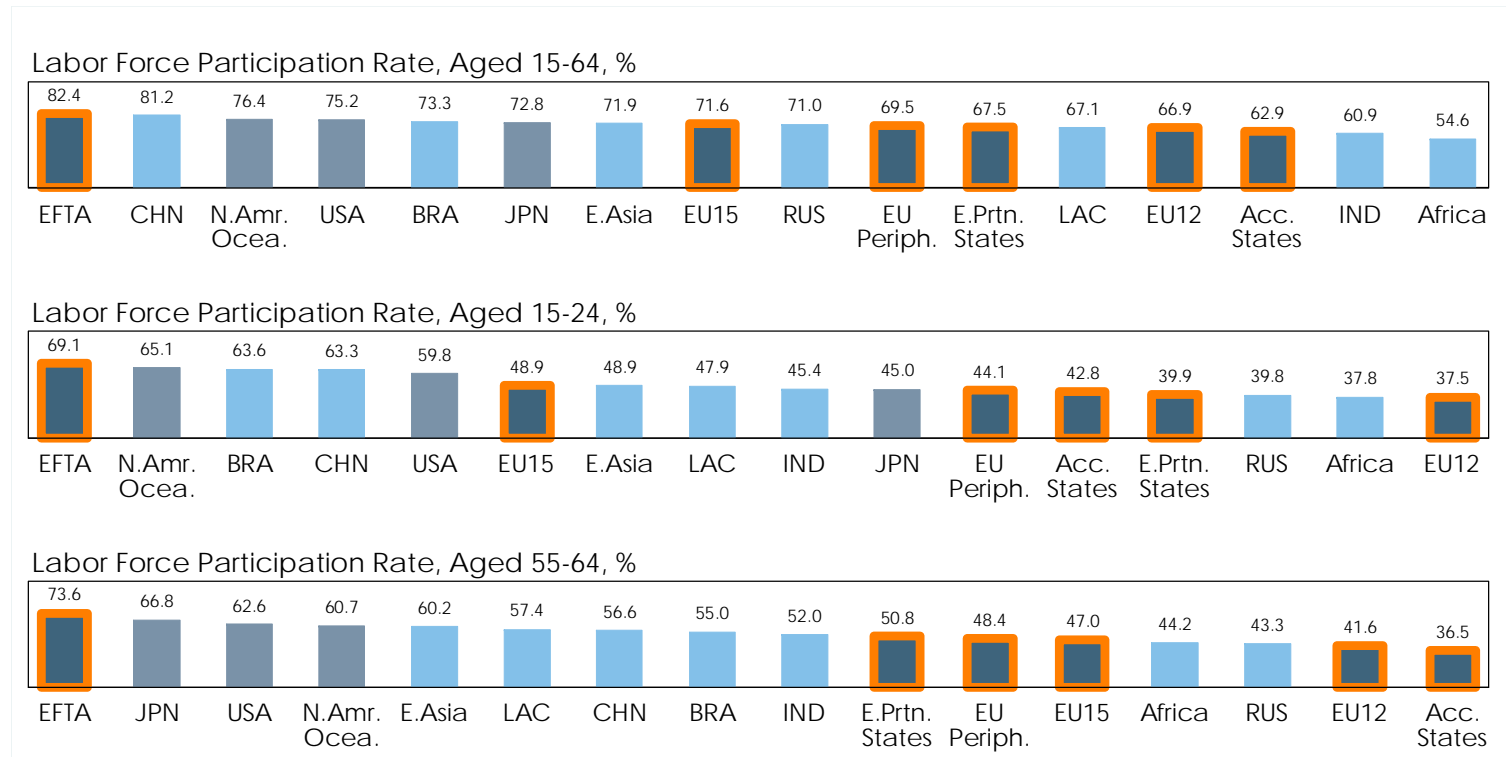
Source: UNESCO.

The European Growth Model: Labor



People get to work less

Labor Utilization in Europe and Other Countries, average of 2005-2009



Source: ILO.

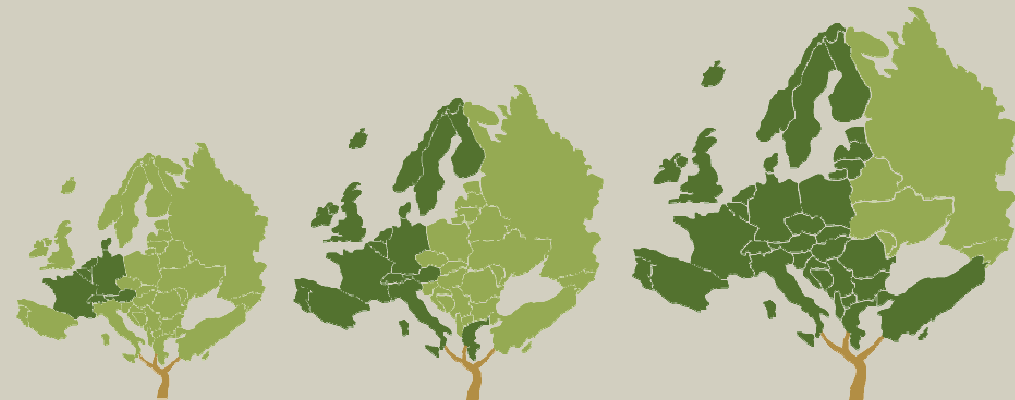
The European Growth Model: Government



With governments that are more redistributive

Gini Coefficients of Income Inequality before and after Taxes and Transfers, mid-2000s





§ Question Two

Does Europe need a new growth model?

Europe—Post-War Growth Superstar



Relentless growth in the United States, a growth miracle in Europe, and resurgence in Asia, 1820-2008

Year	Western Europe	Southern Europe	Eastern Europe	(Former) Soviet Union	United States	Japan	East Asia	Latin America
1820-70	1.0	0.6	0.6	0.6	1.3	0.2	-0.1	0.0
1870-1913	1.3	1.0	1.4	1.1	1.8	1.5	0.8	1.9
1913-50	0.8	0.4	0.6	1.8	1.6	0.9	-0.2	1.4
1950-73	3.9	4.7	3.8	3.3	2.5	8.1	2.4	2.6
1973-90	1.9	2.3	0.5	0.8	2.0	3.0	0.6	0.7
1990-2008	1.6	2.3	2.6	0.8	1.7	1.1	3.0	1.8

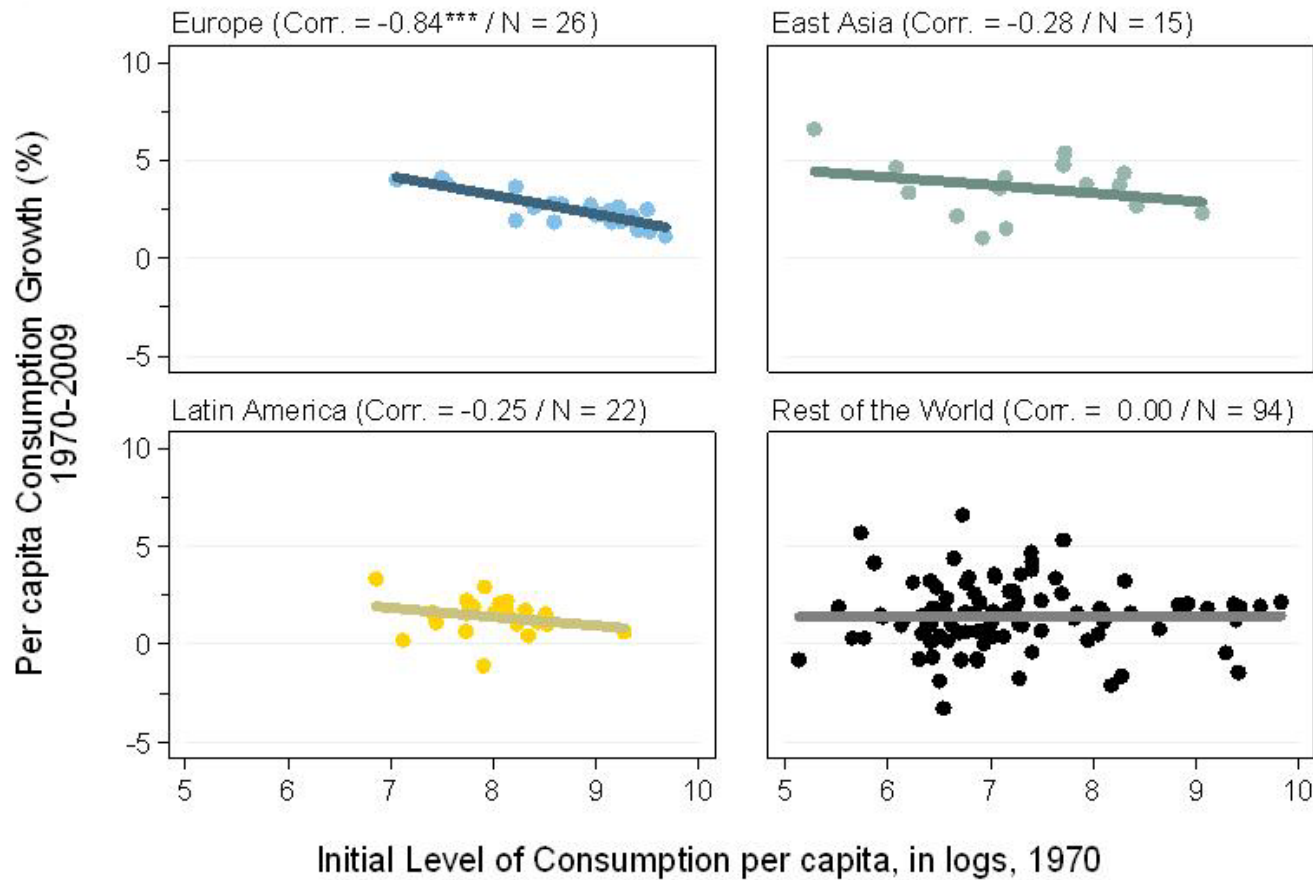
Note: Regional aggregates are population weighted. Western Europe is used here to refer to Austria, Belgium, Denmark, Finland, France, West Germany, Italy, the Netherlands, Norway, Sweden, Switzerland, and the United Kingdom. Eastern Europe refers to Albania, Bulgaria, Czechoslovakia, Hungary, Poland, Romania, and Yugoslavia. Southern Europe refers to Greece, Ireland, Spain, and Turkey. After 1989, West Germany becomes Germany and the data reflect the newly independent countries in Eastern Europe that emerge from Czechoslovakia and Yugoslavia.

Source: Penn World Tables 6.3, World Bank staff.

Europe—The Convergence Machine



Living standards have converged in Europe, not much elsewhere
Consumption levels in 1970 and growth between 1970 and 2009



Source: Penn World Tables 6.3, World Bank staff.

Europe—a big part of the world economy



Europe's share in world GDP has been going down, but only in PPP terms
 GDP shares, percent, 2000 and 2010

	% of World Total			
	GDP		GDP, PPP	
	2000	2010	2000	2010
Europe 45	28.8	29.1	28.3	24.3
EU27	26.4	25.8	25.0	20.8
EU15	25.1	23.8	22.6	18.3
EU12	1.3	2.0	2.5	2.6
EFTA	1.3	1.5	0.9	0.9
EU Candidates	1.0	1.4	1.7	1.8
Eastern Partnership	0.2	0.4	0.6	0.8
USA	30.7	23.1	23.4	19.1
East Asia	22.7	23.2	21.2	25.7
Japan	14.5	8.7	7.7	5.7
China	3.7	9.3	7.1	13.2
Brazil	2.0	3.3	2.9	2.8
India	1.4	2.7	3.8	5.5
Russian Federation	0.8	2.3	2.4	3.7
Sum of Countries Above	86.5	83.8	81.9	81.1
World GDP (trillions)	32.2	63.0	42.3	76.3

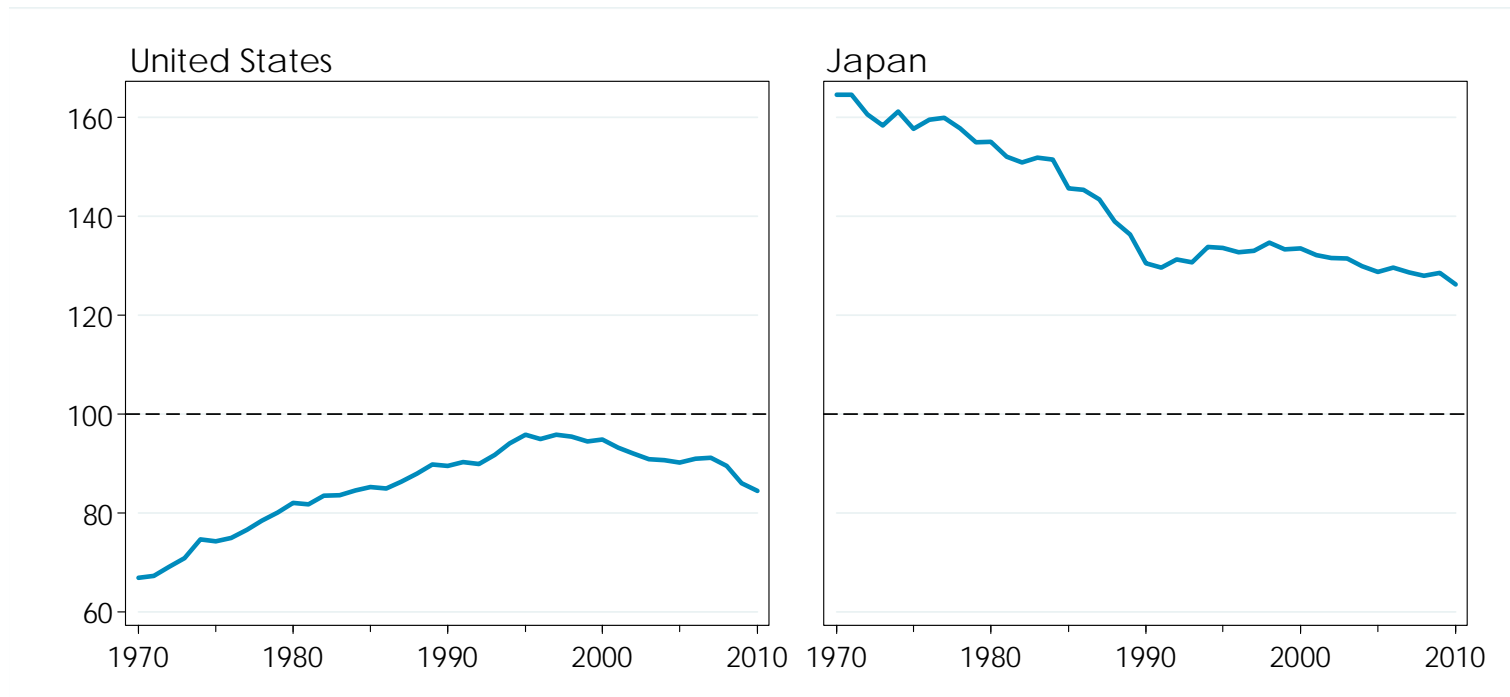
Source: WDI.

But productivity is lagging



Europe's leaders are slowing down

EU15 Labor Productivity, relative to the United States (=100 left panel) and Japan (=100 right panel)



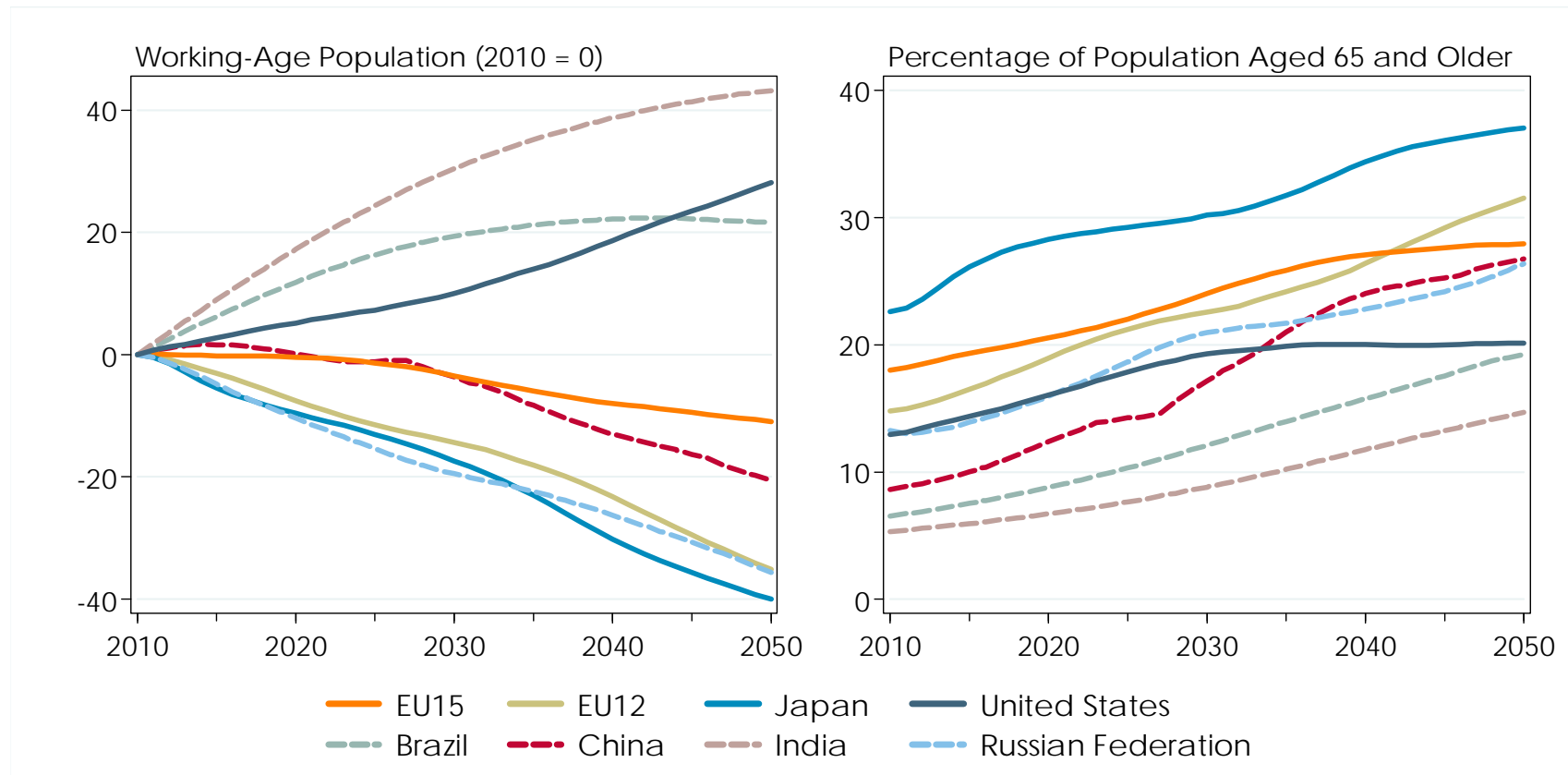
Source: OECD.

Populations are aging



By 2060, Europe's labor force might shrink by 50 million

Population Projection, 2010-2050

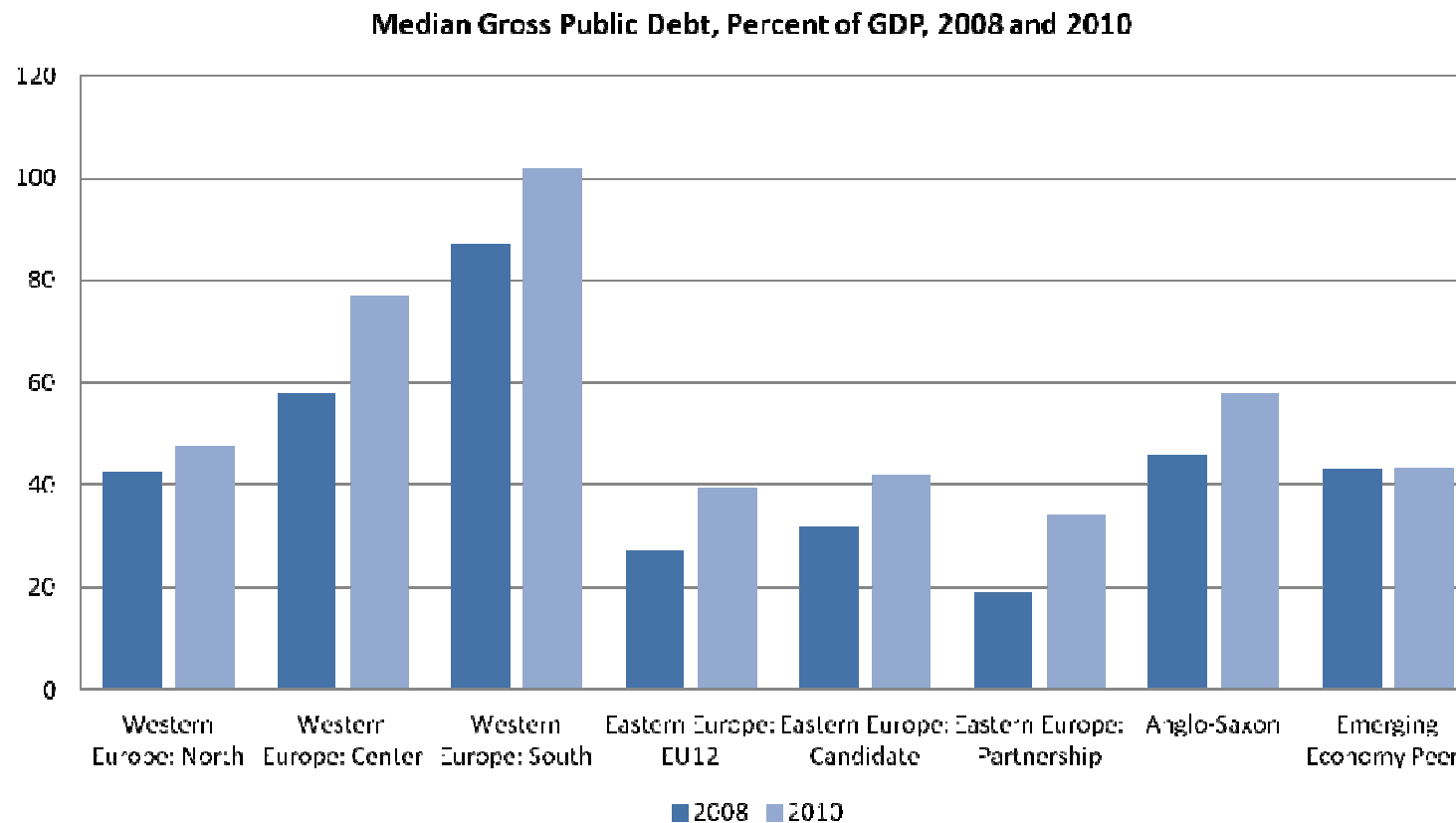


And public debt has been rising



Government debt rose during the crisis, except in non-European emerging economies

Gross Public Debt in 2008 and 2010



Source: World Bank staff, based on IMF WEO.

Main Questions



Trade:
Is Europe taking advantage of enlargement?

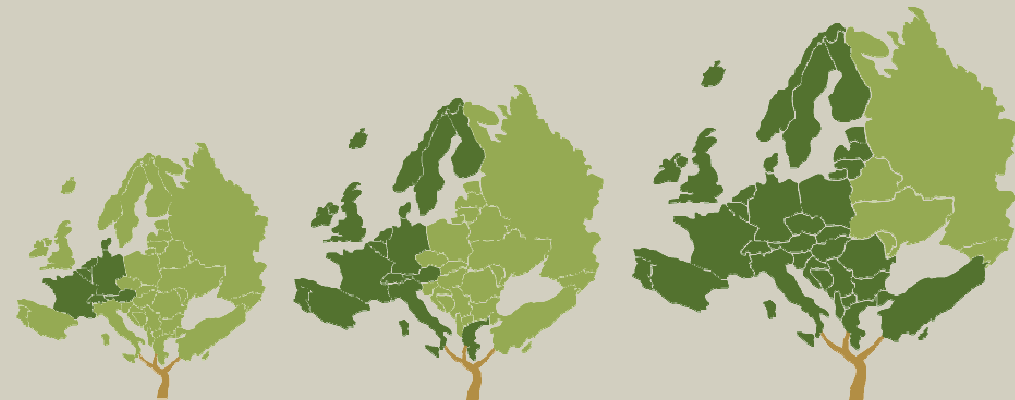
Finance:
Are capital flows in Europe too big?

Enterprise:
Are Europe's enterprises overregulated?

Innovation:
Are Europe's fundamentals flawed?

Labor:
Is labor making Europe uncompetitive?

Government:
Are governments in Europe too big?



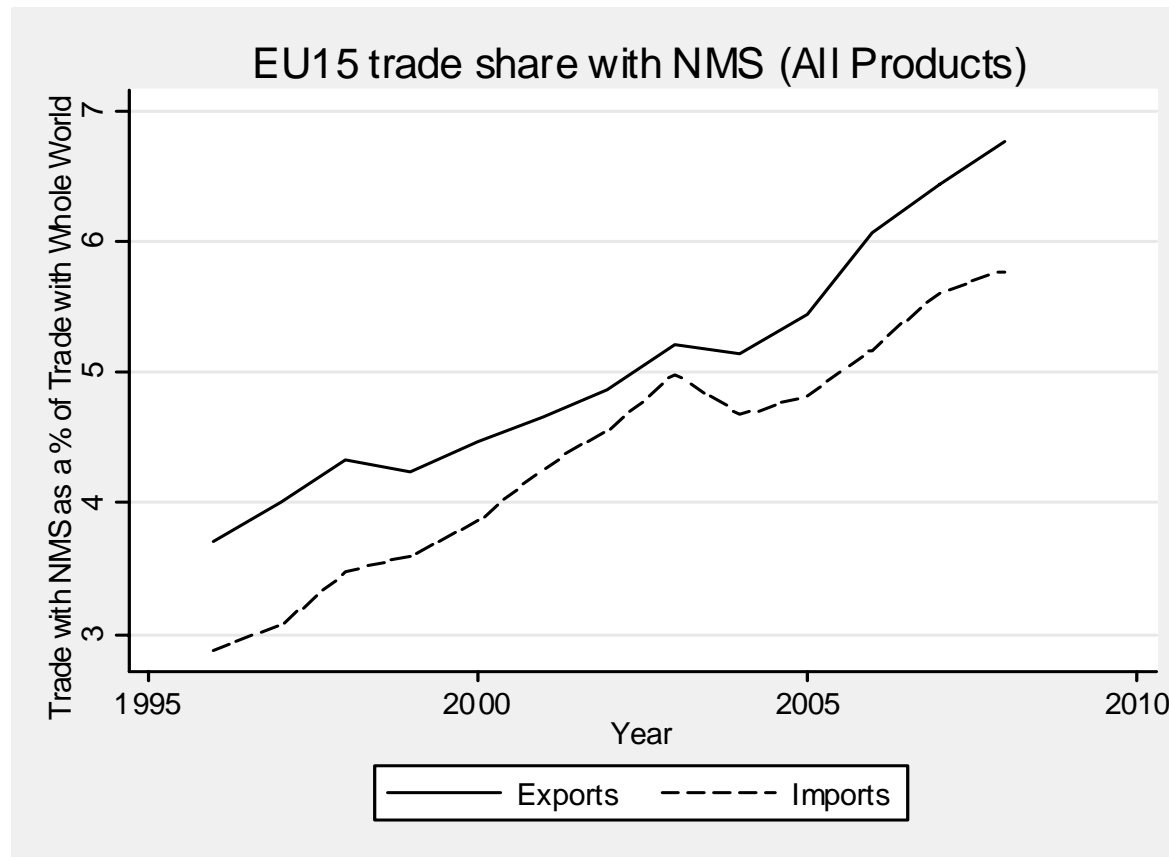
§ Question Three

Is Europe taking advantage of enlargement?

Trade: Western Europe is trading more with the East



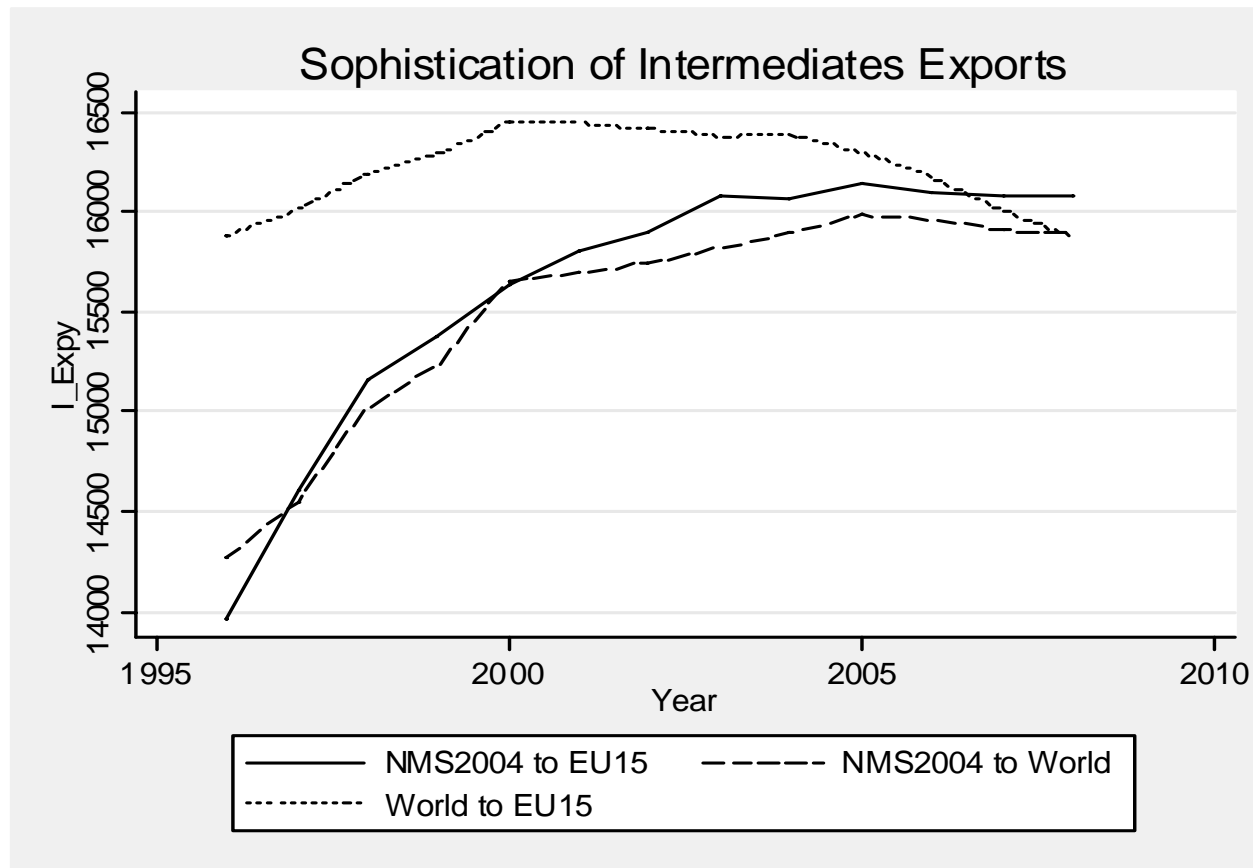
New member states have become more important trade partners for the EU15
EU15 trade with NMS as share of all trade, 1996-2008



Trade is becoming more sophisticated



New member states' exports to EU15 have become more sophisticated
Hausmann-Hwang measure of export sophistication, 1996-2008

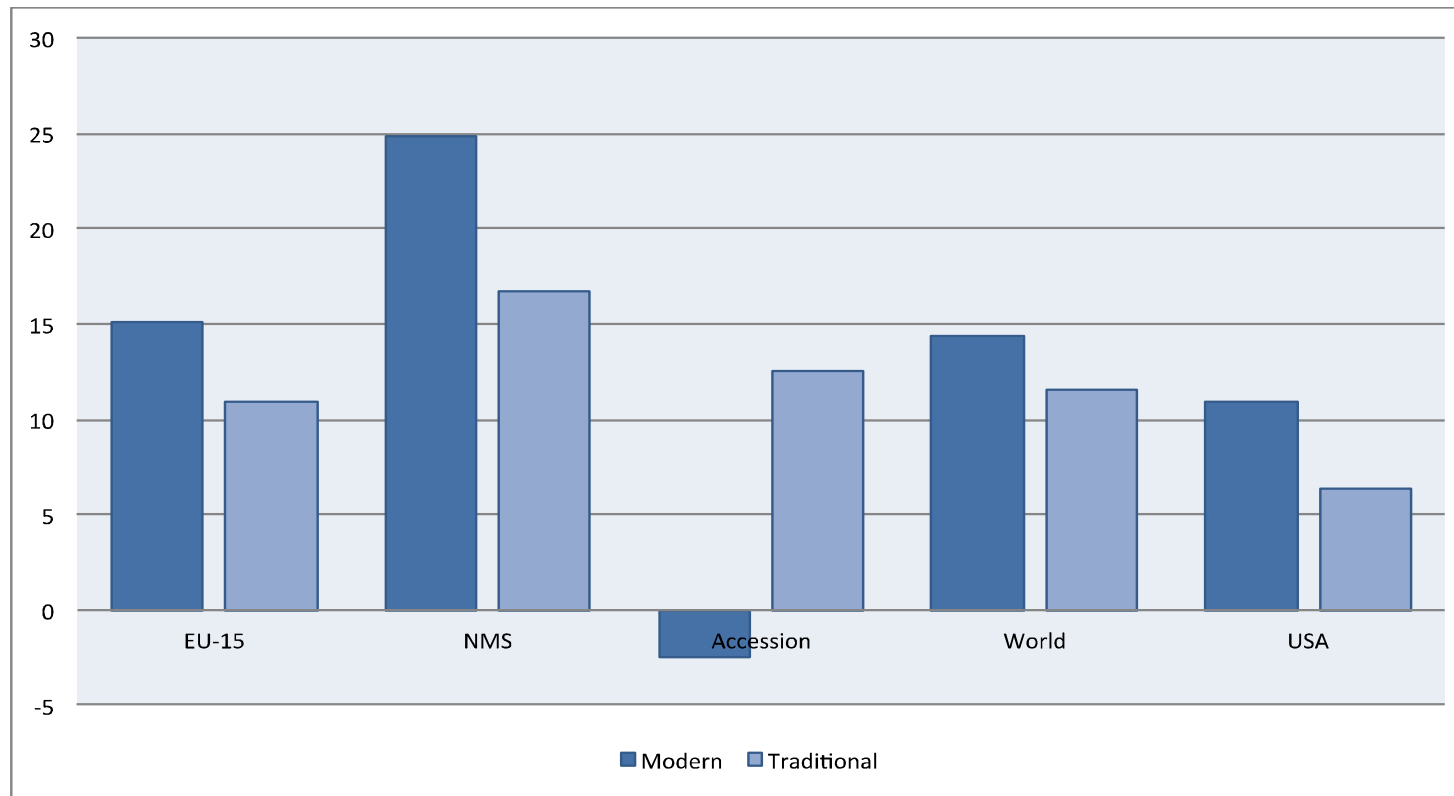


In modern services, candidate countries have been slipping

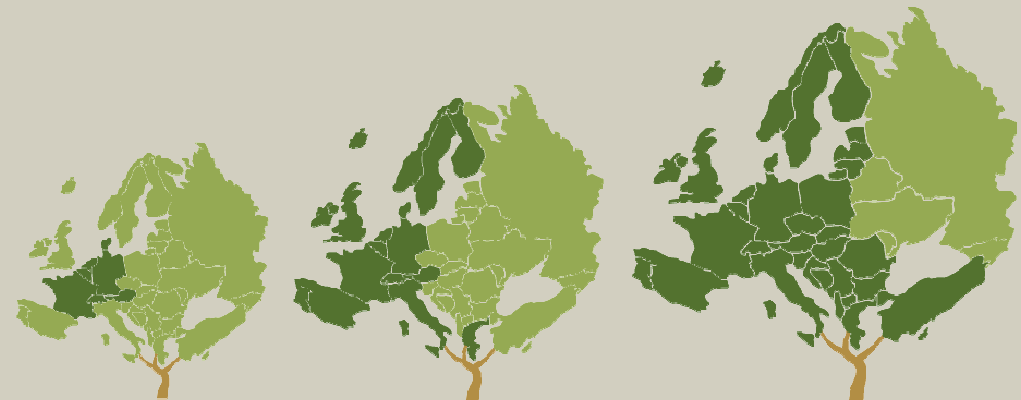


Modern—more tradable—services are growing faster almost everywhere

Annual growth in modern and traditional services, 2000-08



Source: Chapter 2 in Golden Growth



§ Question Four

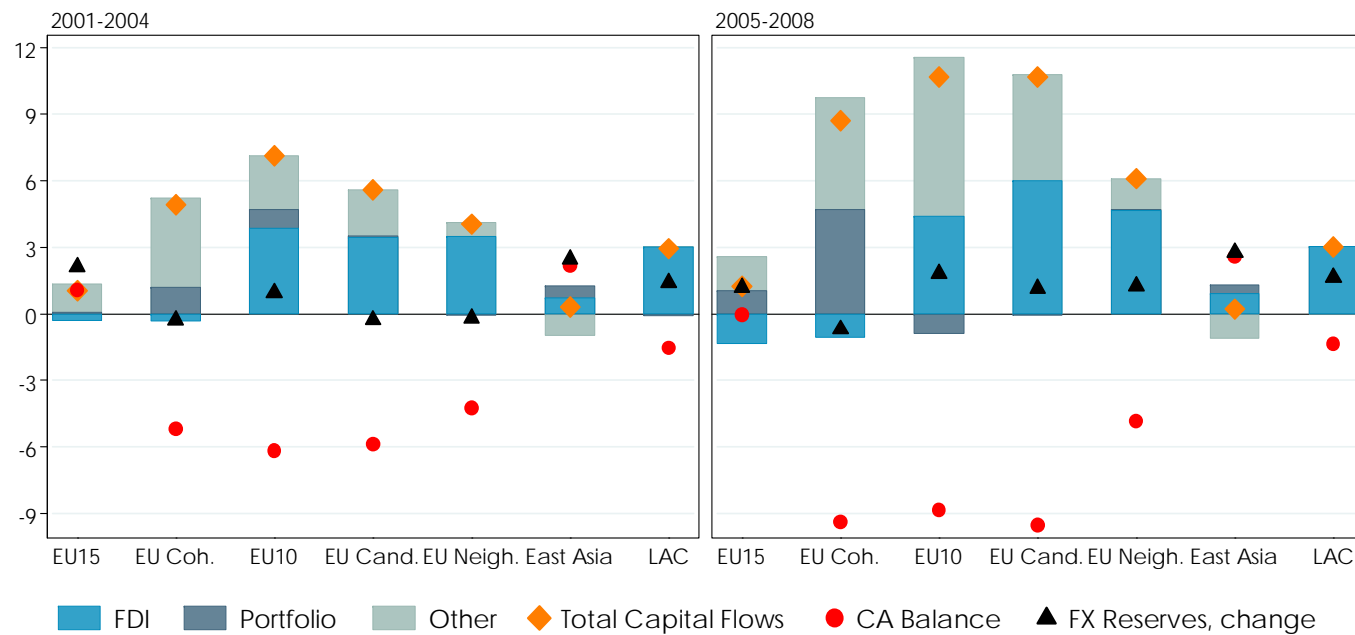
Are capital flows in Europe too large and fast?

Largest financial flows, more of it FDI



The Biggest Capital Flows to Emerging Markets in History

(% GDP; period average of group median values)

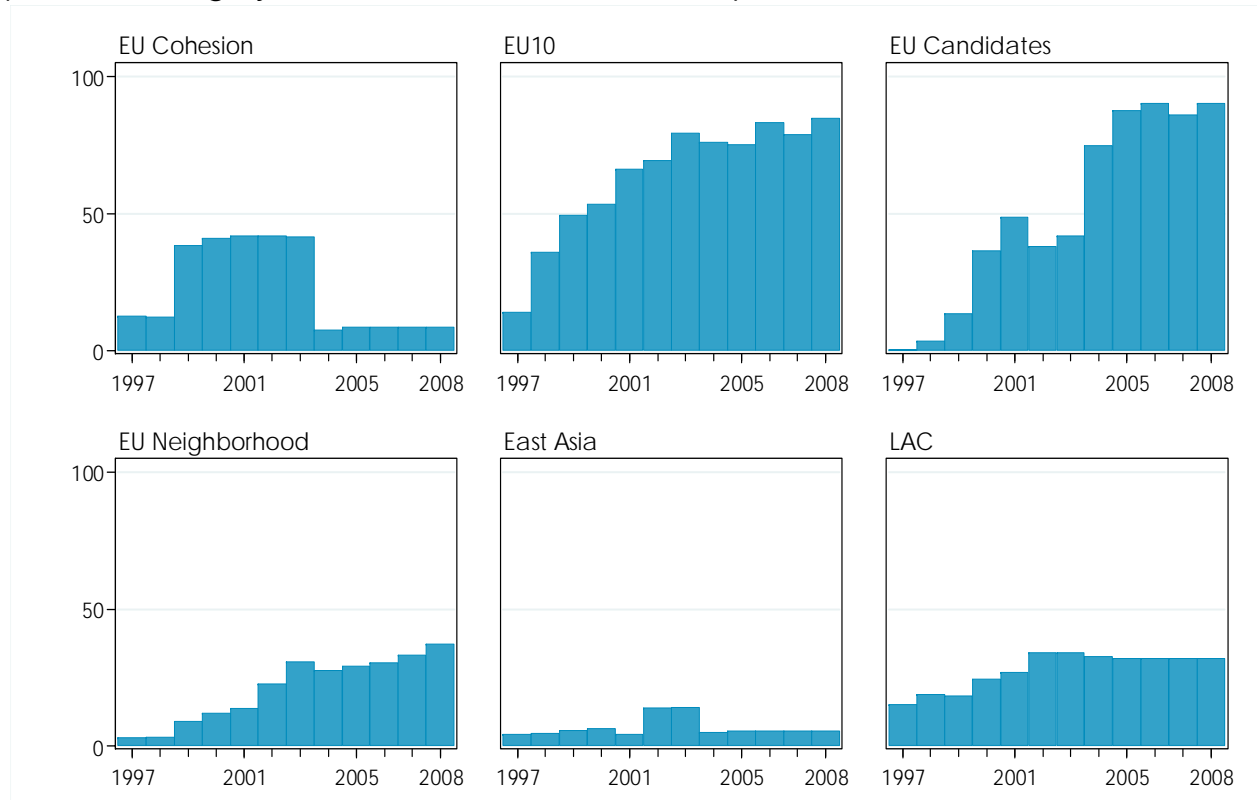


Source: IMF World Economic Outlook and authors' calculations. "EU coh." refers to the 'old' EU cohesion countries.

Sizeable financial FDI is a European phenomenon



Emerging Europe's Most Unique Feature: Foreign Banks (% of banking system assets; median values)



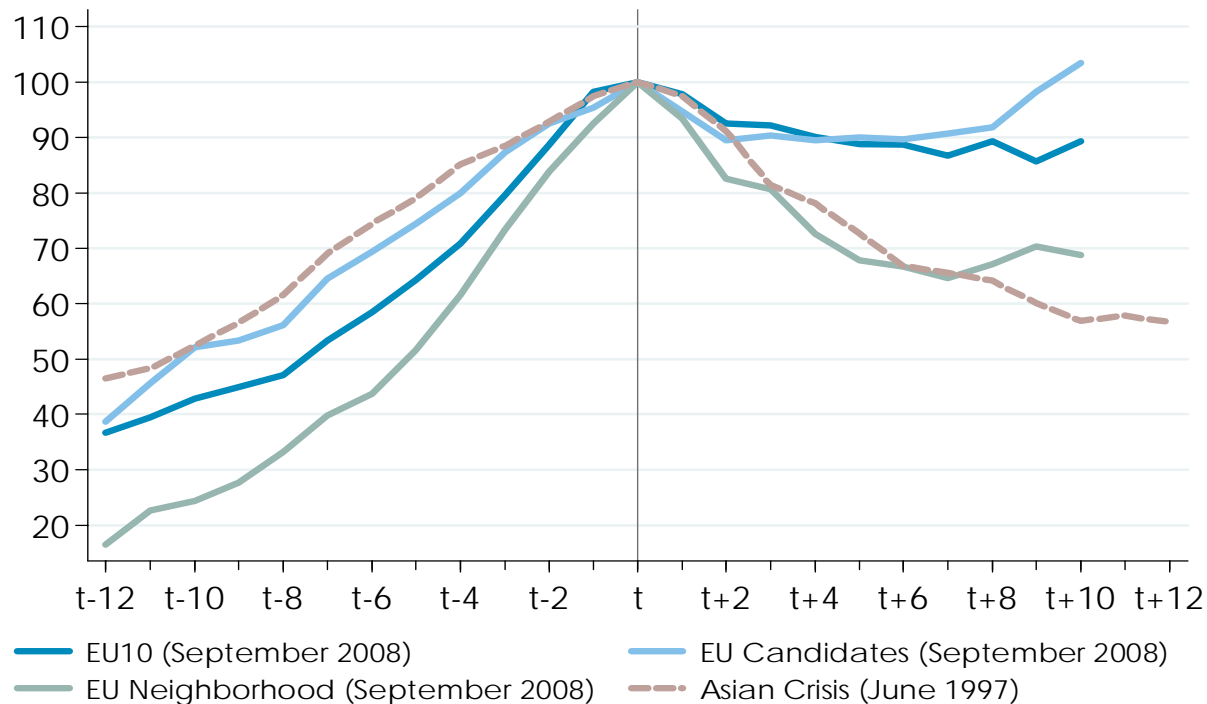
Source: Claessens, S., and N. van Horen (2011); emerging Europe updated based on EBRD transition indicators for 2006 onwards. Other emerging markets have been kept constant at their 2005 level.

Financial Flows in Europe have been more stable



Foreign Finance is Stabler the Closer a Country is to the EU

(Banking flows to emerging markets during crises, quarterly data; $t = 100$)



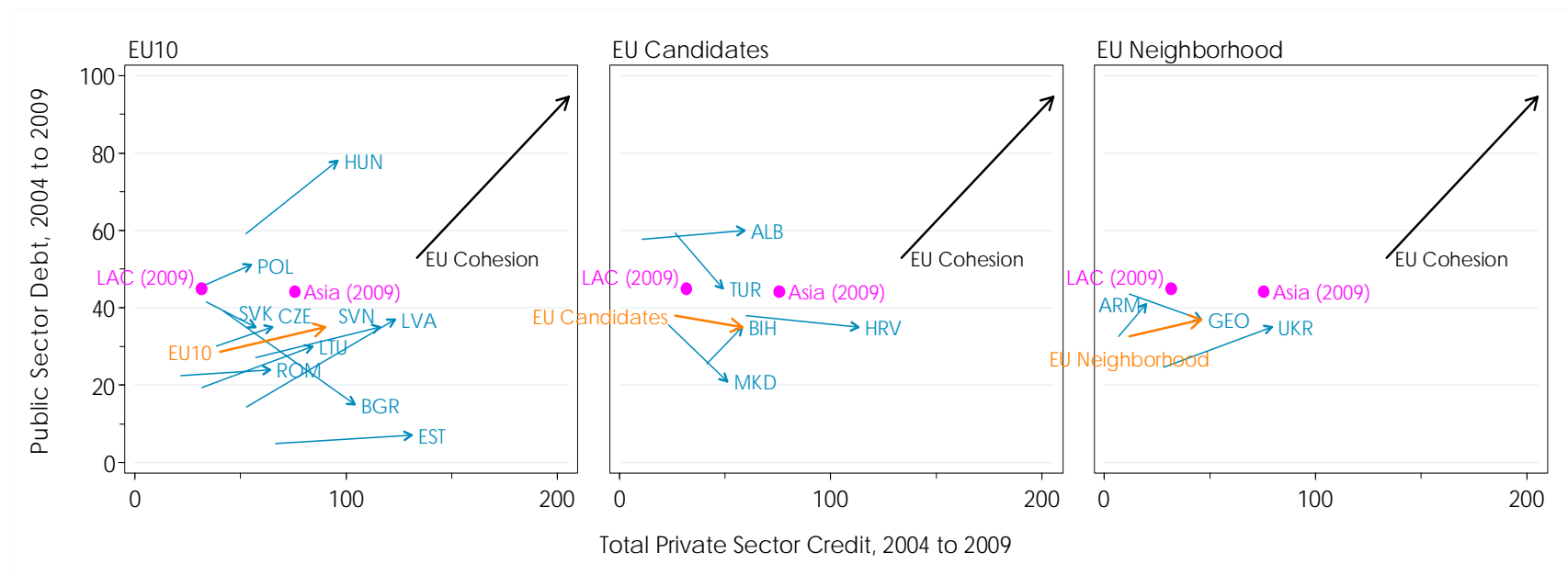
Source: BIS Locational Statistics and World bank. Note: Based on quarterly data as of March 2011; exchange rate adjusted values. Crisis timing date is defined in parentheses. Asian crisis countries include Indonesia, Korea, Malaysia, Philippines and Thailand.

Financial flows varied



Emerging Europe has Lower Levels of Public and Private Debt

(Aggregate exposure of the public and private sectors, % of GDP, 2004 and 2009)



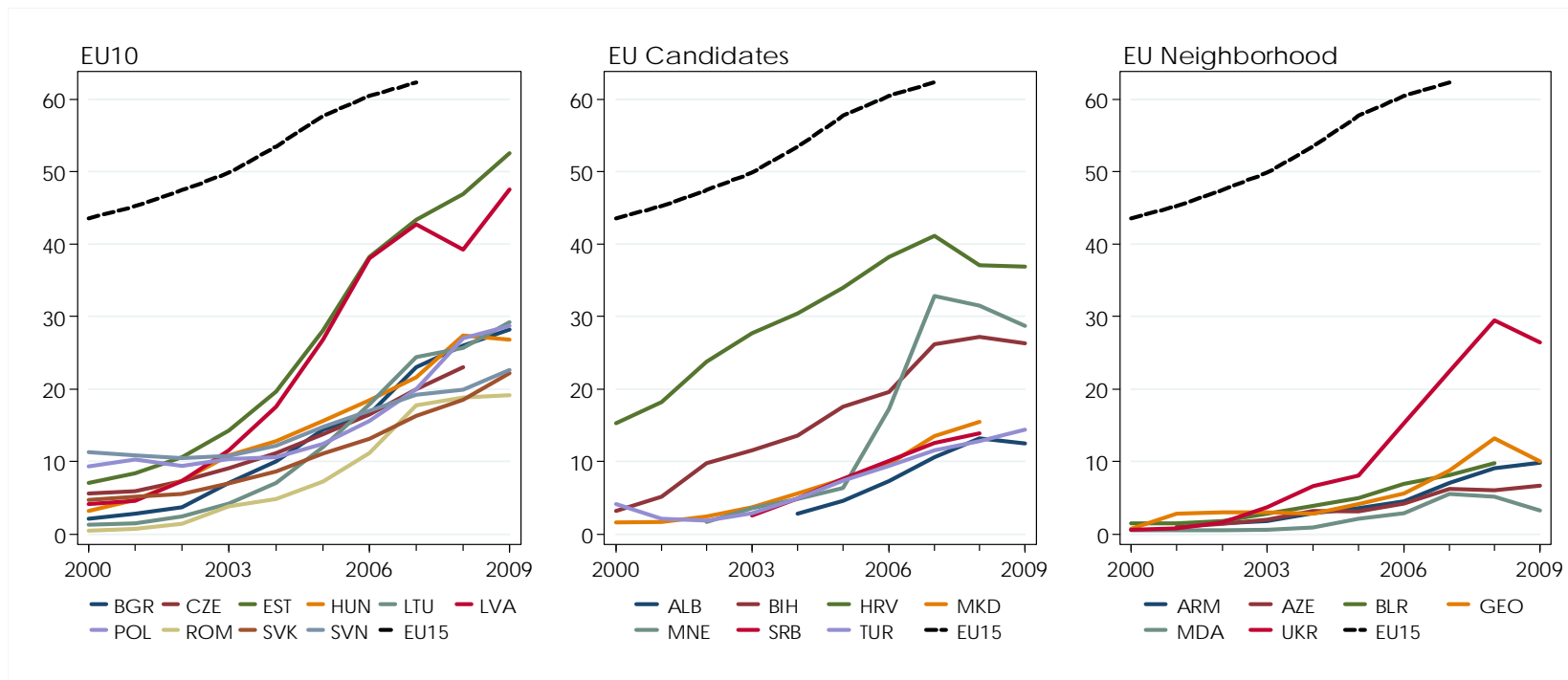
Source: Eurostat, World Bank calculations. Notes: Arrows begin in 2004 and end in 2009.

Household debt has risen, but is lower than EU15

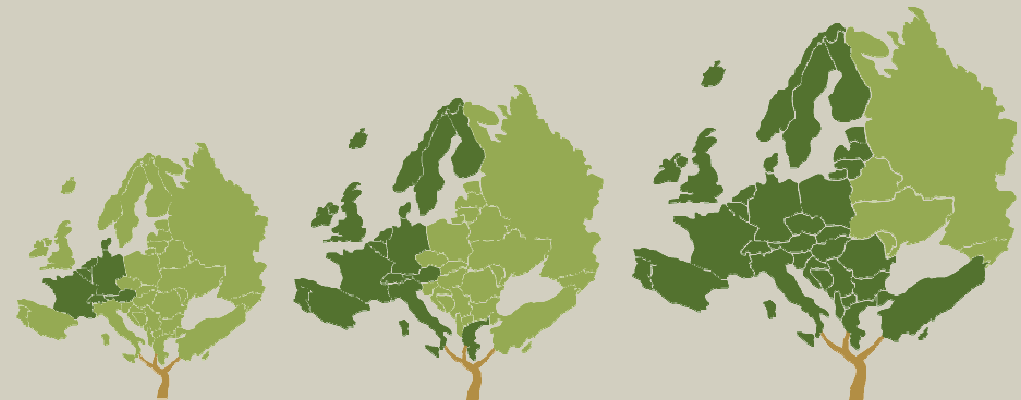


Household Indebtedness Rose, but Remains Well Below EU15 Levels

(Total household debt, % of GDP, 2000 to 2009)



Source: EBRD Transition Indicators, European Credit Institute, and authors' calculations. Note: Includes all types of household debt.



§ Question Five

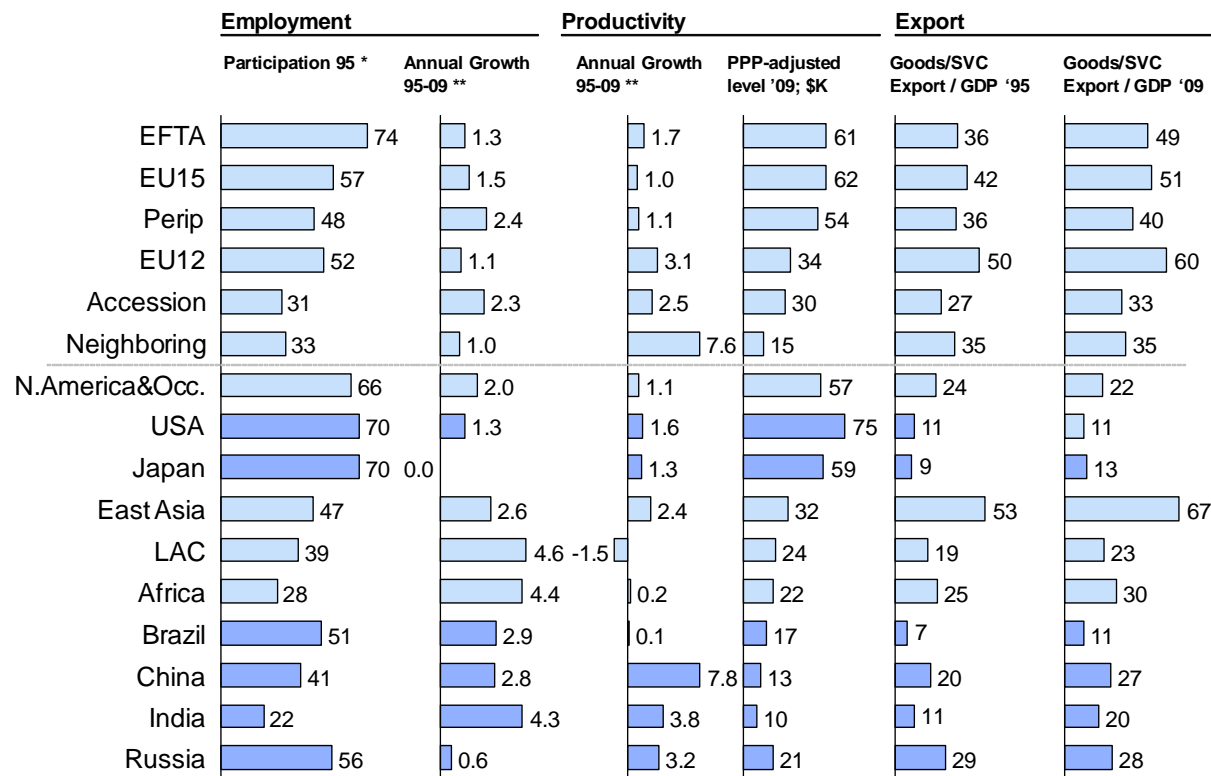
Are enterprises in Europe over-regulated?

European Enterprises have largely delivered



European enterprises have done well since the mid 1990s

Growth performance of European sub-regions and benchmark countries, 1995 to 2009



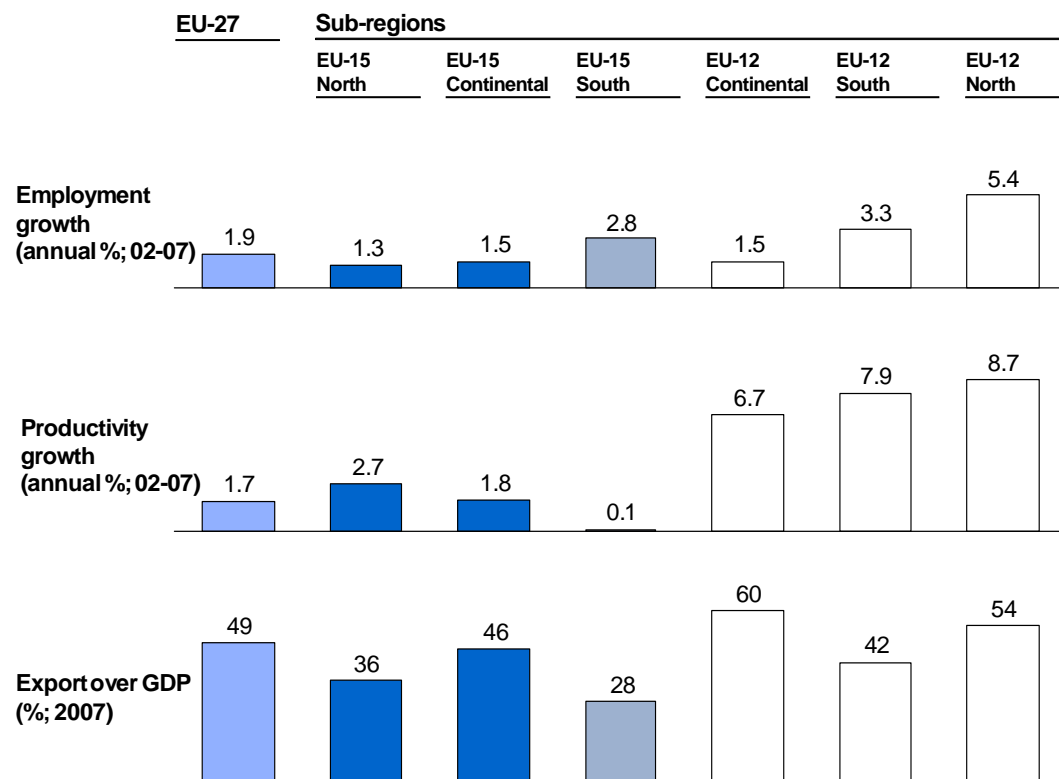
Source: World Bank staff, based on WDI and ILO KILM

Employment, productivity and exports



The East giving chase, the South lagging in productivity growth and exports

Employment, productivity and exports, 2002-2007



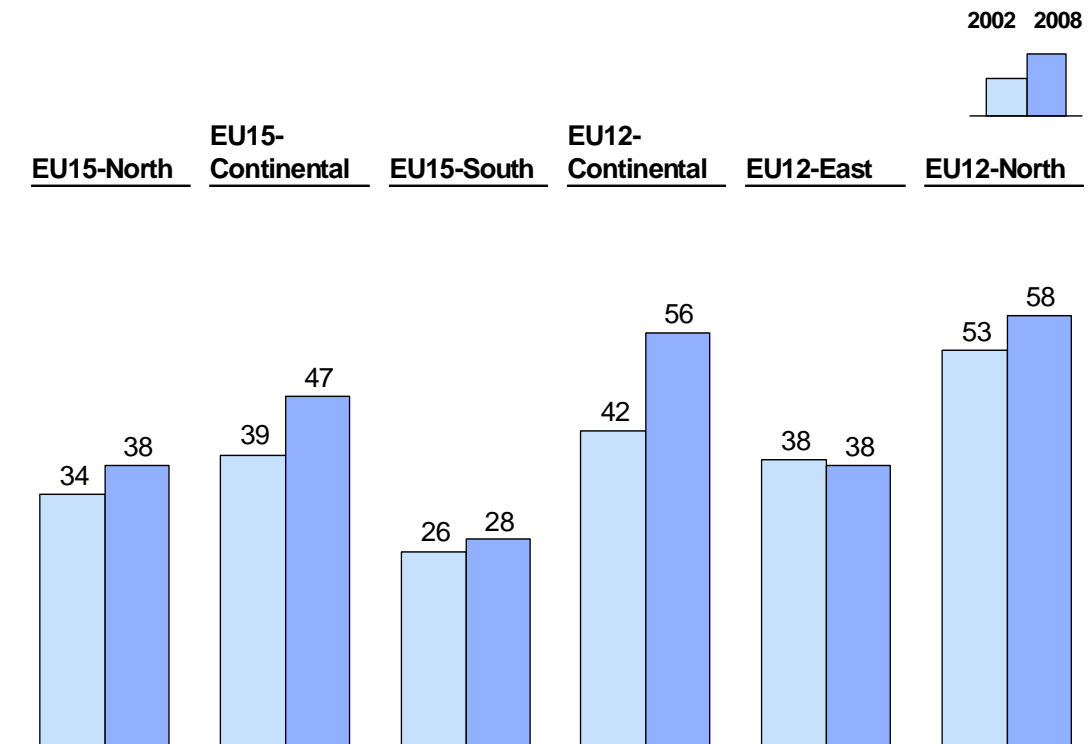
Source: World Bank staff, based on Eurostat, WDI

A region of exporters



Exporting—Central Europe's specialty

Export share in GDP, 2002 and 2008



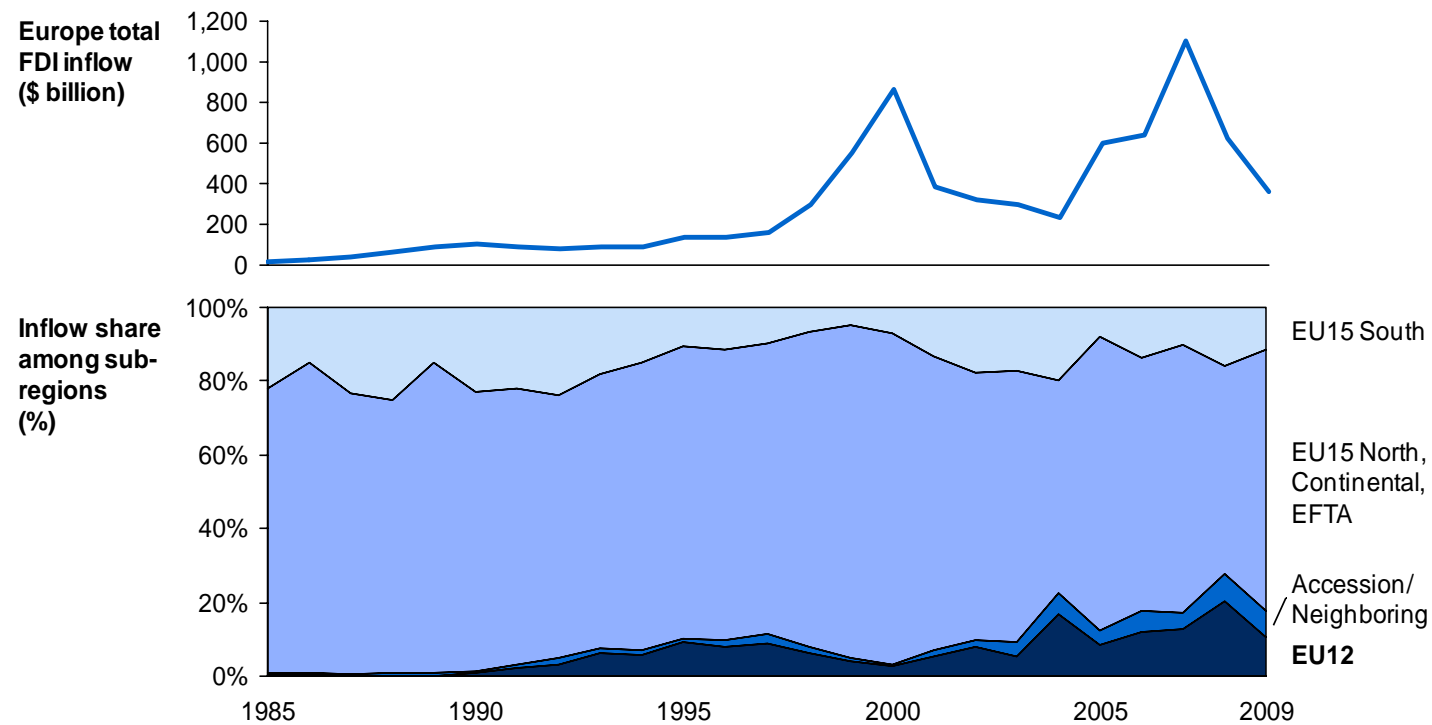
Source: World Bank staff, based on World Development Indicators.

A region of investors



The East has become more attractive to investors, the South less

FDI inflows into Europe, all sectors, 1985-2009



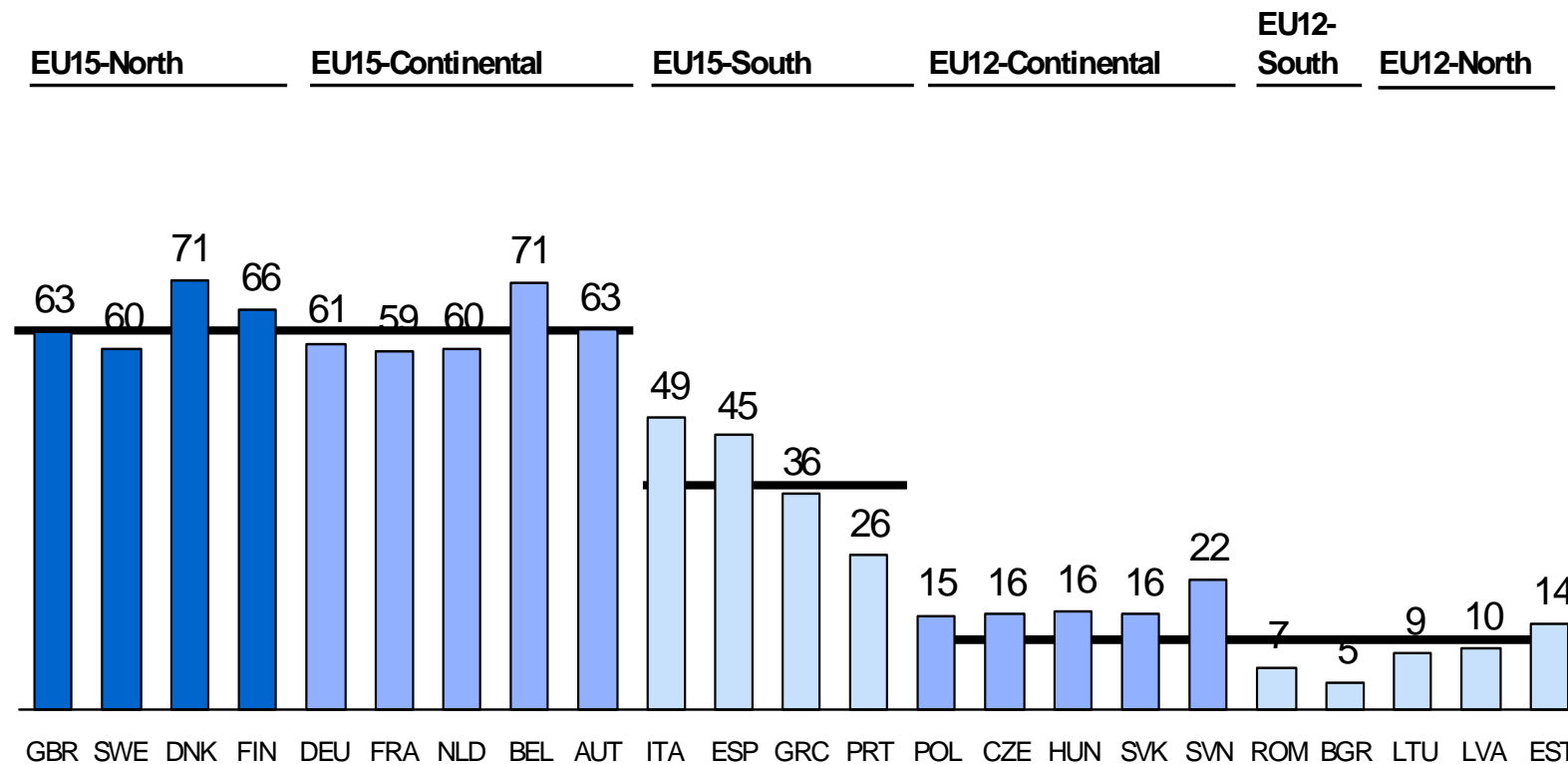
Source: World Bank staff, based on UNCTAD data.

Varying productivity levels—quite normal



Productivity levels were lower in the South and lower still in the East

Average value added per worker in 2002, thousands of 2005 US\$

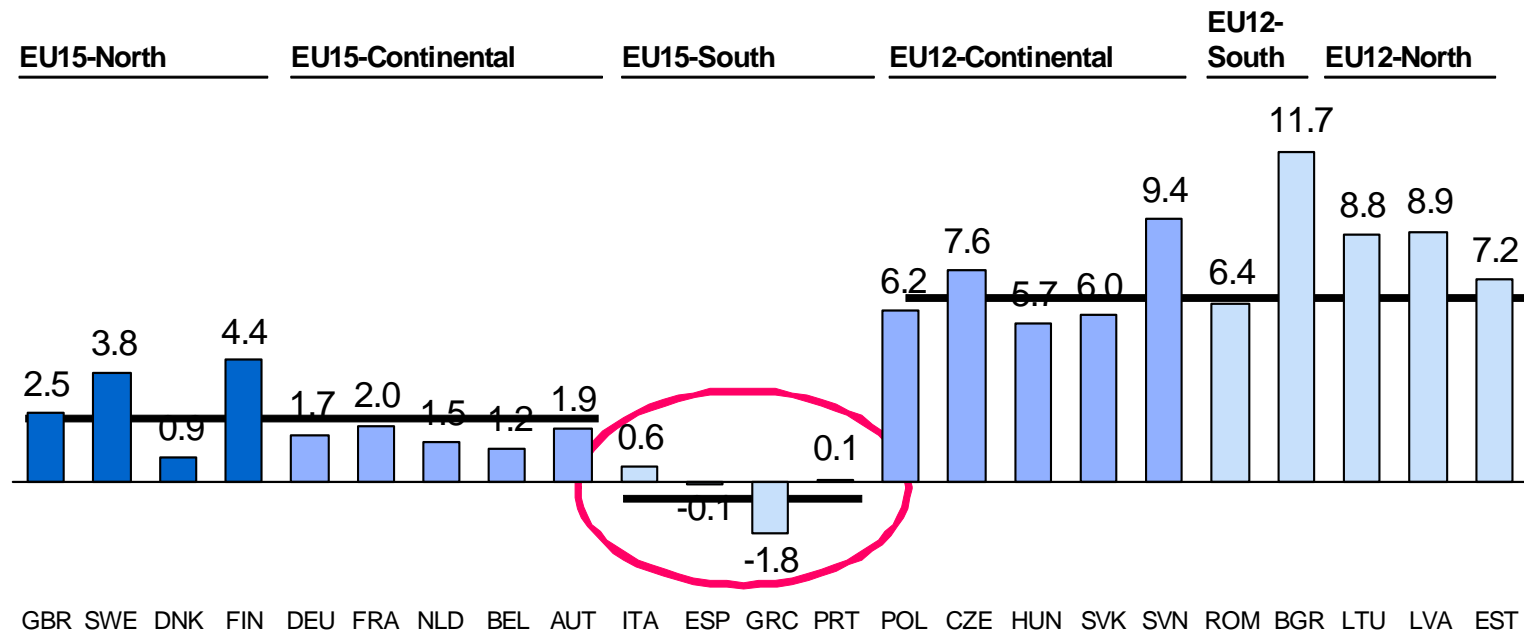


Diverging productivity—not normal



The East has been catching up, the south has been falling behind

Average productivity growth in EU27, annual rates, 2002-2007

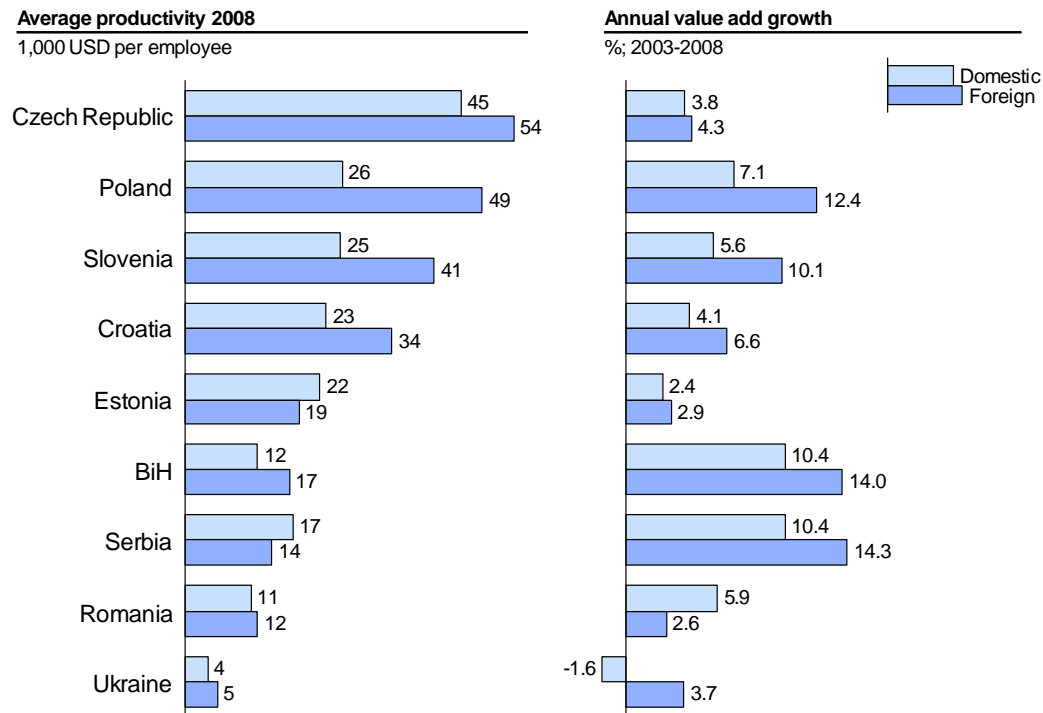


FDI helps make enterprises productive



Foreign firm are more productive

Productivity 2008 and growth of value added, 2003-2008



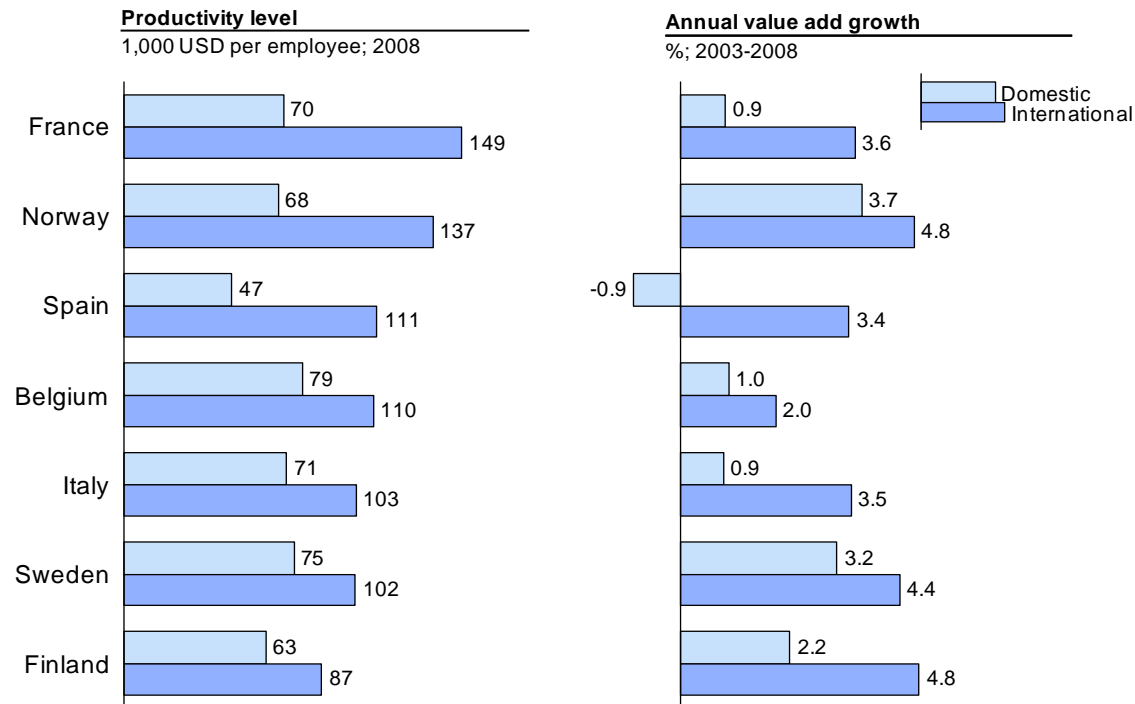
Source: World Bank staff, based on Amadeus

Multinational enterprises are more productive



In the EU-15, firms with a foreign presence are more productive and grow faster

Productivity levels 2008 and growth of value added, 2003 to 2008



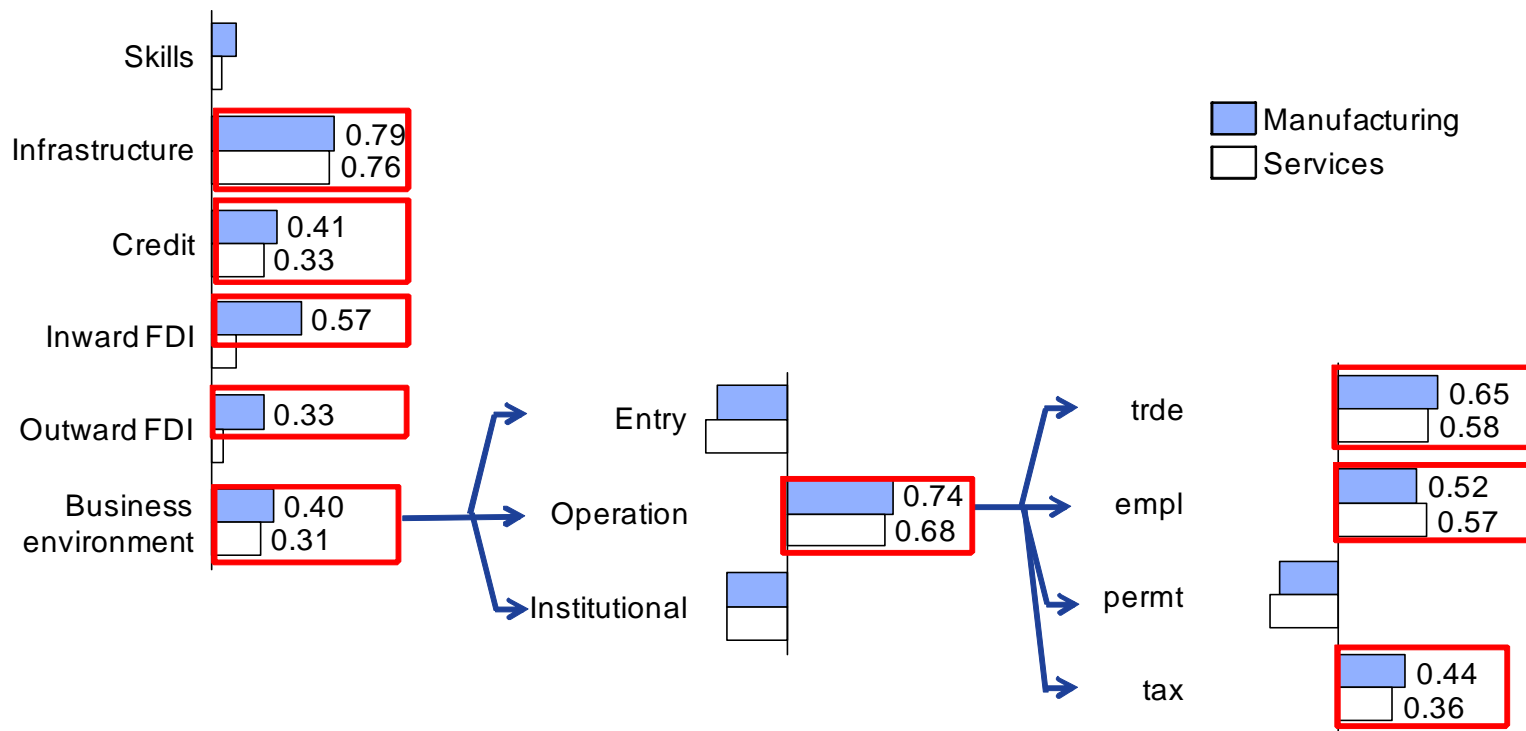
Source: World Bank staff, based on Amadeus.

What helps enterprise in emerging Europe?



Infrastructure, credit, FDI, and regulations improve firm performance in the EU-12

Correlation between country dummies and policy variables in EU-12 countries



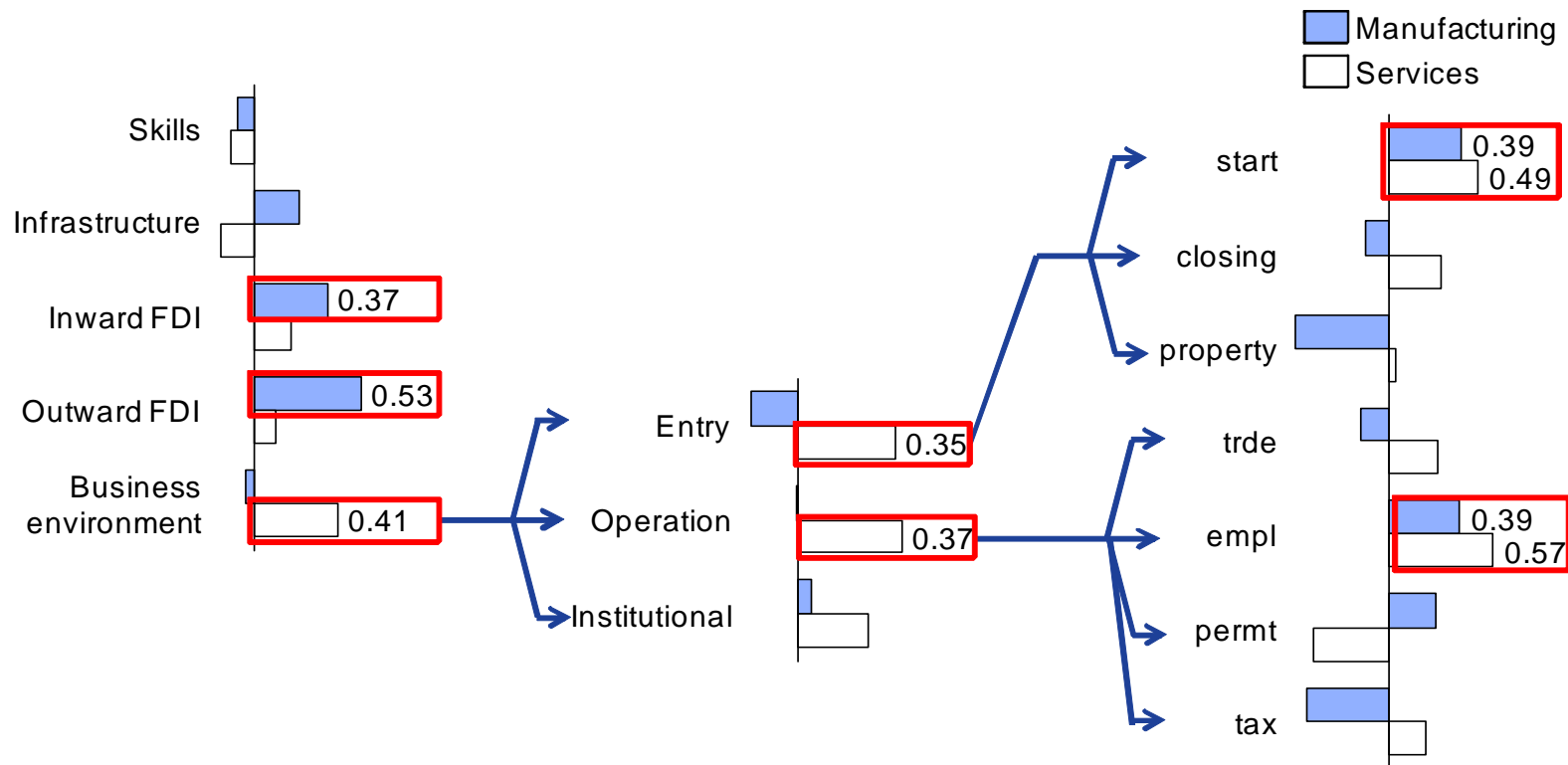
Source: World Bank staff, based on Amadeus data.

What helps enterprise in advanced Europe?

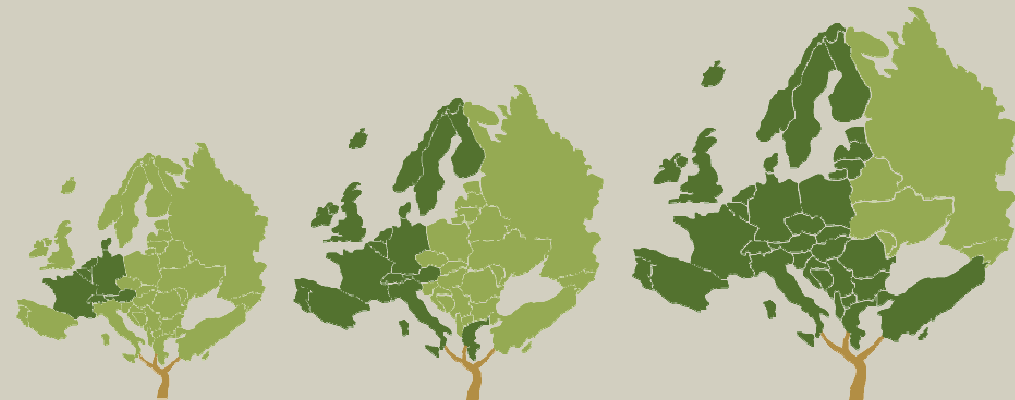


FDI (manufacturing) and regulations (services) are the correlates of productivity in the EU-15

Correlation between country dummies and policy variables



Source: World Bank staff, based on Amadeus



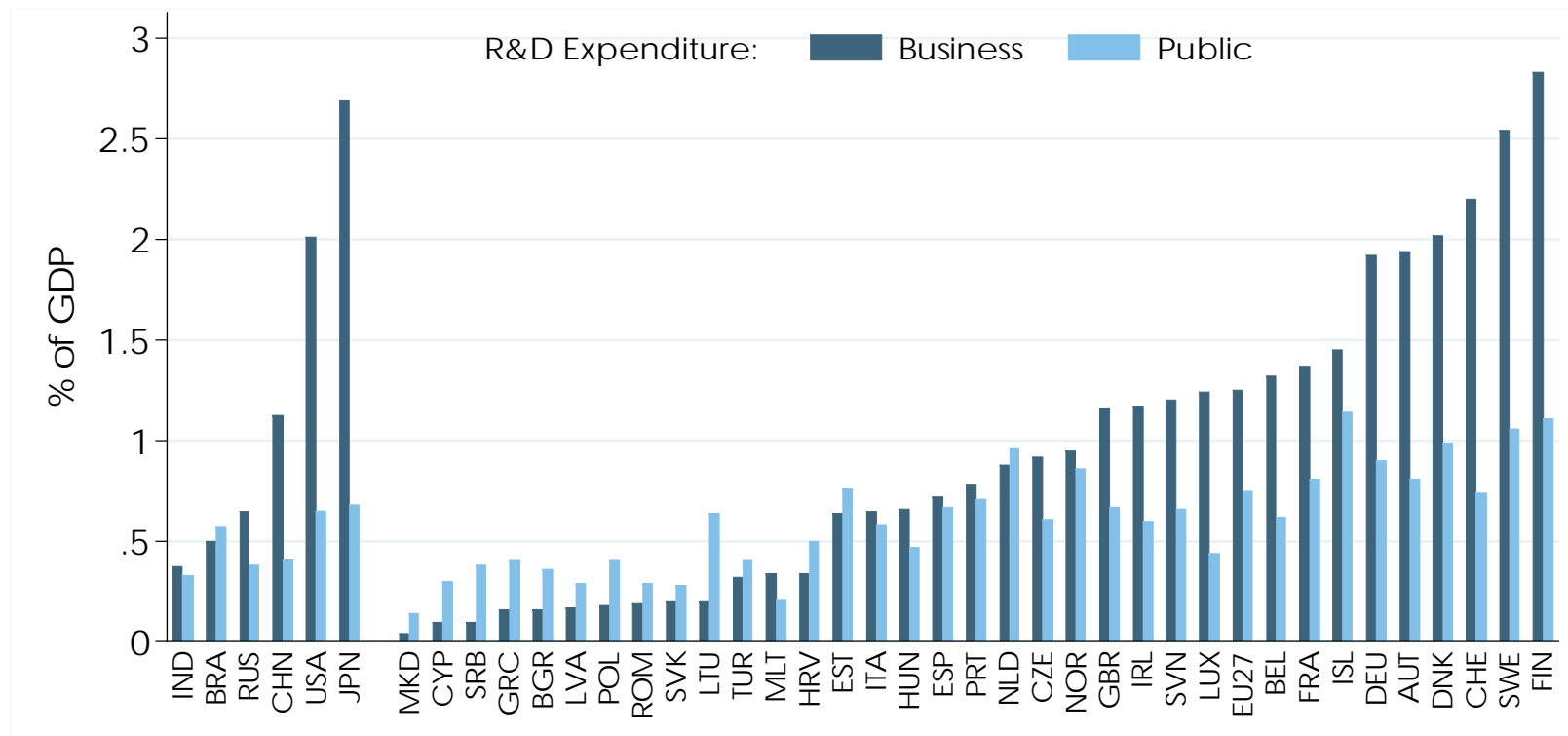
§ Question Six

Are Europe's innovation fundamentals flawed?

Europe has some of the most innovative economies



Europe's leaders invest as much in R&D as the US and Japan



Source: IUS (2010).

Europe does less well in R&D-intensive sectors



Europe specializes in sectors with medium R&D intensity, the US in high intensity

Relative Technological Advantage (RTA) indices by sector

	Europe	US
Aerospace & Defense	1.50	1.13
Computer hardware & services	0.08	1.39
Health care equipment & services	0.70	1.86
Internet	0.00	2.54
Pharmaceuticals	1.27	1.16
Semiconductors	0.50	1.72
Software	0.51	2.05
Telecommunications equipment	1.38	1.09

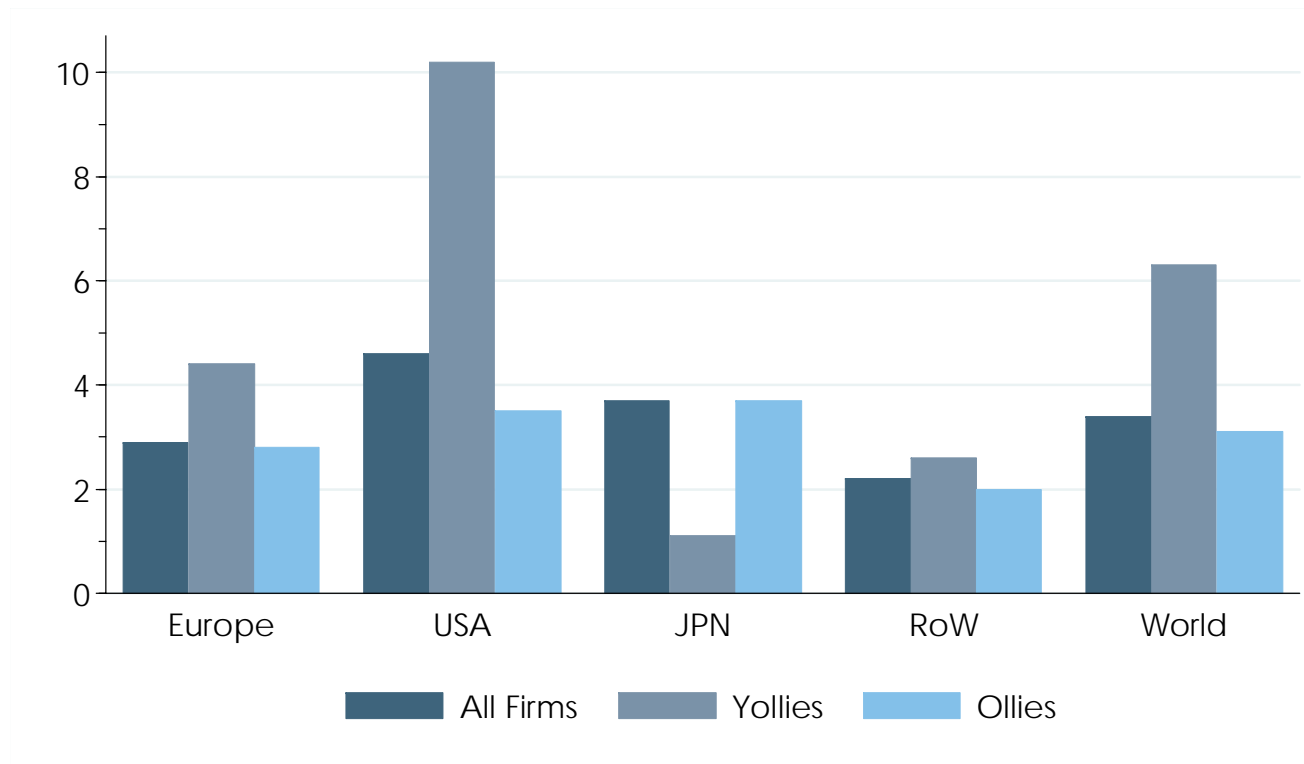
Note: RTA are calculated as the share of the region in total sectoral R&D relative to the share of the region in overall R&D. A RTA value higher than 1 reflects that the region is technology specialized in this

Source: Bruegel and World Bank, on the basis of IPTS R&D Scoreboard data

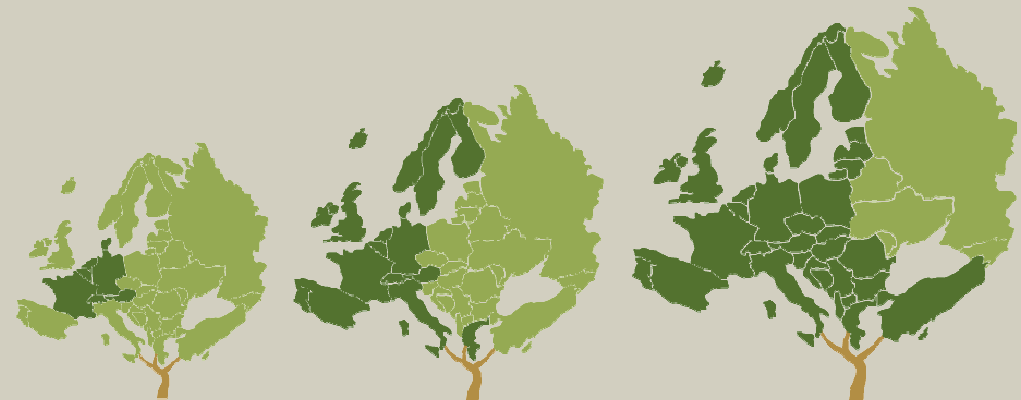
Europe's innovation deficit: Fewer "Yollies"



Yollies spend the most on R&D and US Yollies are the most R&D intensive



Source: Bruegel and World Bank, on the basis of IPTS R&D Scoreboard data



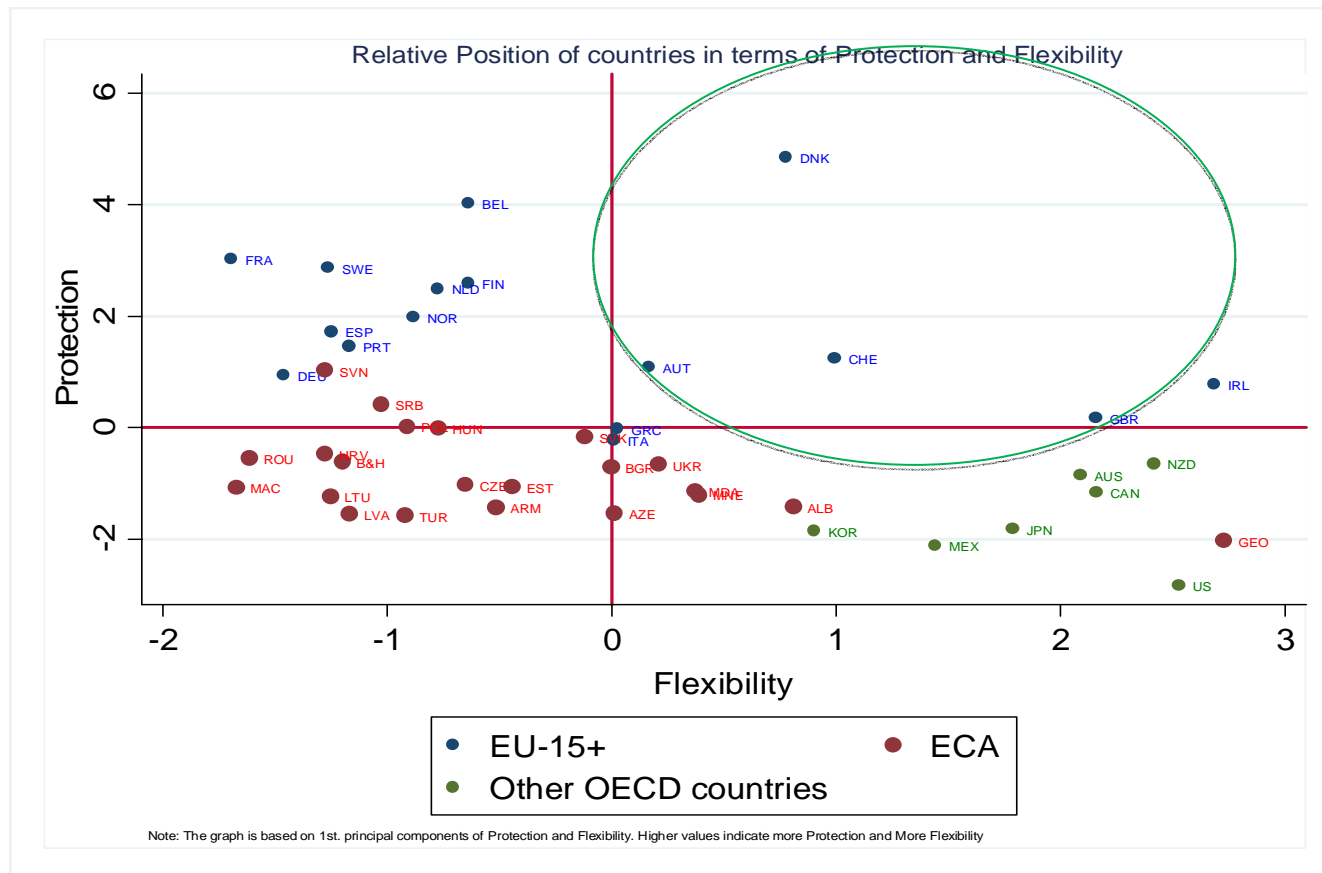
§ Question Seven

Are Europe's workers making it uncompetitive?

The European Work Model



A trade-off between flexibility and security?

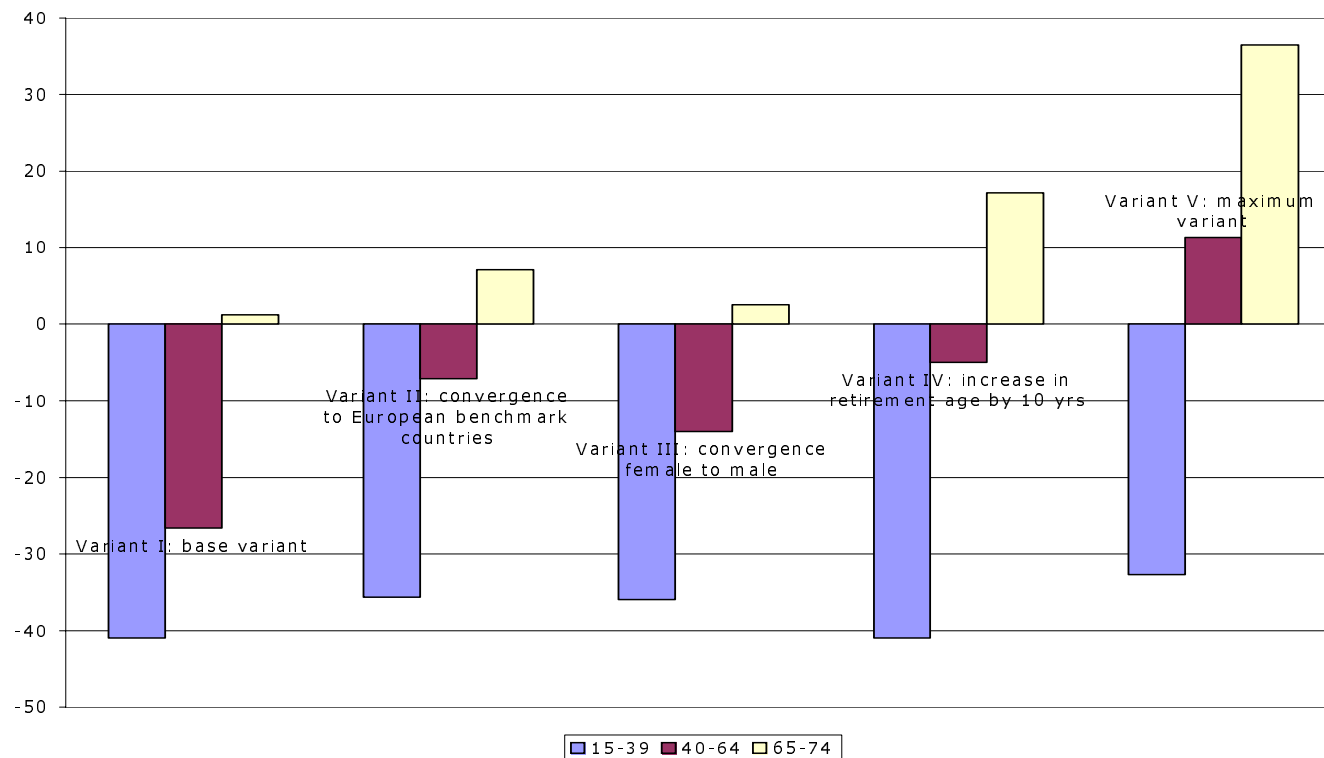


A deficit of young people



To keep the labor force stable Europeans have to work longer, but a demographic deficit of young people will persist

Change in Labor Force Between 2005 and 2050 by Variant and Age Group (millions)



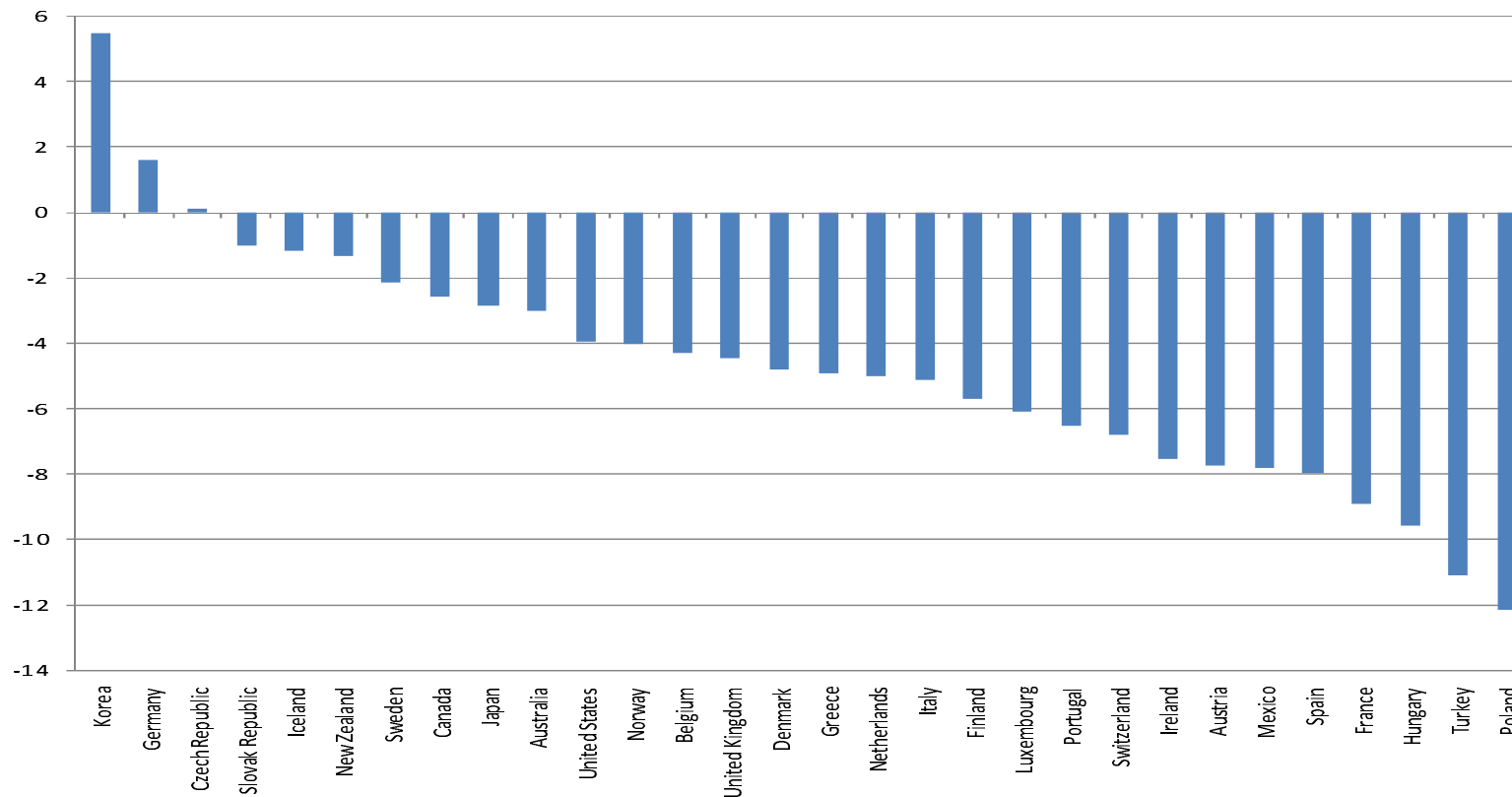
Source: Koettl (2010) using UN (2005), ILO (1997)

If older workers stop retiring so soon



Europeans are retiring at earlier ages than they used to

Change in the average effective retirement age of men, number of years difference 1965-2007.



Source: World Bank staff, using OECD data

Europeans are less mobile, even within countries



Europeans are less mobile than Americans and Asians

Annual cross-border labor mobility, Per cent of the working-age population, 2000-05

US: between 50 states	3.1
Japan: between TL2 level regions	2.2
Australia: between 8 states/territories	2.0
EU15: between NUTS-1 regions within countries	1.0
Canada: between 10 provinces/territories	1.0
EU 27: between NUTS-2 regions within countries	0.8
Canada: between Quebec and 9 other provinces	0.4
EU: commuting across borders	0.4
EU15: between 15 countries	0.1

Source: Eurobarometer (2005), US Census Bureau, Current Population Survey; Eurostat, Labor Force Statistics; Statistics Canada; OECD(2005), Employment Outlook, Chapter 2.



§ Question Eight

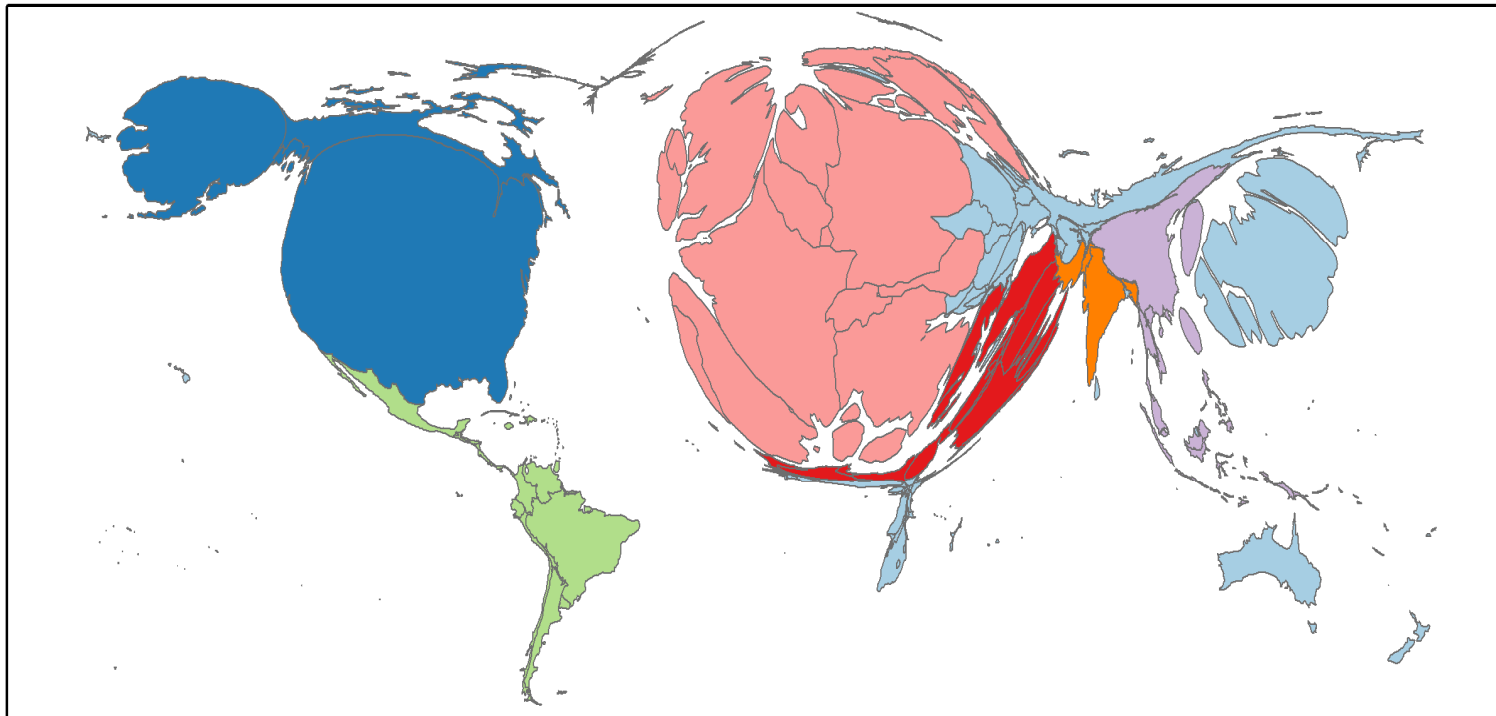
Are governments in Europe too big?

Public spending (as a share of GDP) has increased



Governments in Europe are Bigger

The world resized by government spending in dollars, 2009



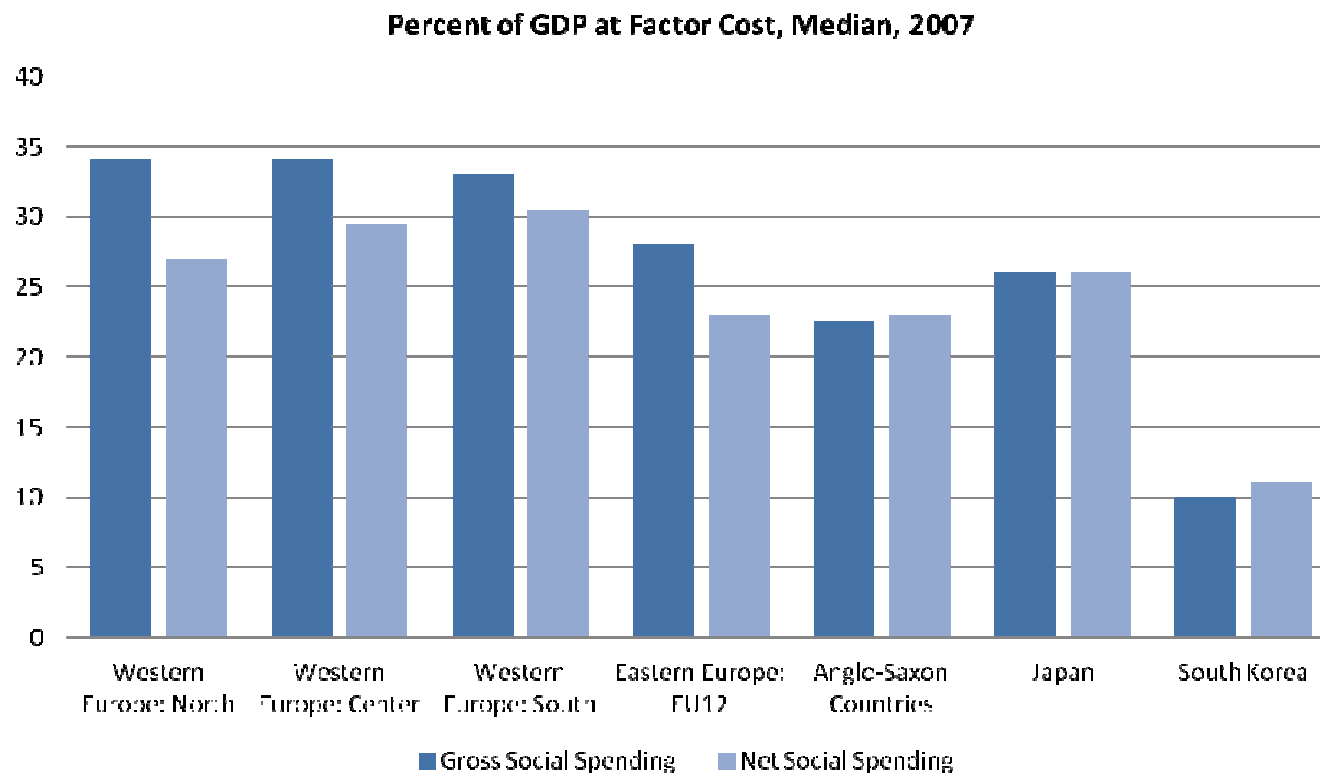
Source: World Bank staff.

Main reason for bigger government: higher social protection spending



About 90 percent of the size difference is due to spending on social protection

From Gross Public to Net Publicly Mandated Social Protection Spending for OECD countries in 2007

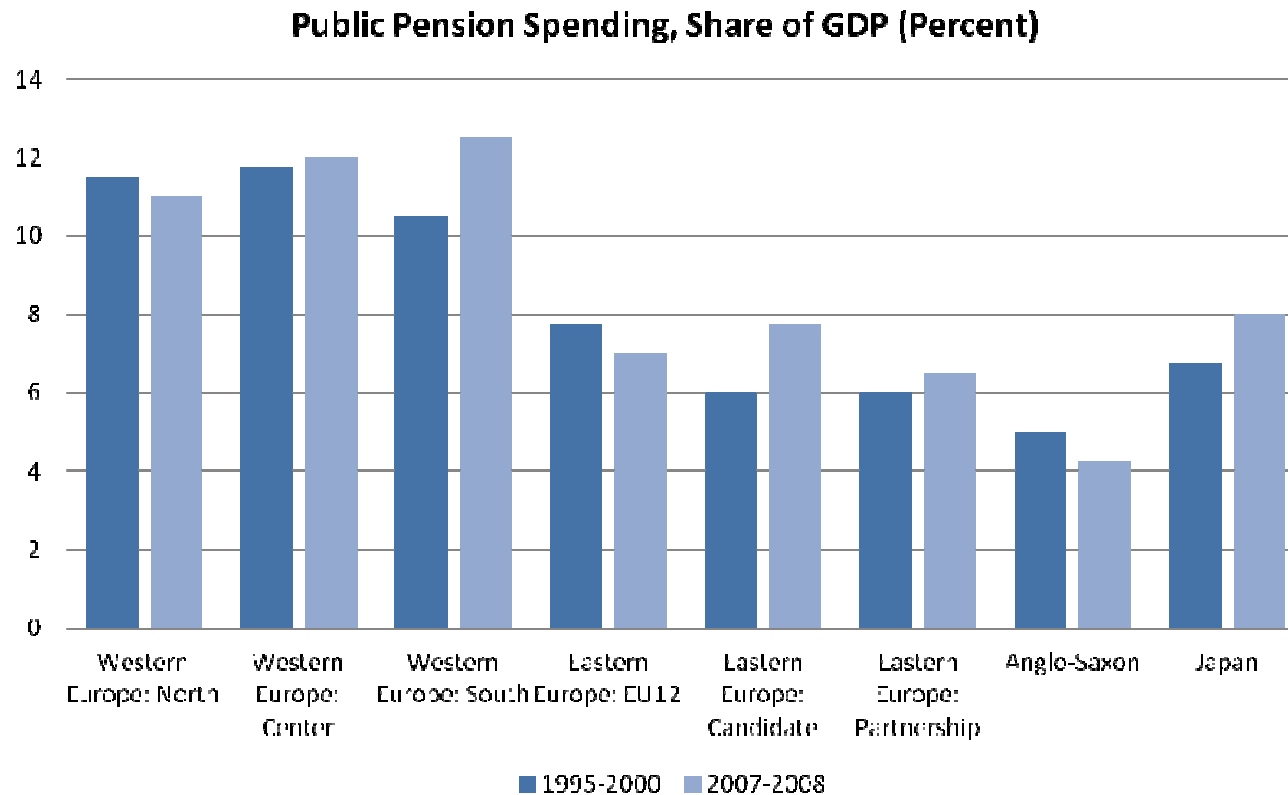


Pension spending is the most critical component



Southern Europe spends the most on pensions in the world

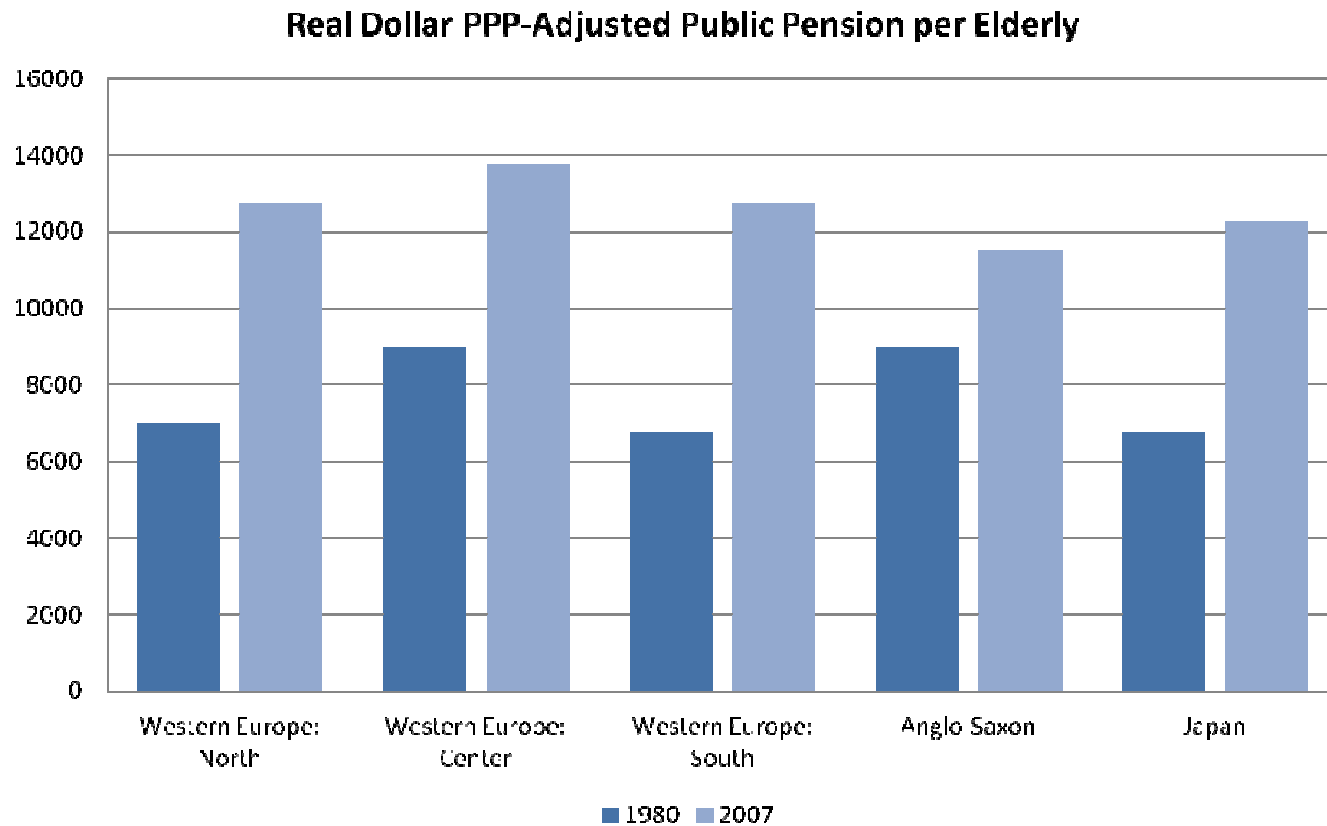
Public Pensions as Percent of GDP, 1995-2000 and 2007-2008



Pension *levels* are not the problem—early eligibility is



Real Public Pensions Per Elderly, 1980 and 2007



Europe's Growth Agenda?

