THE CONFERENCE BOARD

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Innovation and Competitiveness: Revaluating the Contribution to Growth

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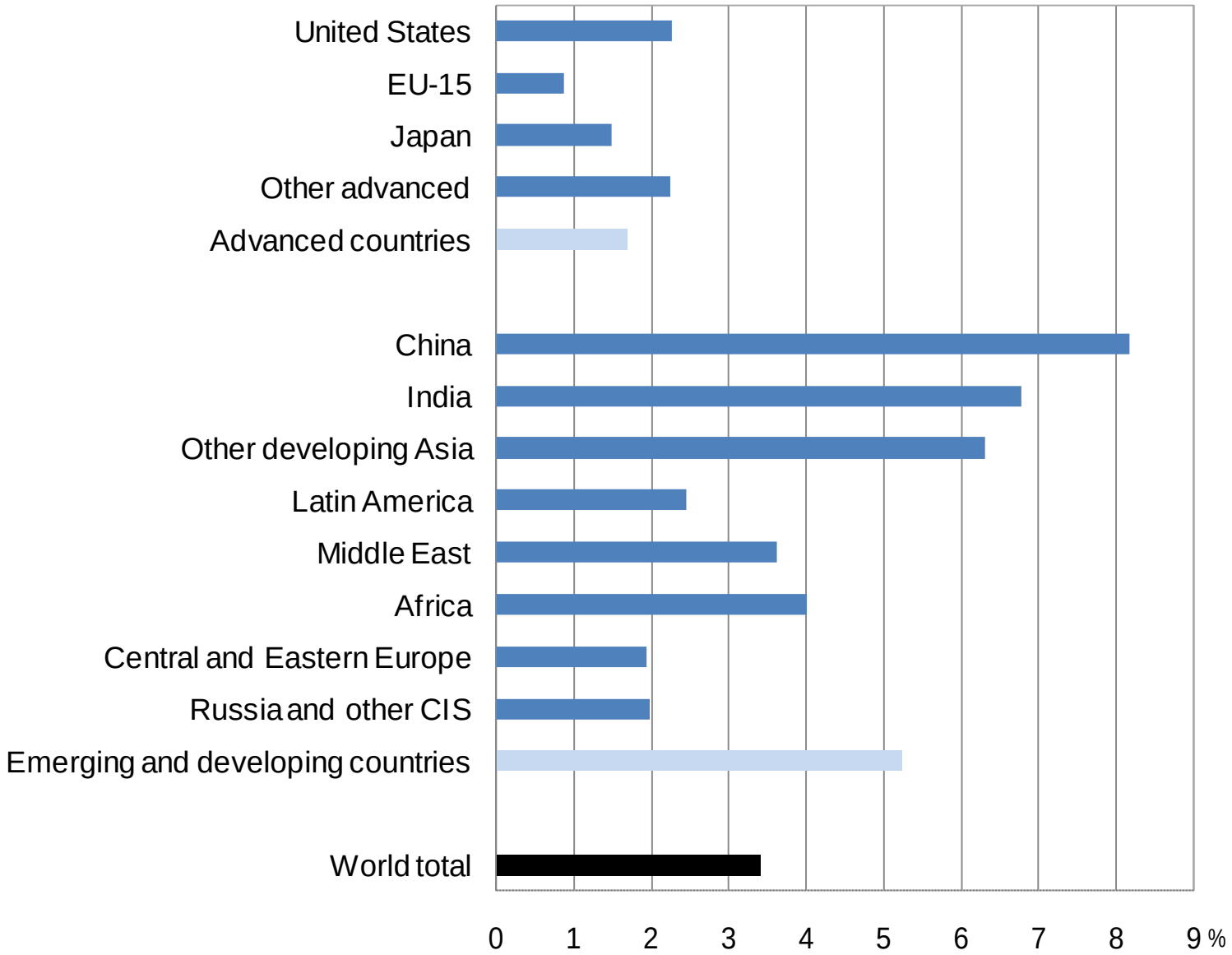
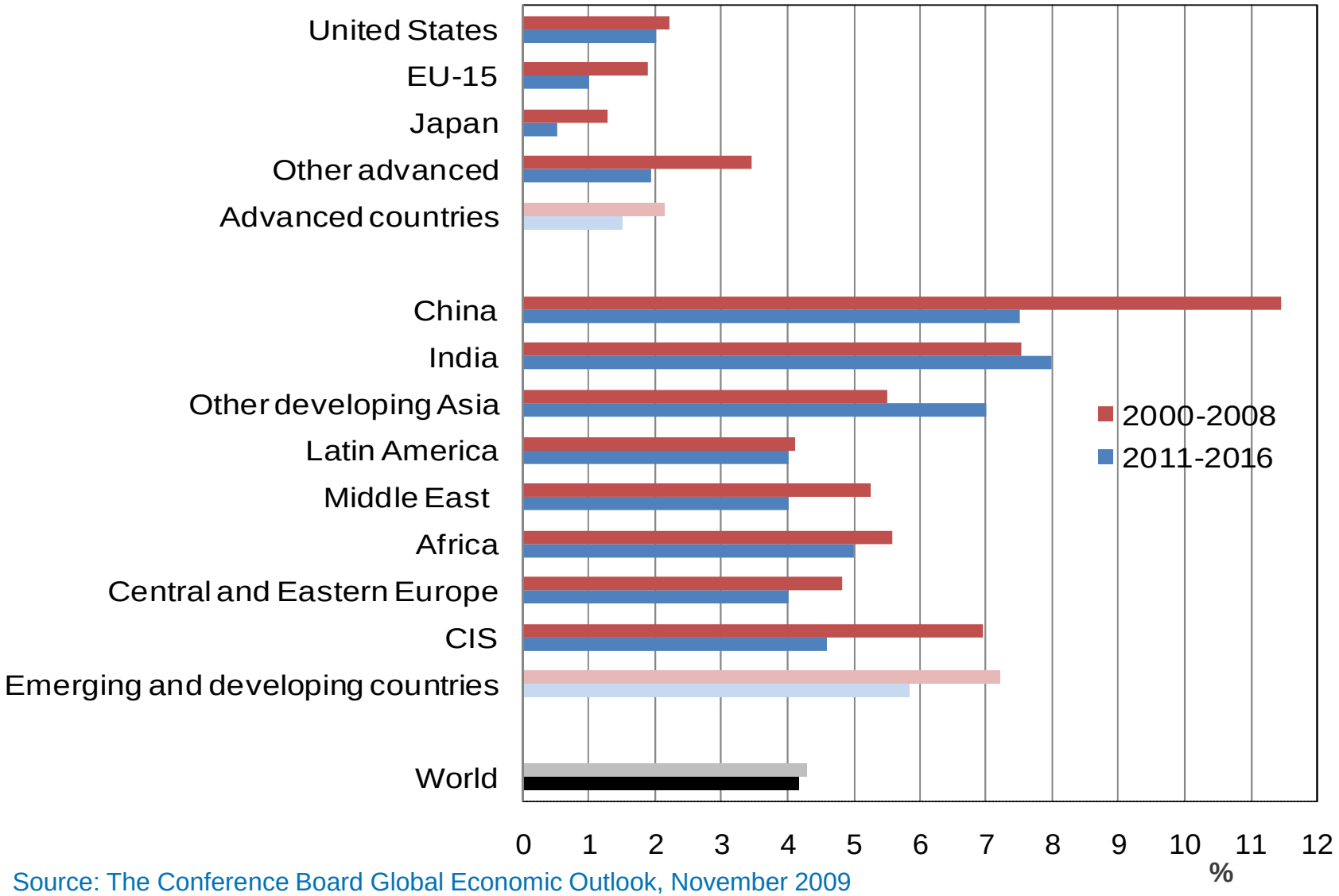
Senior Vice President
and Chief Economist

The world economy will return to growth in 2010

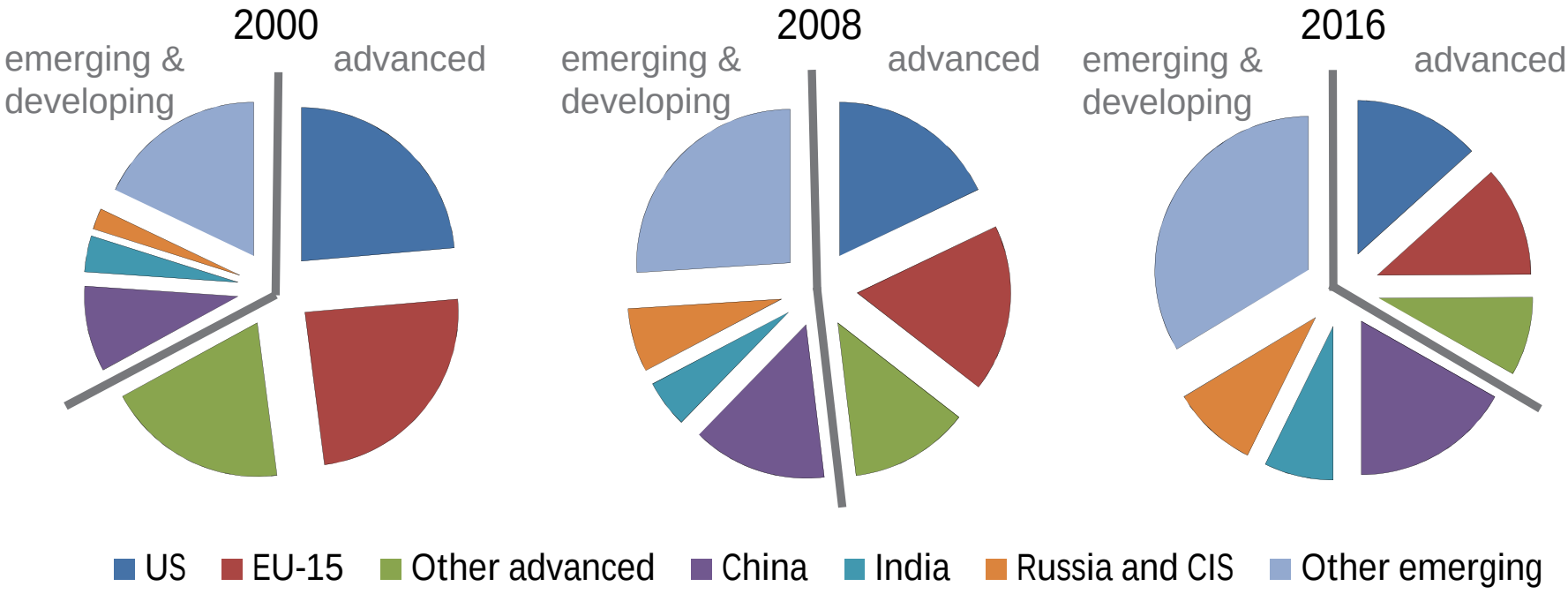


Post-crisis growth in emerging economies is faster than in advanced economies, but slower than before



Source: The Conference Board Global Economic Outlook, November 2009

A massive shift in global distribution of output in less than two decades sets the stage for innovation and competitiveness



Source: The Conference Board Global Economic Outlook, November 2009

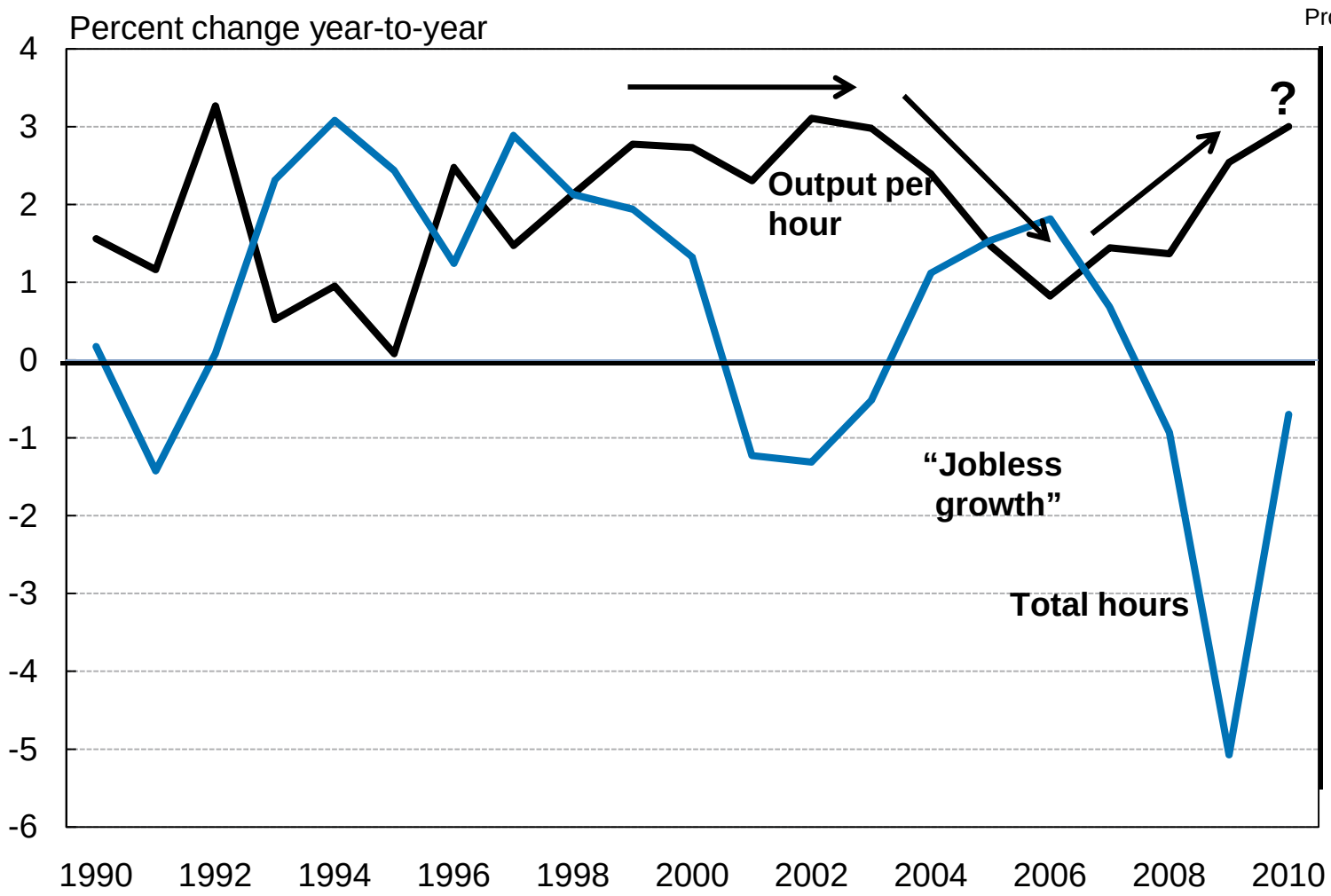
Innovation and competitiveness will make all the difference to who benefits

- Will emerging economies continue to grow faster on the back of rapid population growth, low wages and high exports?
- Or will they move up the value chain through R&D, innovation and investment in high-tech capital and higher terms of trade
- Or develop the domestic economy and middle class, with greater emphasis on services – but slower productivity growth?
- Will advanced economies keep advantage in innovation and competitiveness leadership?
- Are new innovations strengthening macro productivity trends?
- Are the benefits of new technologies going to consumer or producer, and what is the optimal balance?
- What policy options are available?

Most important findings from The Conference Board's 2010 Productivity Brief

- Global productivity (per person employed) fell dramatically in 2009 (about -1%) as a result of the world wide recession
- Advanced economies suffered much more than most emerging and developing economies (-1.2% vs. +1.8% per person)
- Productivity growth (per hour) in U.S. (2.5%) was much higher than in Euro Area (-1.3%) and U.K. (-1.9%) – U.S. reacted strongly by cutting jobs and reducing working hours
- Year 2010 will see productivity recovery (2.4%)
- Among emerging economies, China has best productivity performance, but other emerging economies follow
- Total factor productivity (TFP) – which measures overall efficiency – shows rising advantage of emerging economies

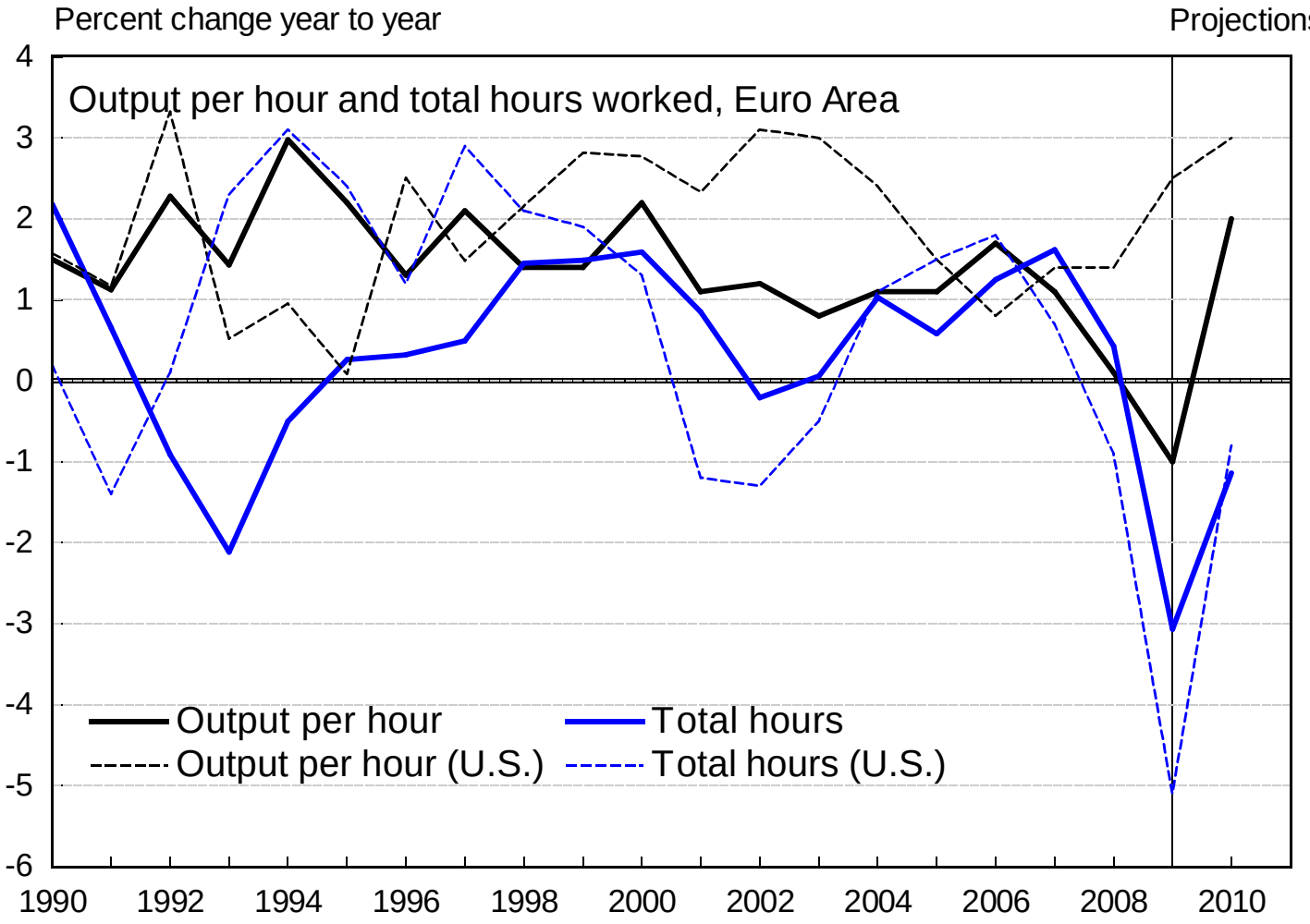
U.S. productivity growth has slowed since 2003 and turned counter-cyclical during recession



A job-lag, job-less or job-loss recovery ?

Source: The Conference Board Total Economy Database, January 2010

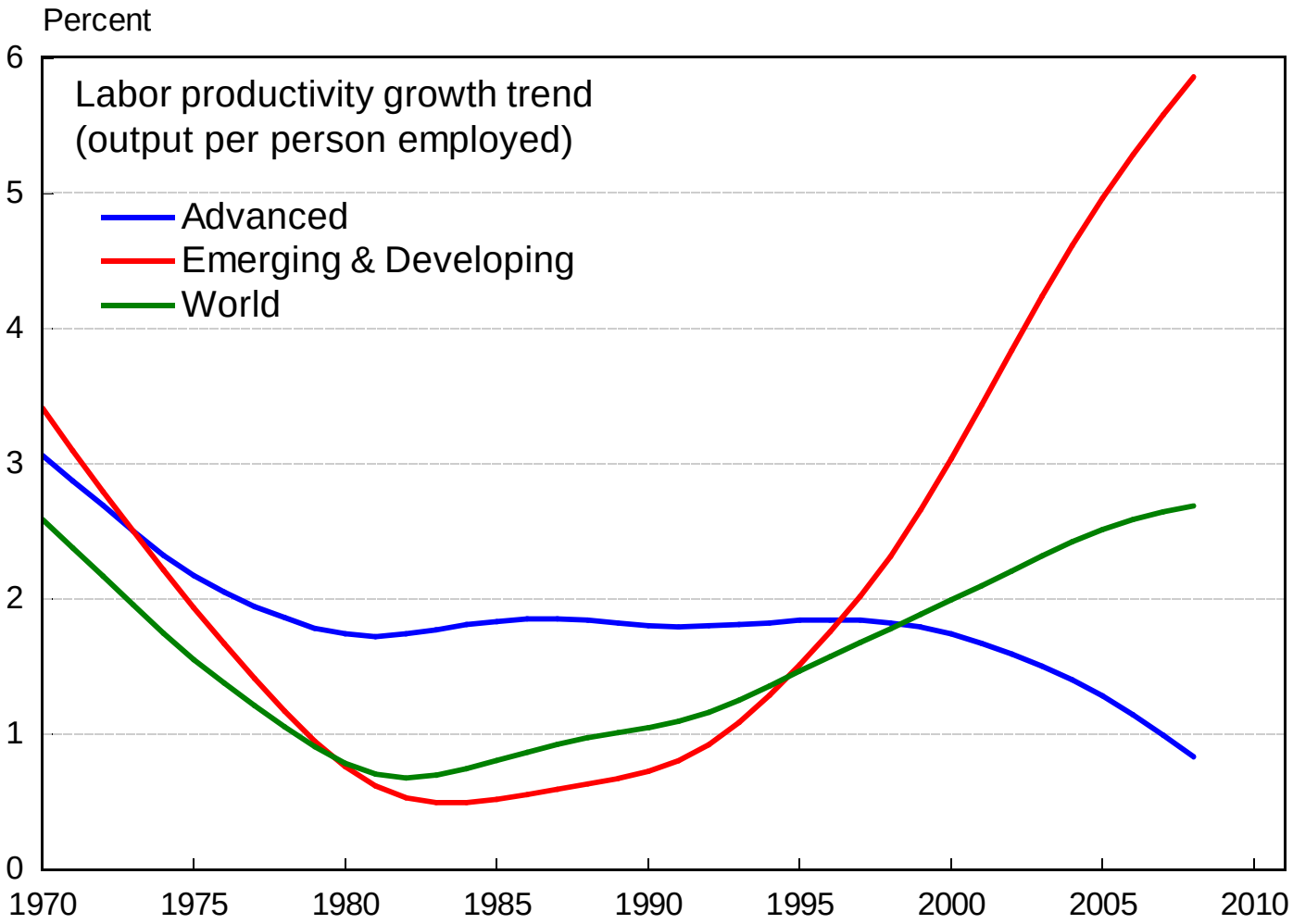
Europe shows long-term productivity slowdown, but did not lose as many working hours as U.S. – can this last?



Can Euro Area productivity growth recover to U.S. level without losing more jobs?

Source: The Conference Board Total Economy Database, January 2010

Emerging economies not only lead on output growth, but also on labor productivity trend



Note: Trend until 2008 using the Hodrick-Prescott filter

Source: The Conference Board Total Economy Database, January 2010

Emerging economies show much stronger productivity performance during crisis but also beyond

Country/Region	2003	2004	2005	2006	2007	2008	2009	2010
World	2.5%	2.9%	2.7%	3.2%	3.4%	1.4%	-1.0%	2.2%
Advanced Economies	1.4%	2.1%	1.2%	1.3%	1.3%	0.1%	-1.2%	2.3%
Emerging Economies	5.5%	5.3%	5.2%	5.8%	6.3%	4.3%	1.8%	3.7%
United States	1.7%	2.4%	1.3%	0.8%	1.0%	0.9%	1.0%	3.0%
Japan	1.7%	2.5%	1.5%	1.6%	1.9%	-0.6%	-2.5%	2.7%
France	1.0%	2.3%	1.3%	1.2%	0.9%	-0.2%	-0.5%	1.8%
Germany	0.7%	0.8%	0.9%	2.5%	0.8%	-0.4%	-4.9%	2.8%
United Kingdom	1.8%	2.0%	-0.3%	1.9%	2.4%	-0.2%	-2.8%	1.7%
South Korea	2.9%	2.7%	2.6%	3.7%	3.7%	1.6%	-2.5%	2.6%
China	13.1%	8.6%	9.0%	10.2%	11.5%	8.6%	8.2%	7.7%
Brazil	-0.5%	0.7%	0.1%	1.5%	3.5%	4.0%	1.5%	4.3%
Russia	6.4%	6.3%	5.6%	6.8%	7.0%	4.7%	-3.8%	1.8%
India	5.7%	4.8%	6.6%	6.9%	6.2%	4.0%	3.9%	4.8%
Indonesia	3.4%	3.9%	5.3%	4.1%	3.6%	1.0%	-0.3%	2.4%

Color Scale

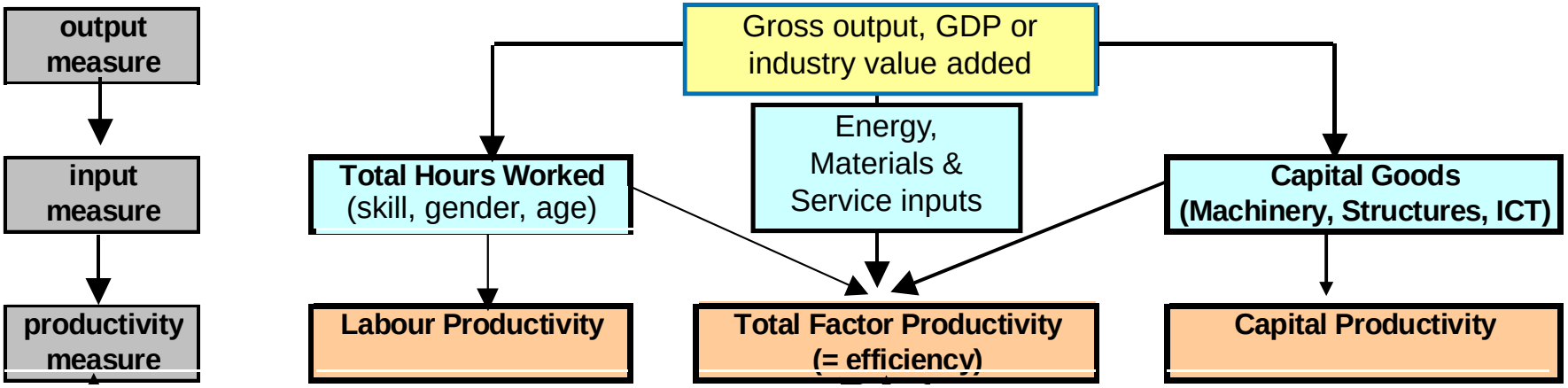
13.1%
From highest growth rate

To lowest growth rate
-4.9%

Source: The Conference Board Total Economy Database, January 2010

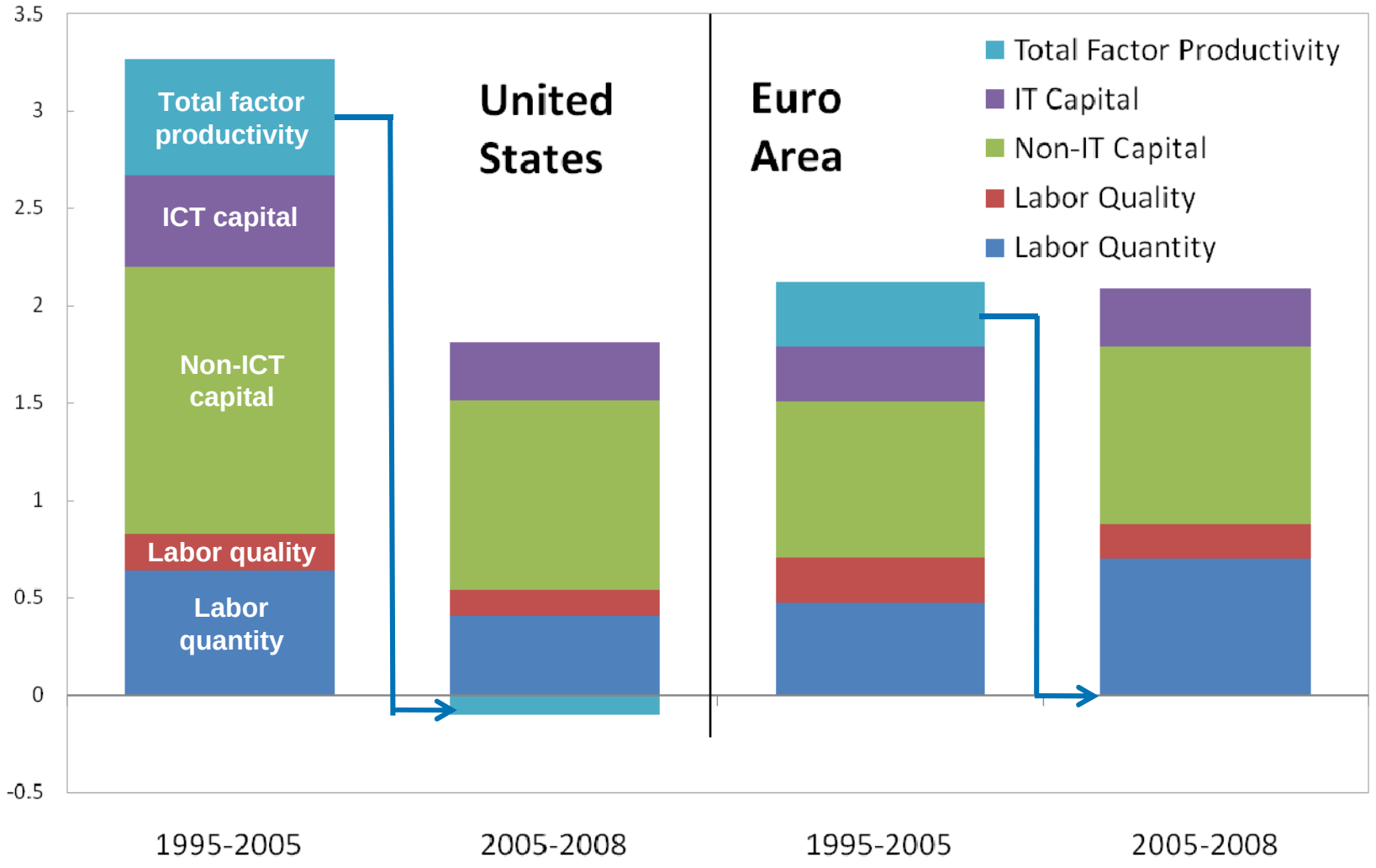
Total factor productivity measures output growth against all inputs in the production process

Measures of Productivity, Input Varables and Sources of Growth

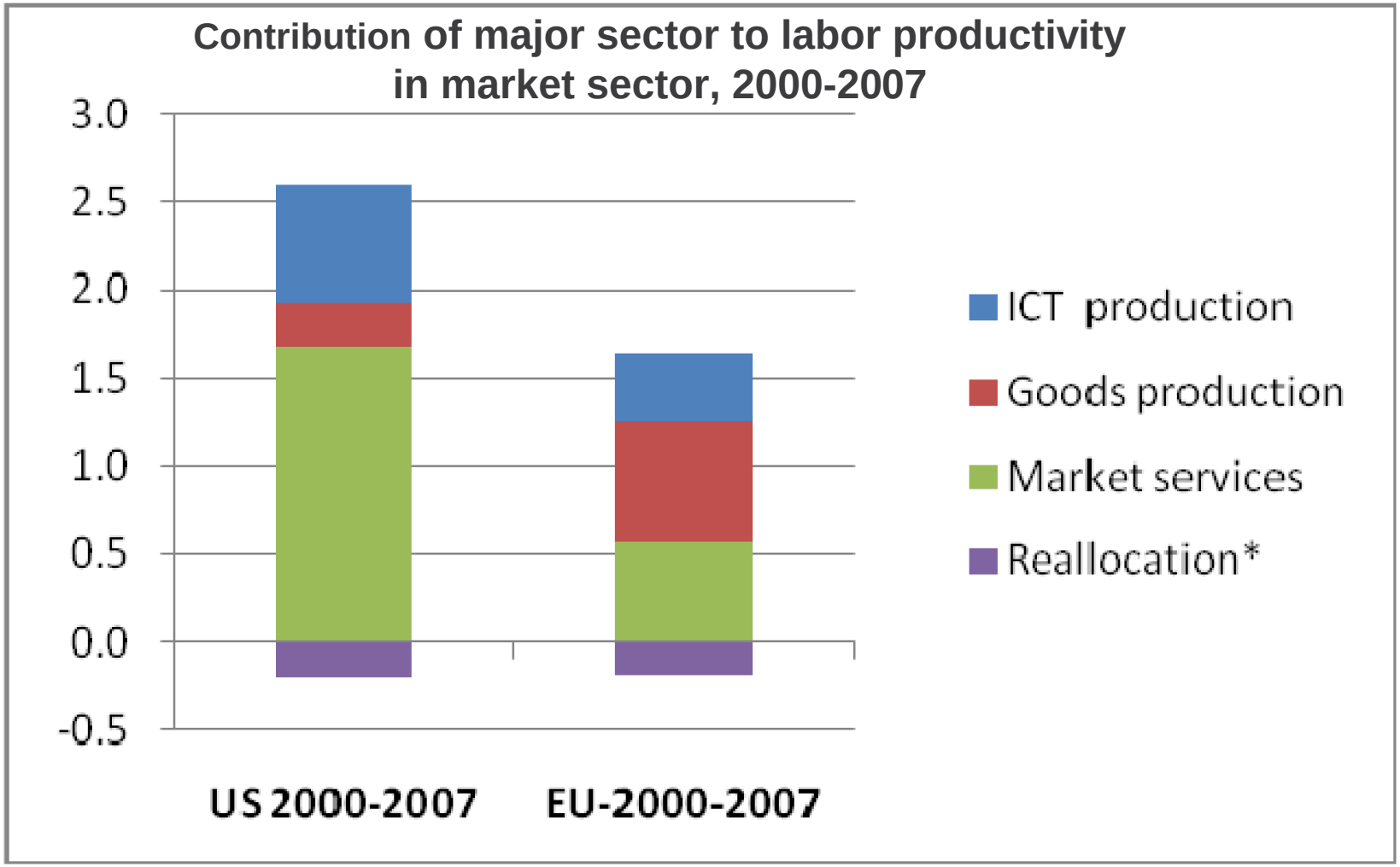


- Labor productivity is an easy measure to obtain; proxies contribution to living standards; provides link to wage setting process
- Capital productivity is related to efficiency of utilization of capital
- Total factor productivity is proxy for efficient use of all resources

Sources of growth analysis shows that efficiency of production in U.S. and Euro Area has fallen since 2005

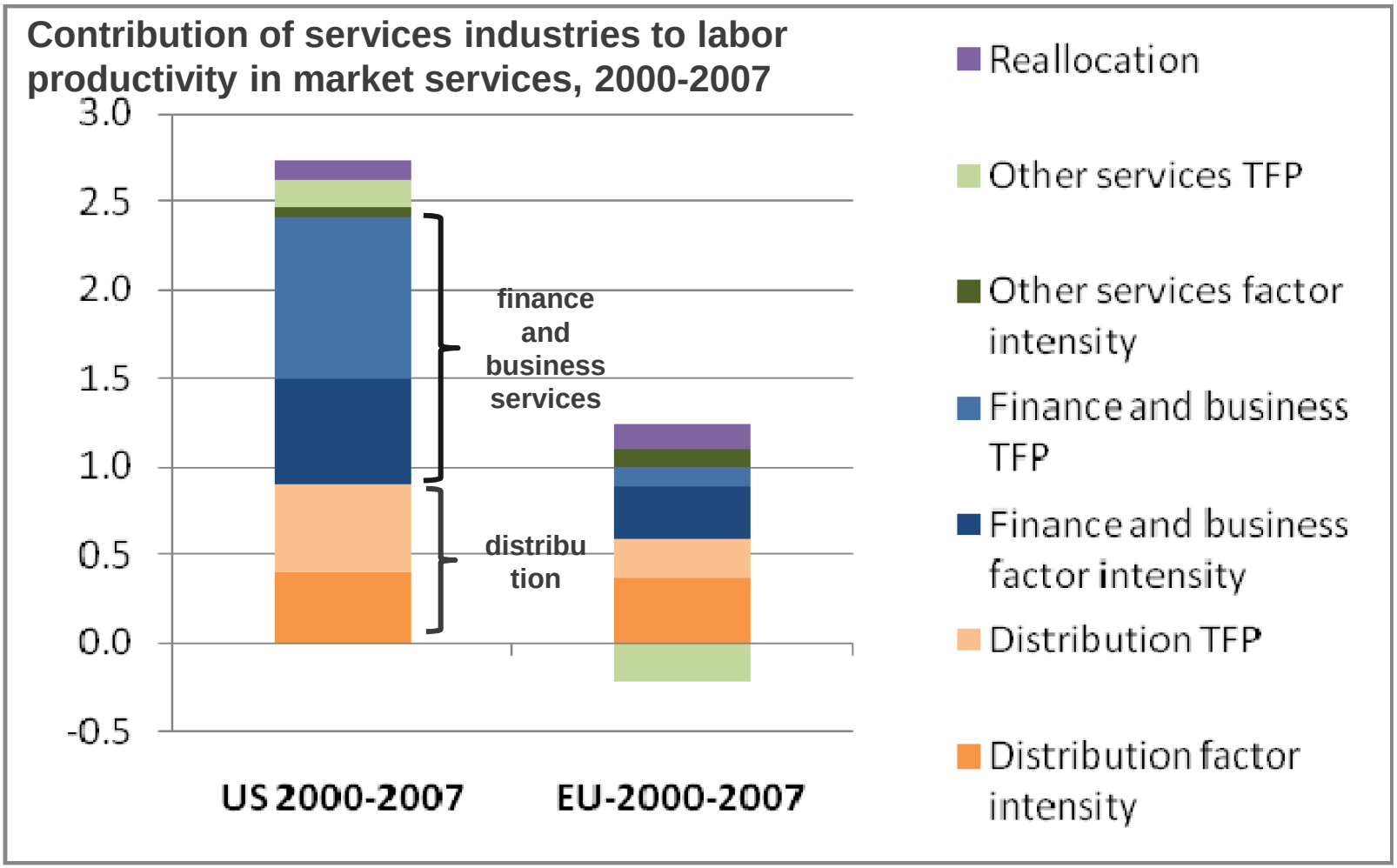


Market services has led U.S. productivity growth – goods production in EU makes partly up for it



Note: "EU" refers to 9 major Euro Area economies and the United Kingdom
Source: EU KLEMS, November 2009

Distribution and finance & business services were key to U.S. productivity boom – was it real ?



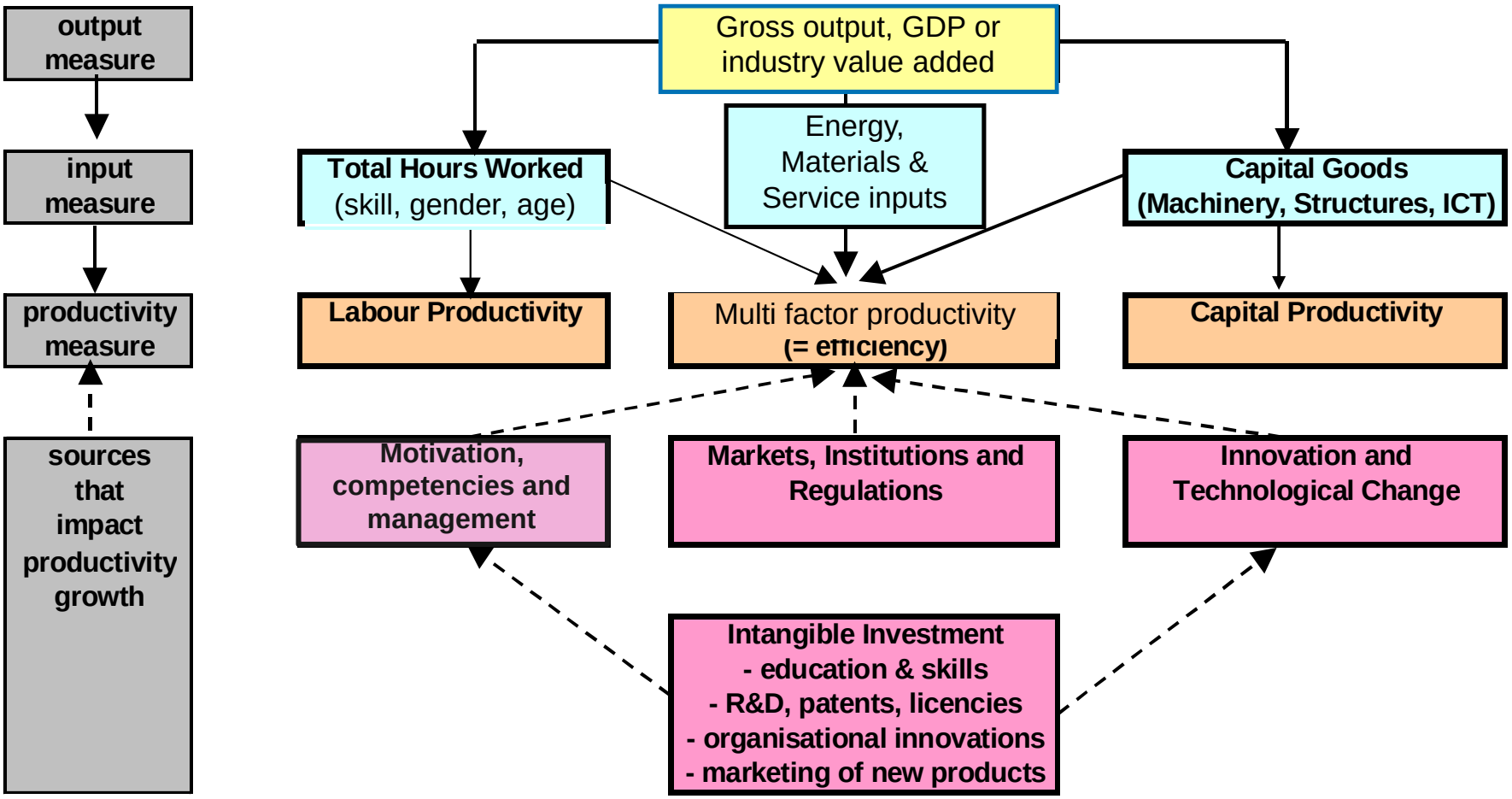
Note: "EU" refers to 9 major Euro Area economies and the United Kingdom
Source: EU KLEMS, November 2009

Even though U.S. productivity advantage cannot be explained away – is potential output growth affected?

- Latest U.S. output and input estimates do not remove productivity advantage in market services over Europe
- Measurement issues (in distribution and financial services) account for no more than a few decimal percentage point at macro-level
- Even if services productivity gains are result of unsustainable credit-fueled growth in U.S., potential output growth is not necessarily affected
- Productivity gains which result from technology and innovation gains do not go away
- But in medium-long term, incentives for accompanying innovations may fall

A strategic framework for productivity and innovation

Measures of Productivity, Input Varables and Sources of Growth



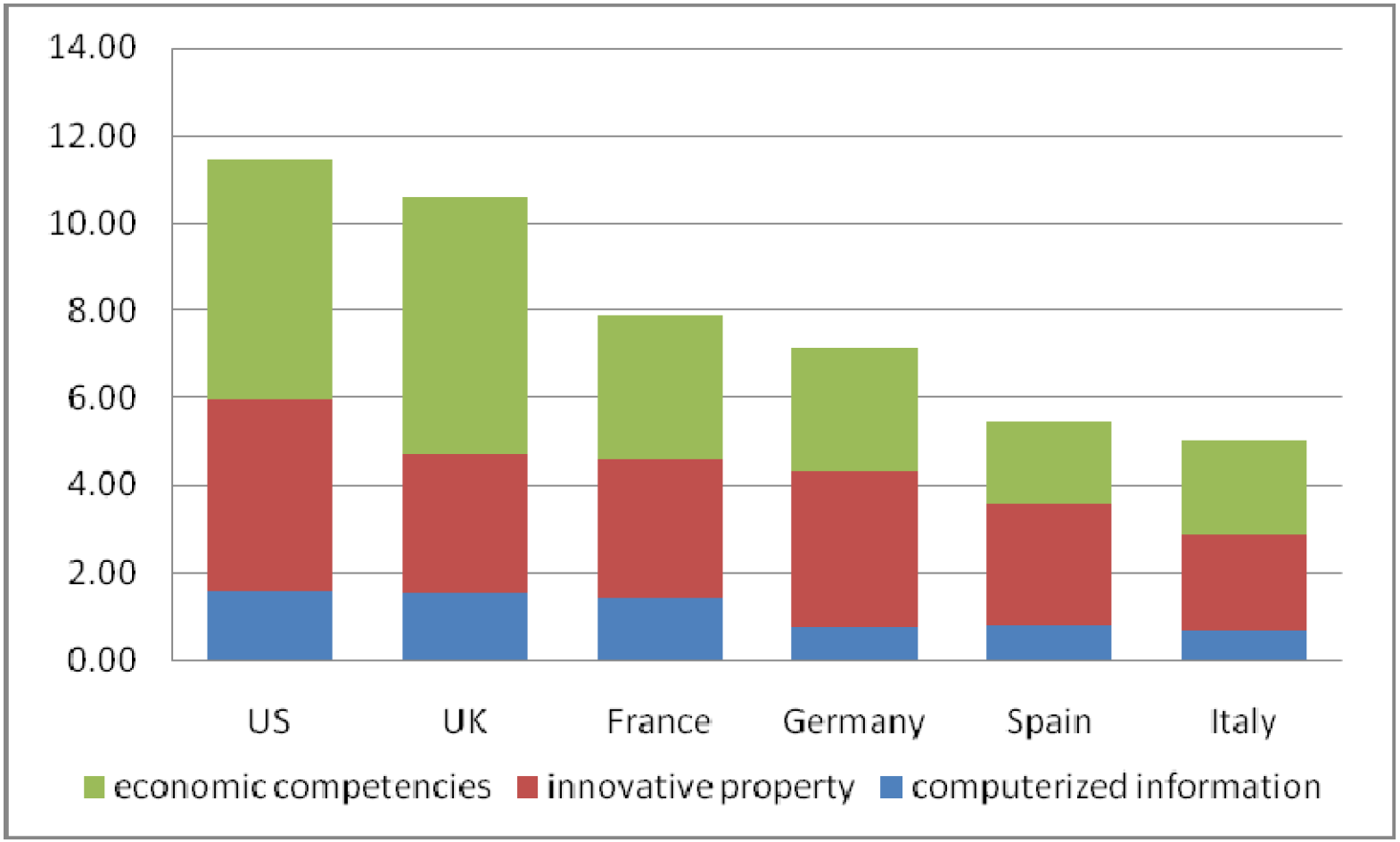
Intangibles are a major source of strategic advantage to economy and individual firms = “Strategic Capital”

Name of Group	Type of Strategic Capital
Computerized information	Software, computer programs and computerized databases
Scientific and Creative Property	Scientific R&D and non-scientific inventive and creative activities
Economic Competencies	Firm-specific human capital, organizational capital and brand names

Source: Corrado, Hulten and Sichel (2005)

Investments in intangible capital are large relative to total GDP – but large differences across countries

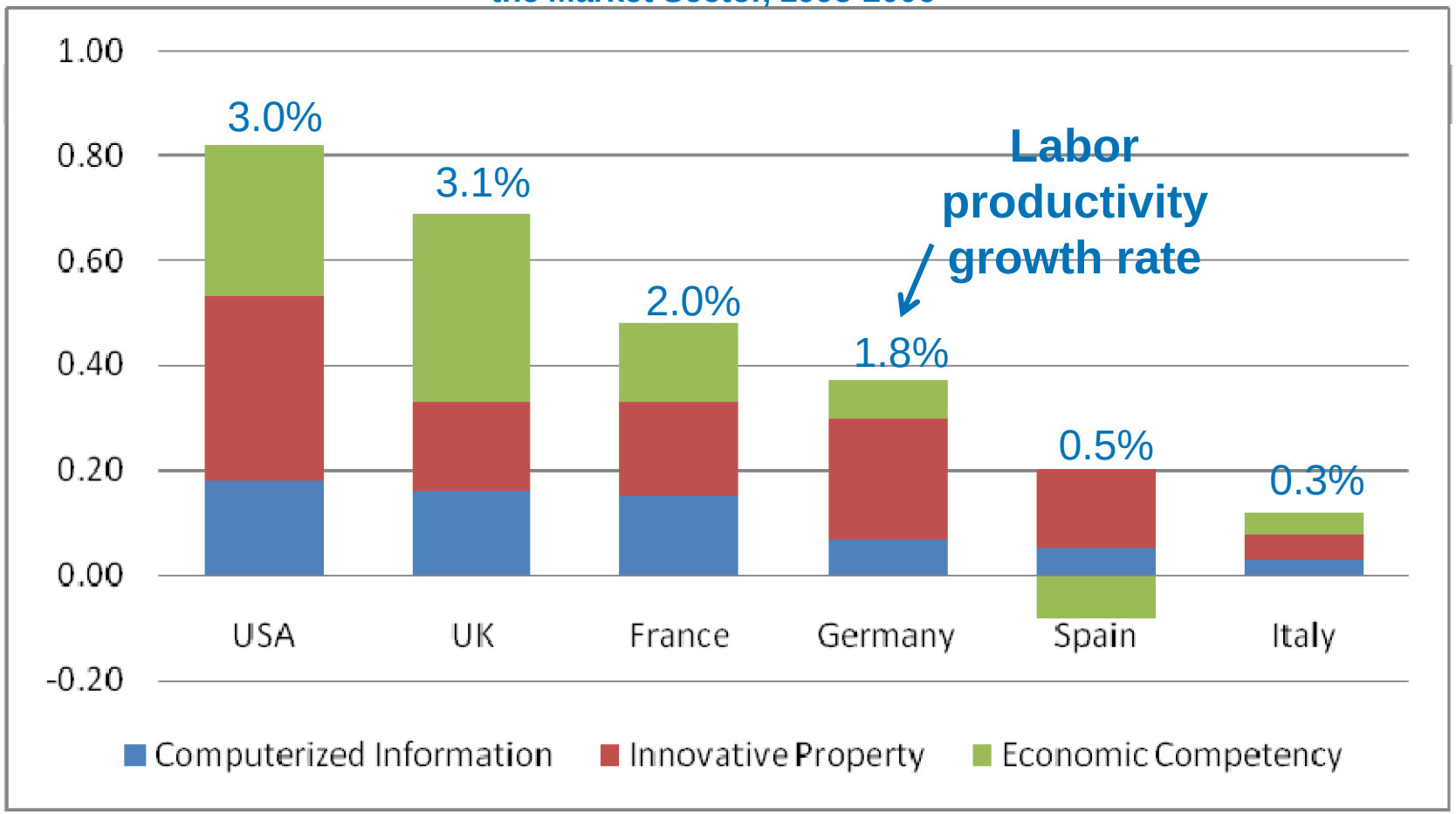
Intangible Investment in the Market Sector in 2006 (% GDP)



Source: The Conference Board

Intangible investments are key to support innovation and productivity growth

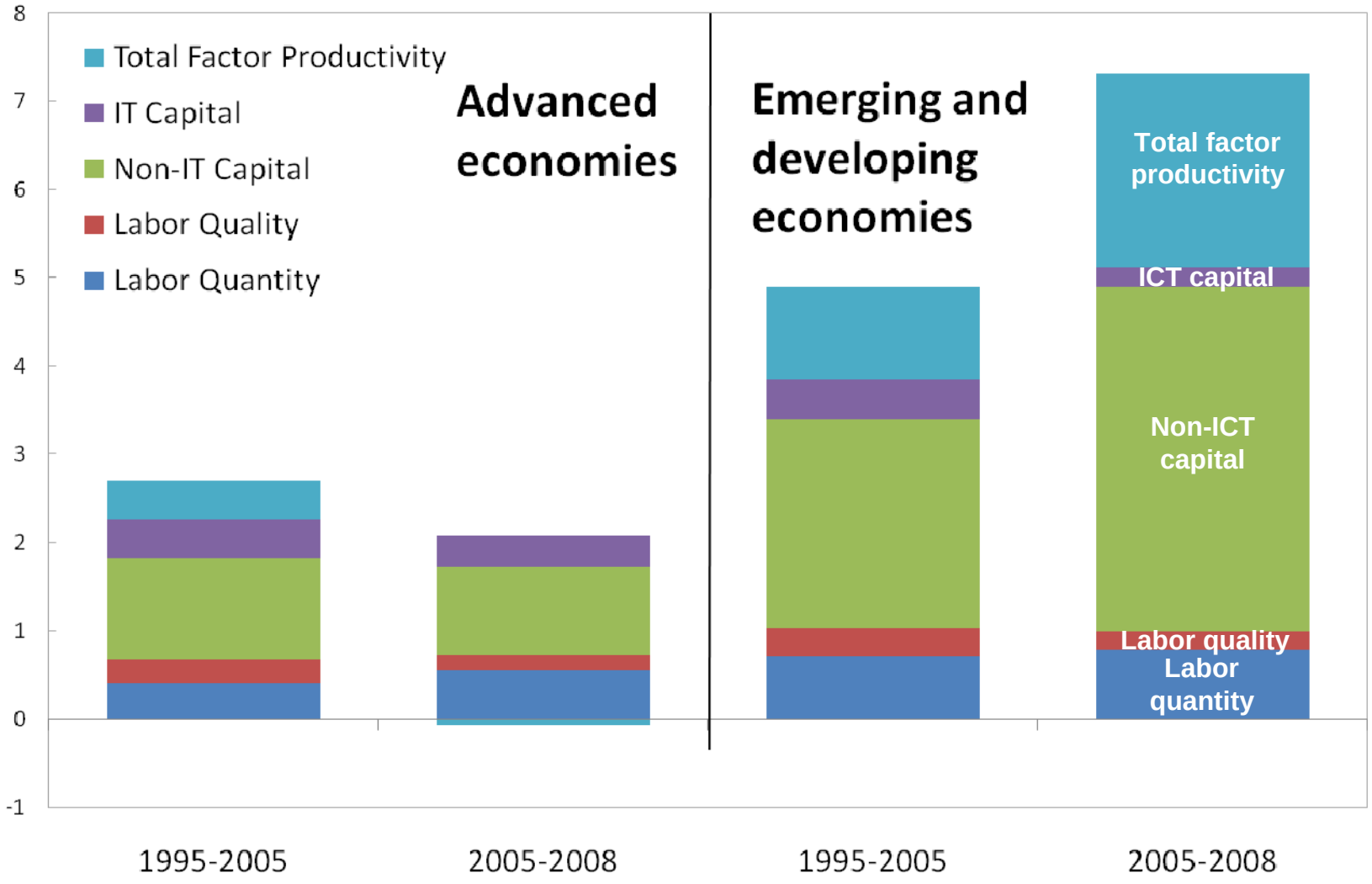
Contribution of Intangible Assets to the Growth of Labor Productivity in the Market Sector, 1995-2006



* Percentages are the annual growth rates of labor productivity on average from 1995 to 2006.

Source: The Conference Board

Emerging economies are progressing not only through investment, but also through greater efficiency



Productivity growth and intangible investment are key components of exit strategy from the crisis

- Deal with short-term cost management and medium- and long-term focus on productivity and innovation is key challenge
- Key factors are to create incentives for businesses and individuals to invest in productivity-enhancing capital …
  - Provide incentives to strengthen competencies of workforce, organizational capital, and innovation
  - Market reforms that allocate resources to most productive uses
- Not only high-tech, but broad (intangible) innovation processes support investment and productivity
- The long-term impact of new technologies and innovation goes far beyond its economic impact, and falls on social and cultural aspects of development too

Our promise