THE NEXT CONVERGENCE: STRUCTURAL CHANGE, GROWTH AND EMPLOYMENT IN A MULTI SPEED WORLD

MICHAEL SPENCE
DEC LECTURE
DEC 5, 2011
The Evolving Structure of the American Economy and the Employment Challenge

Michael Spence and Sandile Hlatshwayo
March 2011
FOREIGN AFFAIRS

How America Can Compete

Globalization and Unemployment
Michael Spence

The Risks and Rewards of Health-Care Reform
Peter Orszag

Learning From the Germans
Steven Rattner

Does Obama Have a Grand Strategy?
Daniel Drezner
What is the Next Convergence?

- Before the Industrial Revolution
- 200 years of divergence
- Post World War II: Reversal of the Pattern
  - GATT
  - Collapse of Colonial Empires
  - Technology
Population Growth


Note: There is usually a lag between the invention of a process or a machine and its general application to production. "Beginning" means the earliest stage of this diffusion process.
Two Centuries of Divergence

**FIGURE 1.4**

Fraction of World Inequality Accounted for by Differences across Countries

![Graph showing the fraction of total inequality due to differences across countries over time.](image)

- **Theil coefficient**
- **Mean ln deviation**

*Source: Bourguignon and Morrison 2002.*
How Do Advanced Countries Growth

- By capital deepening, but there is a limit
- By population growth but that does not cause income growth
- By innovation
- Solow and endogenous growth theory
- How fast
  - 2.5% with spurts to 3.5%
- By contrast, developing countries can grow at 10% for extended periods
- By importing and adapting technology and expertise from outside
  - Provided the transmission channels are open, TFP rises faster than in developed countries and the gap starts to close
Times for the Full Journey

Figure 3 Transitions to Higher Incomes

- **growth rates of per capita GDP**
- **years**
- **poor to advanced**
- **poor to middle-income**
<table>
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<th>Economy</th>
<th>Period of high growth**</th>
<th>Per capita income at the beginning and 2005***</th>
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Source: World Bank, World Development Indicators.

*Economies that have reached industrialized countries’ per capita income levels.

**Period in which GDP growth was 7 percent per year or more.

***In constant US$ of 2000.
Key Elements in Sustained High Growth

• The global economy
  ○ Knowledge transfer and catch up growth
  ○ Market Size and specialization

• Very high rates of overall saving and investment

• An effective government that supports and complements the private sector dynamics

• Structural change and economic diversification

• Leadership
When Does It Fail?

- Leadership
- Failures of governance
- But the form of governance is uncorrelated with economic performance
- Pursuit of other objectives than growth
- Natural resource distort the political economy
- National Identity not formed
- Low rates of public sector investment
- “Bad” Strategy
- Inclusiveness failure
Partial Decoupling

Figure 1

World Output Growth 1961 - 2012
(% Change)


Source: IMF, Fiscal Monitor, May 2010
Post Crisis Sustainability of Growth in EM’s

- In the context of a difficult, extended slow growth in advanced economies

- It looks like the growth is sustainable
  - EM growth dynamics still in place
    - structural change and supporting policies deeply embedded
  - Economic size of EM group
  - Trade within EM group
  - Higher incomes and closer match between demand and supply sides of the economy
  - China’s growth has become an important engine
    - Main export partner for Japan, Korea, India, Brazil and lots of others
  - The network structure of global has shifted

- Downside Risks to Baseline Case
  - Another major downturn downturn in advanced countries
  - Failure to deal with rebalancing of demand
  - Serious outbreak of protectionism
  - Mishandling the current distortions caused by advanced country recovery policies – low interest rates and QE2
  - Growth falters in China
Evolving Structure of Global Economy

- G20 85% of GDP and 66% of population
- EM’s will soon pass 50% of global GDP within a decade
- Asymmetries declining
- Systemic impacts are rising

Old Hybrid’s
- Assumed correctly that the systemic impacts of EM’s were limited
- Enabled focus largely on domestic growth and development
- Won’t work now
- Systemic impact coming at much lower income levels – China and India
  - Creates tensions and challenges for global coordination of policies

EM’s are a double edged sword for advanced economies
- Big market opportunity
- Challenge to employment in tradable sector of advanced economies as they move steadily up the value added chain
China: Short Term Issues

- Short run
- Inflation, asset bubbles. NPL’s and off balance sheet sovereign debt
- The Resources, Competence and Will framework
- Inflation coming down
- Moderately soft landing is levelling off of real estate prices
- Total sovereign debt well under 50% of GDP
- NPL’s can be pulled out and banks recapitalized as necessary
- State balance sheet is huge
China and the Middle Income Transition

- Parallel Shifts in Structure in 12th Five Year Plan

- Middle income transition in China
  - Major internal structural change on supply side
  - Wages in Pearl River Delta post-Foxcomm

- Parallel shift in demand side structure involving national income and saving
  - Required to have domestic demand drive growth and the structural evolution of the economy

- Global rebalancing of aggregate demand and elimination of current account surplus and excess savings – but without loss of growth momentum

- The crisis and China’s growing size has made all of the above more immediate and urgent
  - Domestically and in the Global Economy
Middle Income Transition is Difficult
Five High Speed Transitions

- Japan
- Korea
- Taiwan
- Hong Kong
- Singapore
Disposable Income Declining as Percentage of GDP

Household Disposable Income and Components (in percent of GNP)

- Investment income
- Net Current Transfers
- Disposable Income
- Wage Income

Year:
- 1992
- 1994
- 1996
- 1998
- 2000
- 2002
- 2004
Components of Savings: The Increase is in the Corporate Sector
Requirements

- Major change in the investment system
  - Shift from investment led to rate of return lead growth
- Shift in structure of income side of the economy – shift toward the household sector
- Elimination of low return investment
- As market takes larger role, innovation and human capital investment is central
- Financial sector development to expand savings options and recycle savings to productive (high return) investment
- Corporate governance
- Social insurance and services – focus on inclusion
- Urban service sector will take over from labor intensive process manufacturing as main entry level employment engine
Crossroads in Global Economy

- Moment when emerging economies are large, systemically important, much more self-sufficient and resilient
- China 25 years ago and now
  - Growing at close to 10%
  - But 25 years ago it was small and didn’t matter
  - Now it is the equivalent of about 4% real growth in the US economy or Europe
Eurozone

- Mostly likely scenario
  - Periphery exits
  - No growth model without a reset
- Less likely but possible
  - The eurozone core comes apart
  - Key is Italy
Italy

- Third largest sovereign debt market
- Debt to GDP 120%
- Highly vulnerable to escalating yields
- But (see graph) overall debt OK
- Household debt low
- Household net worth high
- Dynamic northern economy
- New government is highly competent
- The issues are will and support from the ECB as implement reforms
Total Debt in Selected Countries around the World, latest data available, as percent of GDP, by sector

- Japan: 471% (2009)
- United Kingdom: 466% (2009)
- Spain: 366% (2009)
- South Korea: 333% (2009)
- France: 323% (2009)
- Italy: 315% (2009)
- Switzerland: 313% (2007)
- United States*: 296% (2009)
- Germany: 285% (2009)
- Canada: 259% (2009)
- China: 159% (2008)
- Brazil: 142% (2008)
- India: 129% (2008)
- Russia: 71% (2008)

Black – government
Red – non-financial corporate
Grey – household
Green – financial institutions
Structural Challenges for the Advanced Economies

- Adapting to and Accommodating EM growth and size
- Structural Changes in Advanced Economies
- Partial growth engines and no employment engines
- Distributional Issues
- In Context of the Reinhart/Rogoff, new normal post crisis period
- Fiscal challenges
- Political gridlock – at least until 2013
Employment in the US

[Bar chart showing employment in millions from 1990 to 2008, with separate bars for nontradable and tradable jobs.]

- **1990**: 88.3 million nontradable, 33.7 million tradable
- **2008**: 114.9 million nontradable, 34.3 million tradable
Figure 10. Tradable/Nontradable Value Added, 1990–2008

Source: Authors’ calculations using Bureau of Economic Analysis historical data series
Value Added Does not Show the Same Pattern

Total Change in Value Added, 1990-2008

Billions of Chained 2005 Dollars

- Total: 4,504
- Tradable: 1,520
- Non-Tradable: 2,984
Figure 15. Value Added per Job, 1990–2008

Source: Authors' calculations using Bureau of Economic Analysis and Bureau of Labor Statistics historical data series
Figure 6. Nontradable Industry Jobs, 1990–2008 (Majors)
Figure 7. Nontradable Industry Jobs, 1990–2008 (Minors)³

Source: Authors' calculations using Bureau of Labor Statistics historical data series
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<td>Food, beverage, and tobacco production; textile, apparel, footwear, and leather goods</td>
<td>Wood and paper products; petroleum and coal; basic chemical products; synthetic materials; nonmetallic mineral products; glass; and cement products</td>
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<tr>
<td>Manufacturing III</td>
<td>Primary and fabricated metal products; heavy machinery; transportation equipment; computers and electronics; household appliances; semiconductors; and furniture production</td>
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</table>

*Source: Summary of the North American Industry Classification System descriptors for manufacturing.*
Figure 8. Tradable Industry Jobs, 1990–2008 (Majors)
Figure 9. Tradable Industry Jobs, 1990–2008 (Minors)
Figure 10. Tradable/Nontradable Value Added, 1990–2008

Source: Authors' calculations using Bureau of Economic Analysis historical data series
Figure 11. Nontradable Value Added, 1990–2008 (Majors)\textsuperscript{12}

Source: Authors’ calculations using Bureau of Economic Analysis historical data series
*Industries that are not predominandy or entirely nontradable include an asterisk.
Figure 13. Tradable Industries' Value Added, 1990–2008 (Majors)\textsuperscript{14}

- Finance and Insurance
- Misc Professional, Scientific, and Technical Services (Includes R&D, Engineering, Architectural, etc.)
- Manufacturing II
- Manufacturing III (w/o Auto, Electronics, Aero, Rail, and Naval)
- Information
- Manufacturing I
- Mining
- Other Transportation (Aero, Rail, and Naval)
Figure 14. Tradable Industries' Value Added, 1990–2008 (Minors)
Figure 15. Value Added per Job, 1990–2008

Source: Authors’ calculations using Bureau of Economic Analysis and Bureau of Labor Statistics historical data series
Figure 17. Tradable Industries' Value Added per Job, 1990–2008 (Minors)
Figure 19. Nontradable Industries’ Value Added per Job, 1990–2008 (Majors)
Figure 20. Nontradable Industries’ Value Added per Job, 1990–2008 (Minors)

- U.S.: 3.9
- Japan: 3.3
- Germany: 3.1
- China: 2.7
- South Korea: 2.5
- United Kingdom: 2.5
- India: 2.4
- Canada: 2.1
- France: 2.1
- Mexico: 2.0


- China: 3.6
- Japan: 3.3
- U.S.: 3.1
- Germany: 3.0
- India: 3.0
- South Korea: 3.0
- United Kingdom: 2.8
- Canada: 2.6
- France: 2.6
- Mexico: 2.6

Ratings (1 = Weak to 5 = Strong) by Respondents to Battelle R&D Magazine Survey

Source: R&D magazine, December 2010.
### Figure I. Comparing Countries' and Economies' Performance

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Graph 1: Labour Share in OECD Countries, 1960-2000

Labour participation fully in rising productivity in the pre-globalization era, but under globalization productivity gains and trade have first and foremost benefited capital - eroding labour shares in industrialized countries.  
Source: Gasolina (2006), based on OECDSTAN database.
What Does All This Mean for the US Economy Post–Crisis

- Growth engines
- Employment engines
- Deficit reduction path and stimulus
- Domestic aggregate demand shortfall is permanent
- To restore growth requires structural change and expansion of the scope of the tradable sector
Germany

Net Change in Employment, 1995-2008

Jobs, In Millions

- Nontradable: 2.0
- Tradable: 1.1
- Total: 3.1
Value Added Per Job, 1995-2008

Real Value Added Per Job, Euros

- Average Nontradable VAP
- Average Tradable VAP

Net Change in Average Real Value Added Per Job, 1995-2008

Nontradable: -4,857
Tradable: 4,521
Total: -168
The Long Term Sustainability Challenge

- Relative sizes and power
- But absolute size matters even more
- Global economy will triple in next 25 years
- Almost all the growth in absolute terms will be in Asia
- Contains the two future economic giants, China and India
- The old growth model will not scale
- Lifestyles and new growth patterns
Carbon Mitigation

"Sorry, Harold, but I'm reducing our carbon footprint."
Figure 1. CO₂ Emissions per Capita
Ubiquitous by any name
Telephones, bn

Mobile-phone subscriptions

Fixed line

Source: International Telecommunication Union

*Estimate
Cell Phones as Percentage of the Population

[Bar chart showing the percentage of cell phones among the population in various countries including Italy, Russia, Germany, Ukraine, Turkey, France, USA, Brazil, Japan, Vietnam, Thailand, Philippines, Mexico, World, Indonesia, Pakistan, China, Nigeria, and India.]