

Growth Prospects and Challenges in the Global Economy: Building Blocks Of Sustainable Economic Growth Strategies

The Dr K B LALL MEMORIAL LECTURE

ICRIER

Michael Spence

Nov 21, 2013

Bad Ideas

Defective or Unsustainable Growth Models with Built In Decelerators

- Import substitution
- Excess economic diversification
- Natural resources and the Dutch Disease
- Excess consumption (private or gov't or both)
 - Deficient investment
 - Usually excess debt
 - Excess reliance on domestic demand for growth and employment
 - USA, UK, Ireland, Italy, Spain, Greece, Portugal
- Excess investment
 - Low return trap
 - China
- Resource and environmental constraints on the size of the global economy
 - These issues are global and longer term

Why Do The Structural Elements of Growth Dynamics Matter?

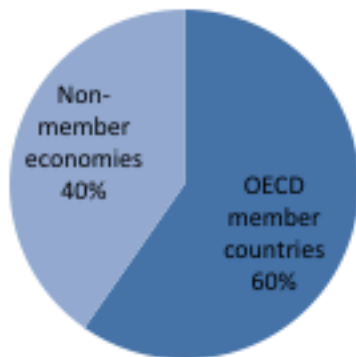
- The straight answer is that it is virtually impossible to understand the growth dynamics in advanced and developing countries and the potential for defective growth patterns and recovery mechanisms without paying attention to differences between the tradable and non-tradable sectors in the factors that stimulate and constrain growth.

Brief Snapshot

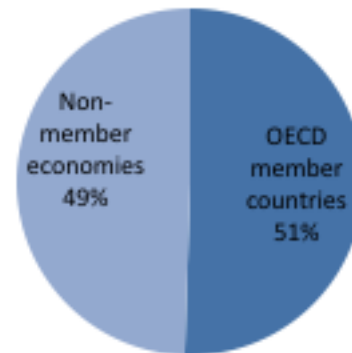
- The US is growing at 1.5 -2.0% real – it is a partial recovery lead by the private sector and structural shifts
- Europe is in for an extended period of low growth (and negative in the south) because the growth engines are blocked
- China will transition to a new growth pattern and sustain 7% plus growth
- The major emerging economies having hit by slow AC growth and unconventional monetary policy externalities, will go back to sustained high growth patterns

DEVELOPING COUNTRY SHARE OF GLOBAL OUTPUT

2000



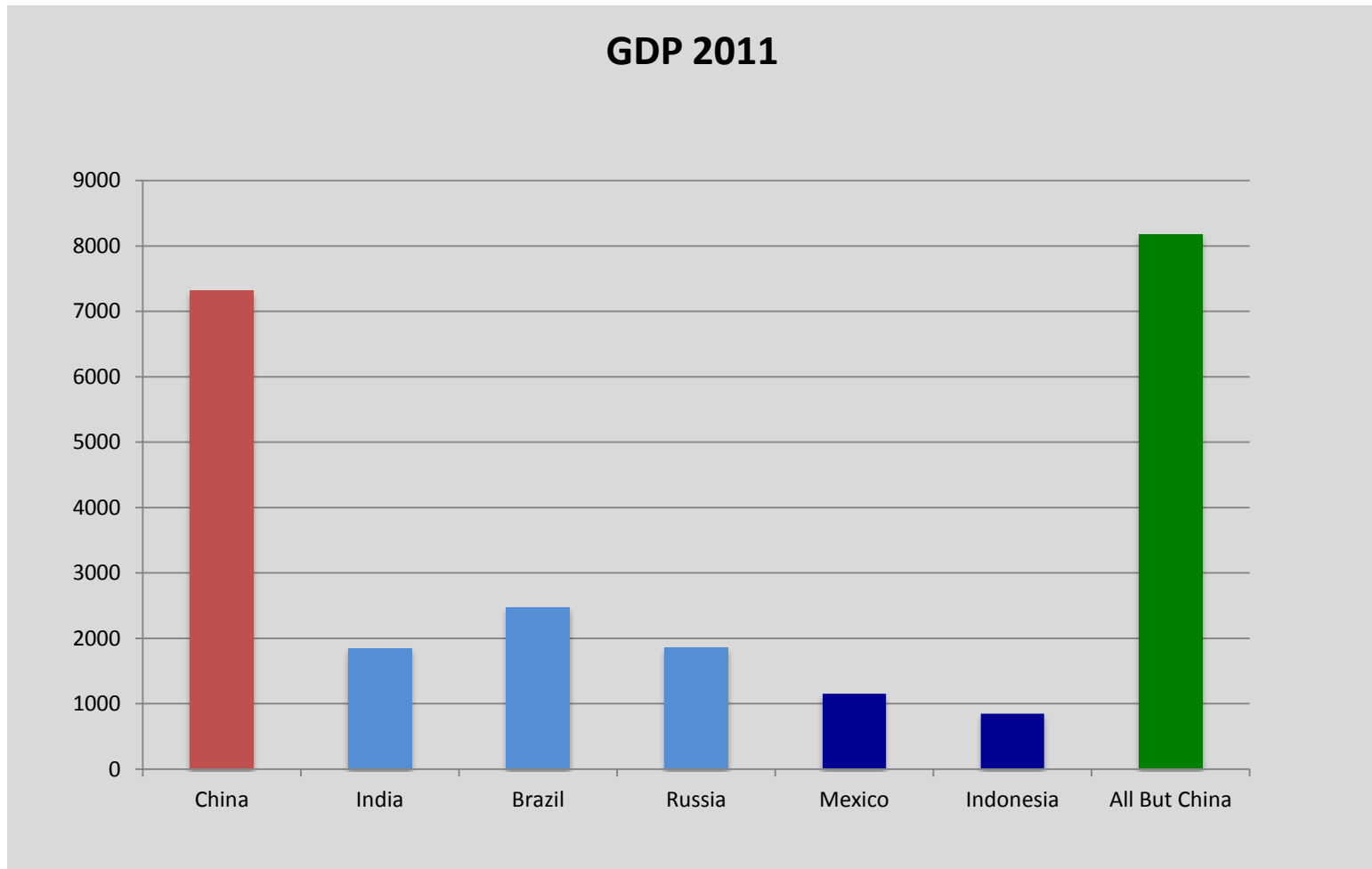
2010



- OECD

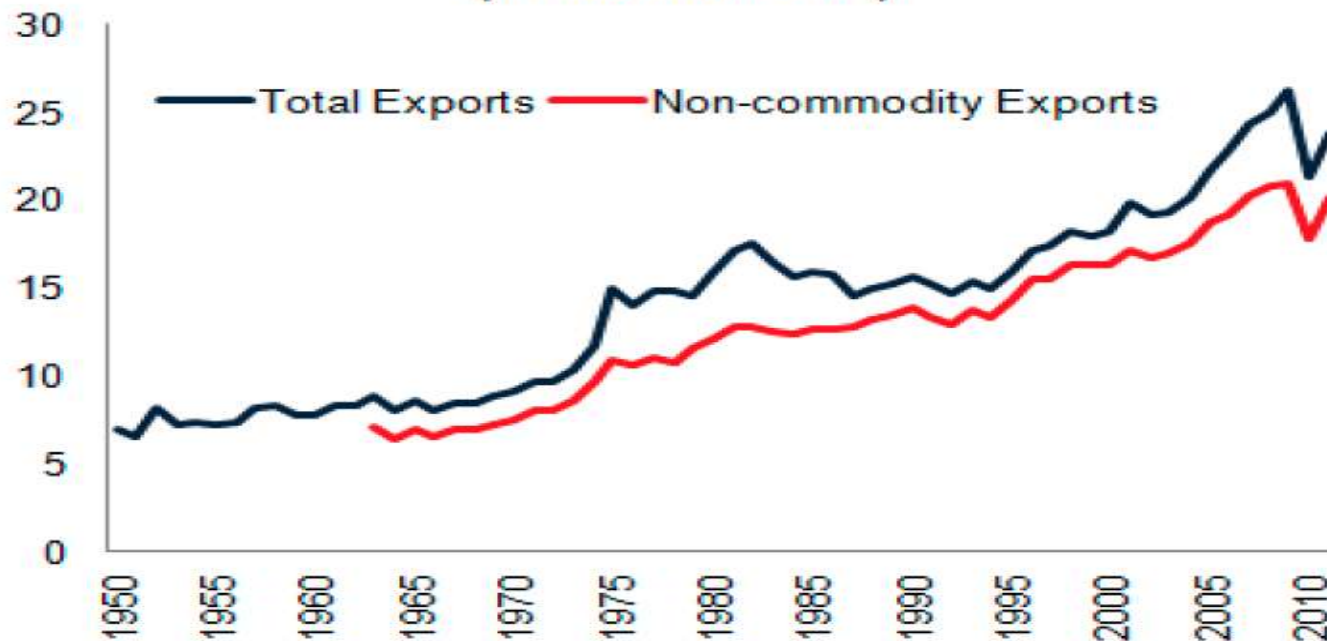
Chinese Economy is Half the Size of the USA or EU

It is also Almost as Big as the Other BRICS Plus Mexico and Indonesia Combined



The Share of the Tradable Part of the Global Economy is Growing

Figure 1. World Exports Relative to Production
(Percent of GDP)

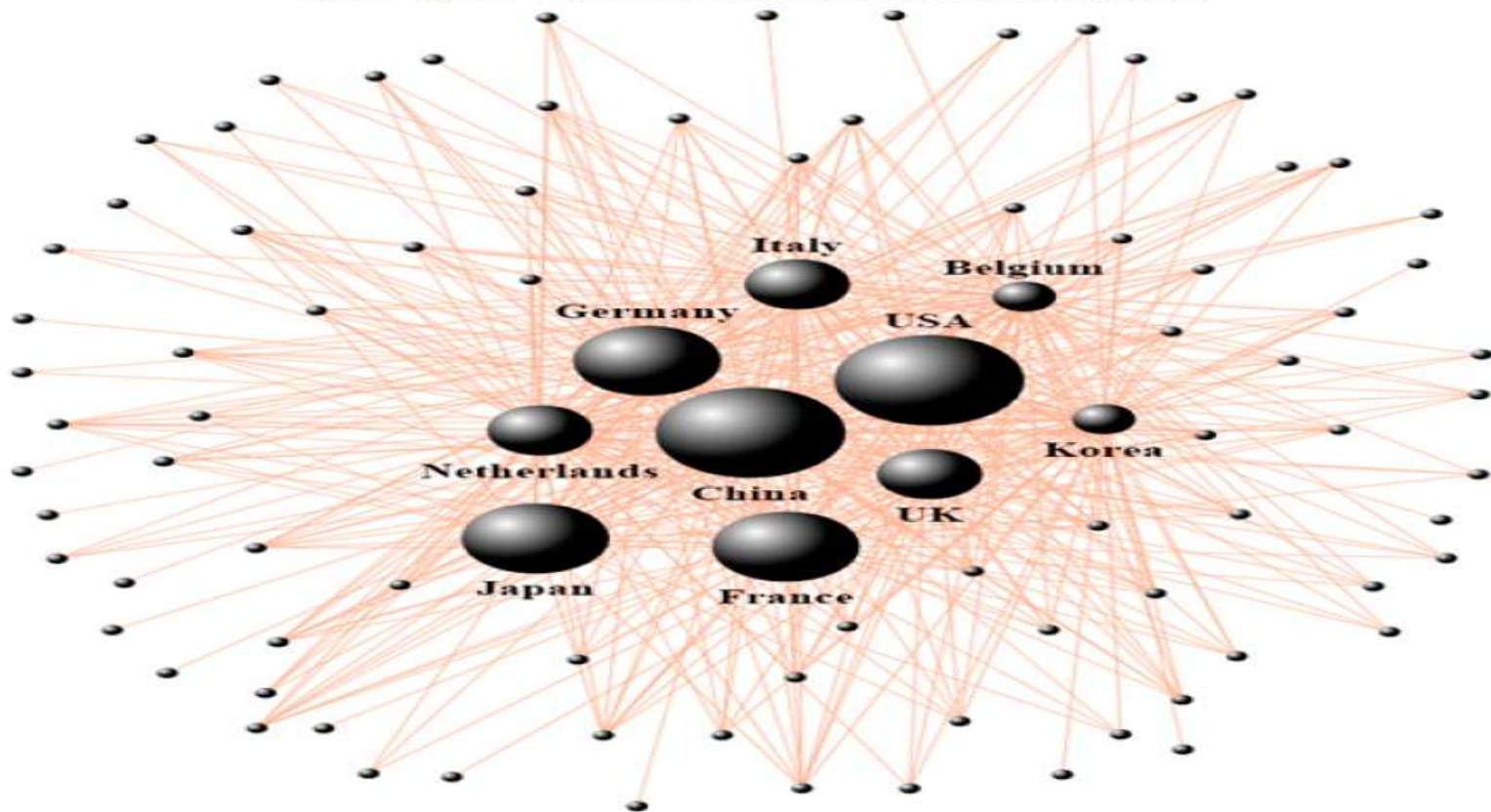


Source: DOTS, WEO and UN Comtrade. The ratio for 1949-61 is calculated based on 15 major exporters.

Changing Patterns of Global Trade
Strategy, Policy and Review Department, IMF, June 2011

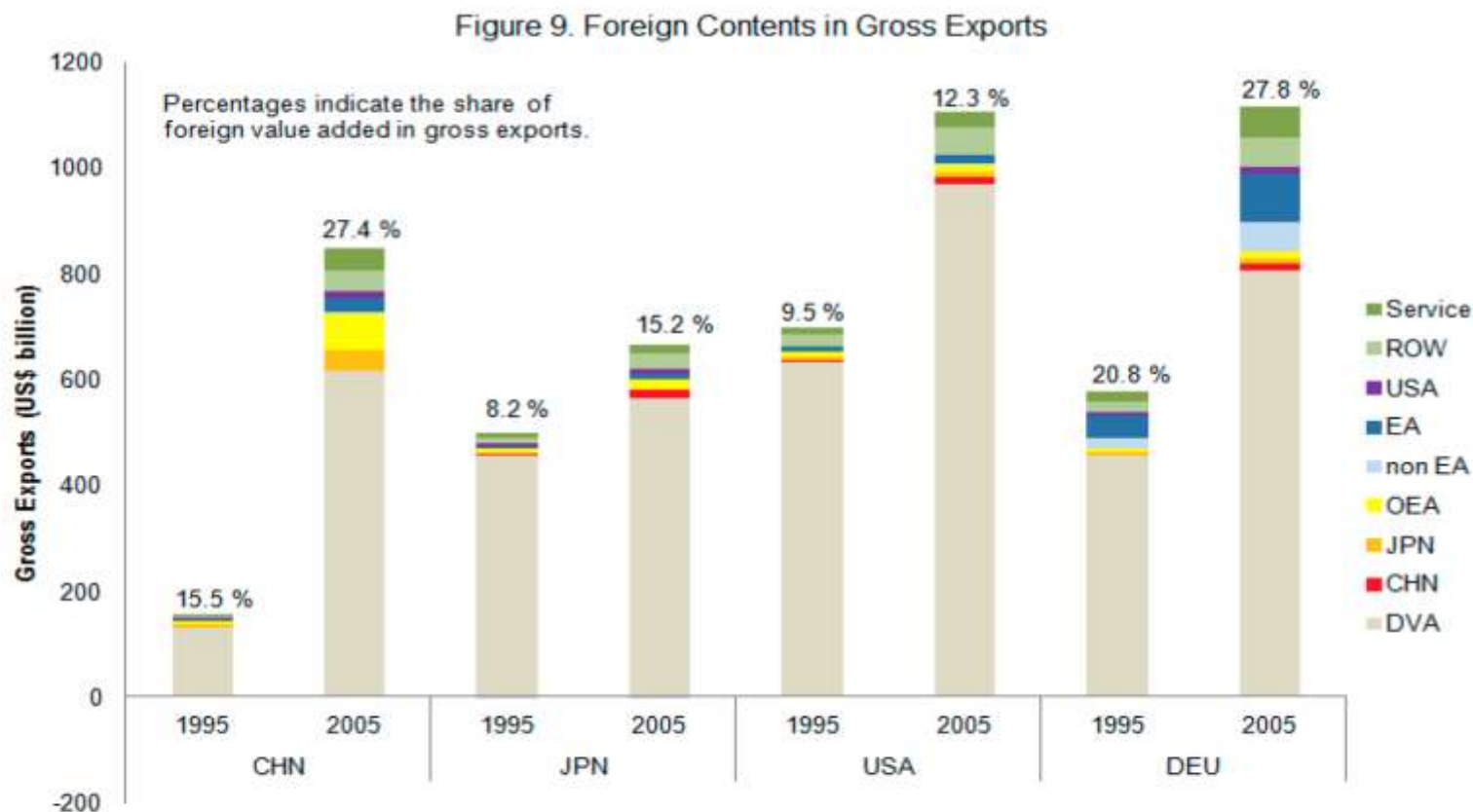
Multi-polar Network Structure Rapidly Evolving

Box Figure 1.1. The Global Trade Network, 2009



Source: DOTS and Fund staff estimates.

Atomization of Global Supply Chains



Source: Fund staff estimates using OECD Input-Output Tables, UN Comtrade and OECD STAN data.

GROWTH MODELS AND DYNAMICS

- Long run determinants of growth - TFP
- Demand is largely missing
 - Except for the investment (=savings) element of the composition of aggregate demand matters
- But key elements of growth and structural dynamics have to do with demand
 - China middle income transition
 - US negative domestic aggregate demand shock
 - Southern Europe
 - At the global level: the degree of coordination in unwinding global imbalances and the question of an aggregate demand shortfall

The Argument

- In open economies, the level and composition of demand
 - Drive the supply side evolution of the economy
 - Are important in understanding defective growth patterns and the recoveries from them
 - Provide insights into the employment challenges of advanced economies
- The level can exceed or fall short of output
- The composition
 - Tradable and non-tradable
 - Government, consumption, private investment, public investment
- In many economies these get out of balance – giving rise to defective growth models
- Recovering involves more than restoring the level – it involves changing the composition
- This is much more complex than in a closed economy which is the implicit background of much growth theory

DOMESTIC DEMAND

NON-TRADEABLE
DEMAND

NON-TRADEABLE
SUPPLY

DOMESTIC SUPPLY

TRADEABLE
DEMAND
(DOMESTIC)

TRADEABLE
SUPPLY

EXTERNAL DEMAND
EXPORTS

EXTERNAL
SUPPLY IMPORTS



What is Stable and Where do the Structural Shifts Occur?

- Demand in composition is relatively stable across time and countries at a given income level
- Non-tradable supply is therefore also stable
- But the tradable supply side is highly variable across countries
 - Compare Sweden, Germany and the USA
- In the face of negative demand shocks and recoveries from them, the ability to expand the scope of the tradable sector and access external demand is crucial
- For developing economies, this will be “old hat” – huge external demand is a primary driver of growth in early stages because it relaxes the severe domestic demand constraint

Demand Constraints in an Open Economy

Why is the Tradable/Non-tradable distinction Important

- Tradable versus non-tradable sectors – what are they?
- Roughly 2/3 of advanced economy is non-tradable
 - On the demand side – but therefore on the supply side as well unless current account surplus or deficit is large
- Non-tradable sector is driven in level and composition by domestic aggregate demand
- Tradable sector is quite different
 - The supply side has access to domestic and external demand
 - Productivity constrained rather than demand constrained
 - The demand side has access to domestic and external supply
 - Domestic aggregate demand can exceed GDP without inflation
 - i.e. you can run a persistent current account deficit provided external conditions facilitate it
- There are more potential defective growth patterns in open economies
 - And they can persist for some time before they break down

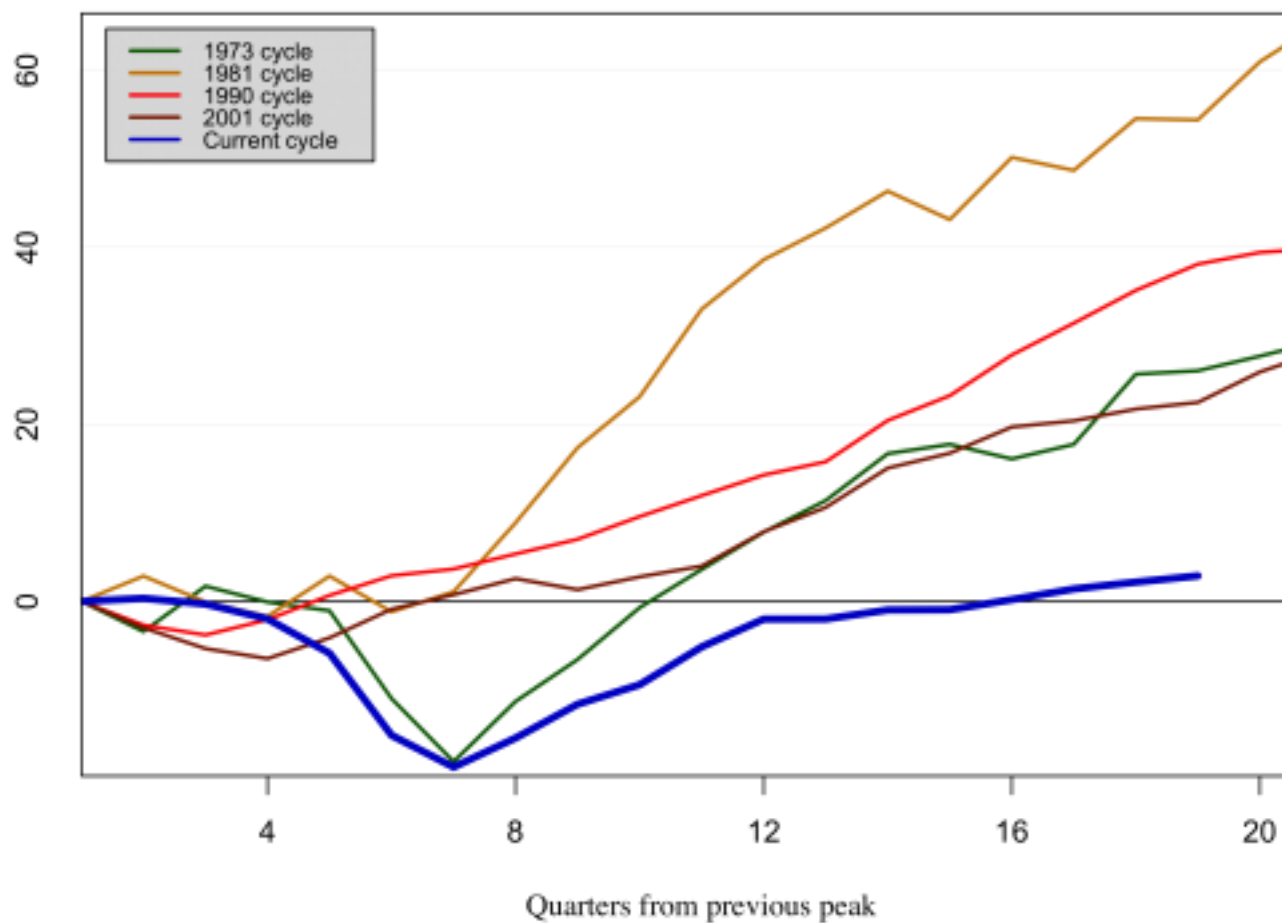
Excess Domestic Demand and a Demand Shock

- What happens?
- Prior to the shock the non-tradable sector becomes too big and reduces the scope and at the margin the competitiveness of the tradable sector
- After the shock growth slows or is negative
- And the economy is structurally out of balance:
 - To recover you may need some restoration of domestic demand (say via deleveraging and balance sheet repair)
 - But you also need a shift toward the tradable sector on the supply side, that is toward external demand
 - In a relative flexible dynamic economy, that is what happens
 - Nominal wages and incomes stop growing and real wages decline with the rate of inflation
 - Labor and capital flow toward the tradable side which expands in share, scope and growth
 - Having your own exchange rate helps

You Can See Some These Patterns Clearly in the US Case

Real Imports of Goods & Services

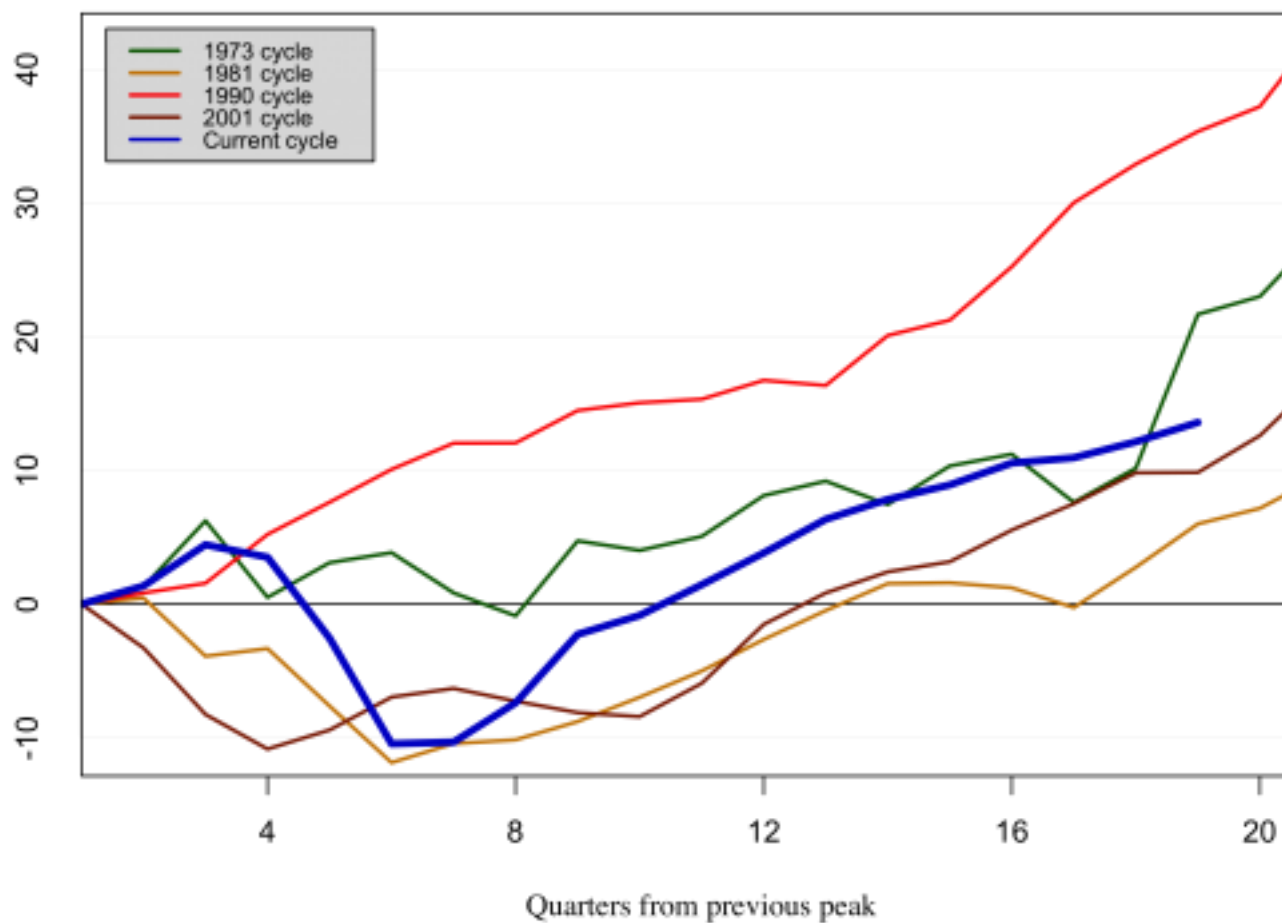
Percentage change from previous peak, Seasonally Adjusted



Codley-Rupert Economic Snapshot; www.econsnapshot.com
U.S. Bureau of Economic Analysis

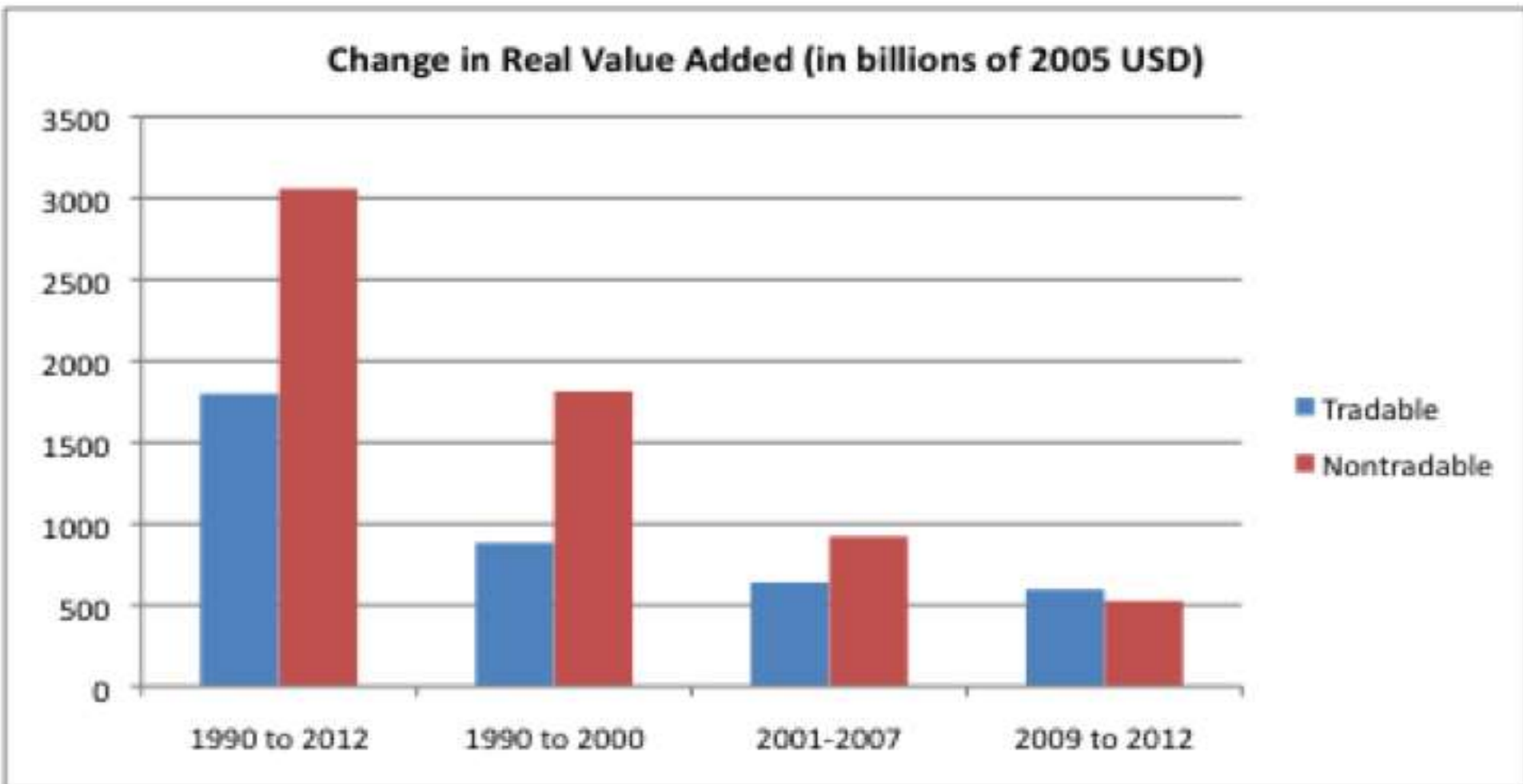
Real Exports of Goods & Services

Percentage change from previous peak, Seasonally Adjusted

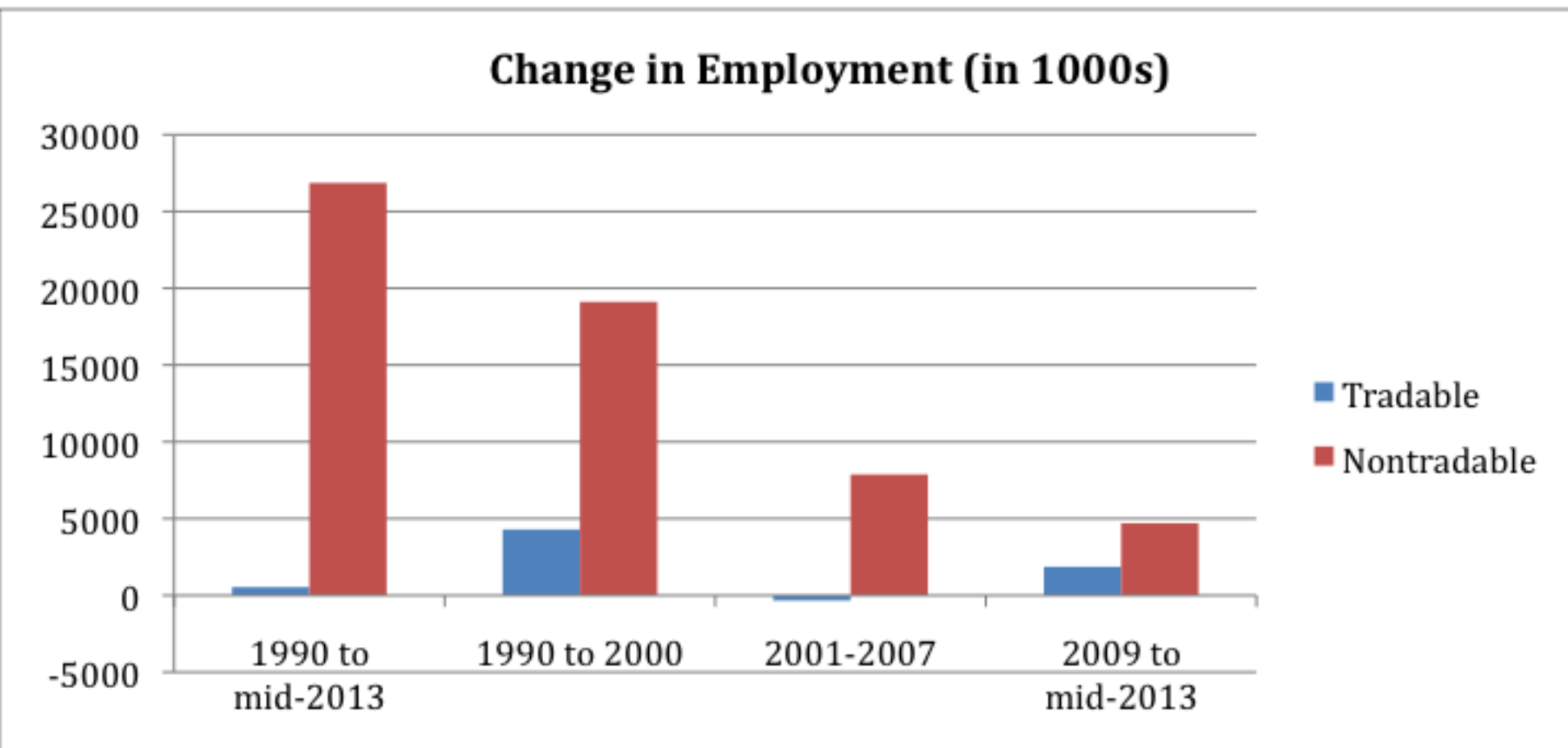


Codley-Rupert Economic Snapshot; www.econsnapshot.com
U.S. Bureau of Economic Analysis

US Growth



US Employment

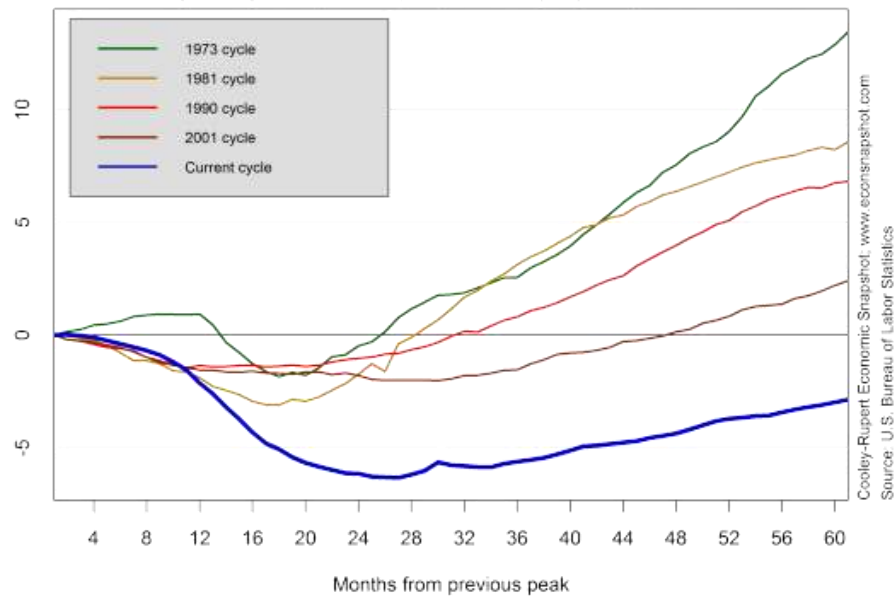


Growth and Employment in the US

VALUE ADDED							
1990-2000			2001-2007			2009-mid 2012	
% of Gain			% of Gain			% of Gain	
Nontradable	0.66		Nontradable	0.59		Nontradable	0.44
Tradable	0.34		Tradable	0.41		Tradable	0.56
EMPLOYMENT							
1990-2000			2001-2007			2009-mid 2013	
% of Gain			% of Gain			% of Gain	
Nontradable	0.79		Nontradable	0.83		Nontradable	0.73
Tradable	0.21		Tradable	0.17		Tradable	0.27

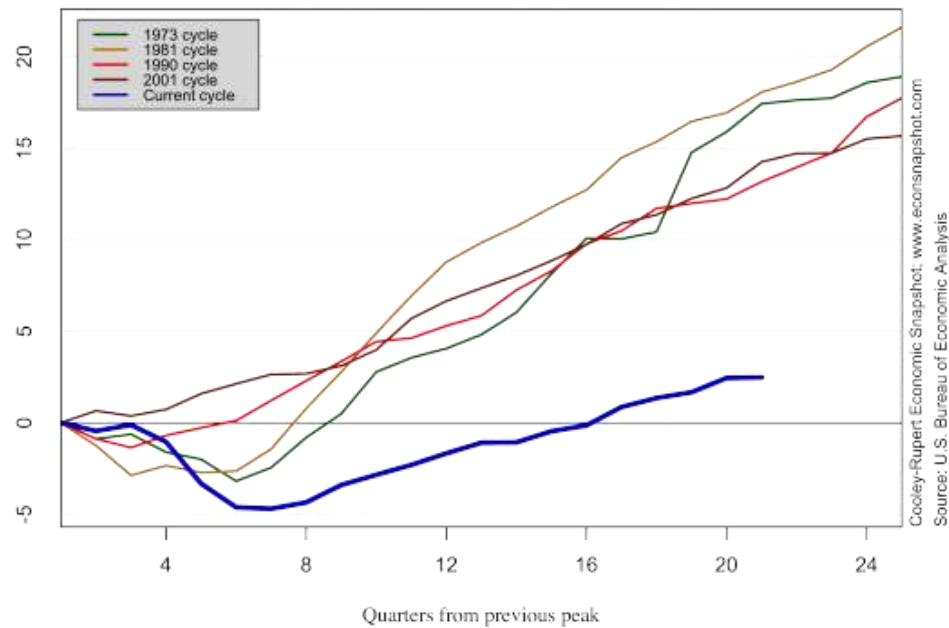
Total Employment - Establishment Survey

Percentage change from previous peak, Seasonally Adjusted, Nonfarm Business



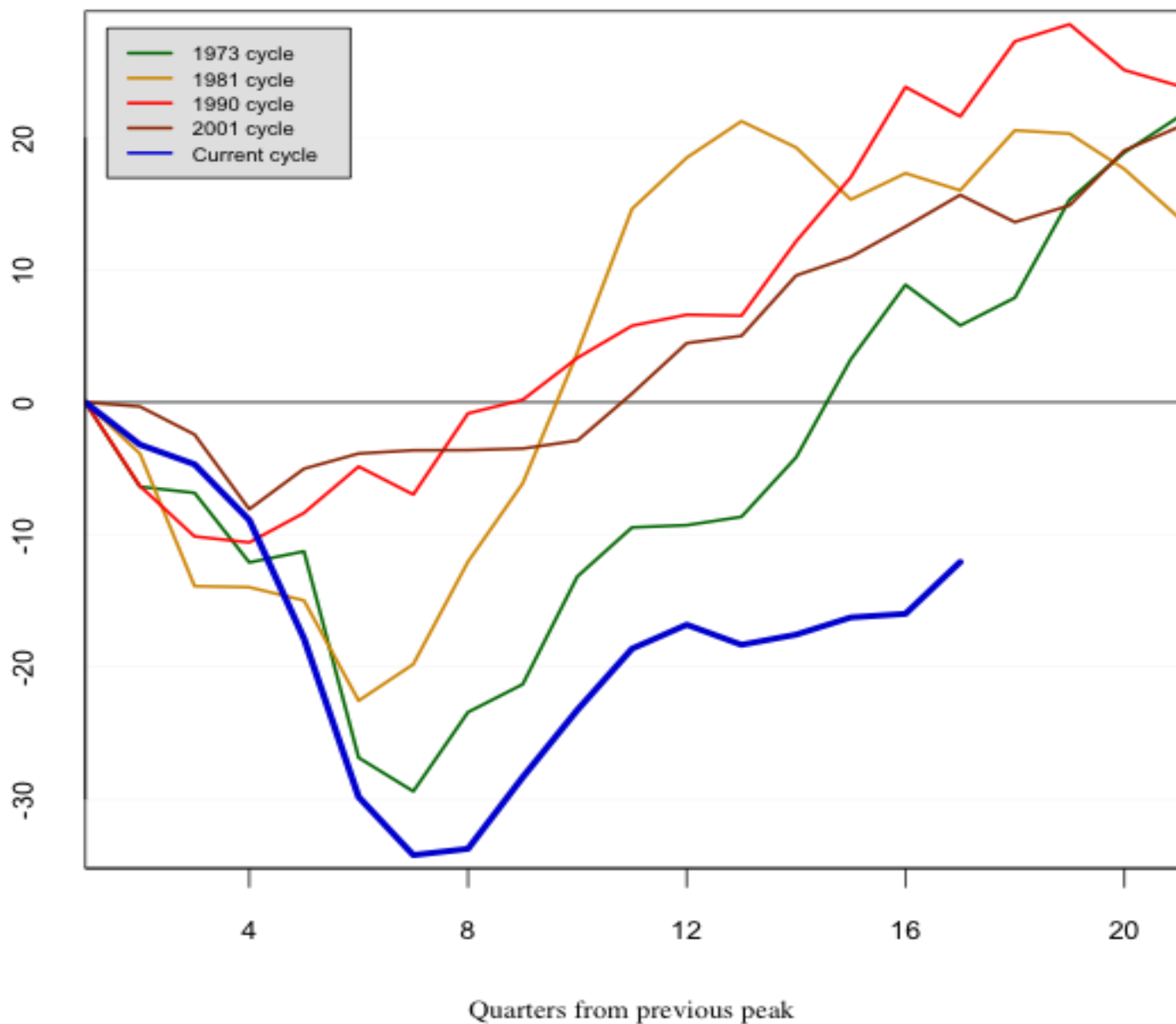
Real Gross Domestic Product

Percentage change from previous peak, Seasonally Adjusted



Real Gross Private Domestic Investment

Percentage change from previous peak, Seasonally Adjusted

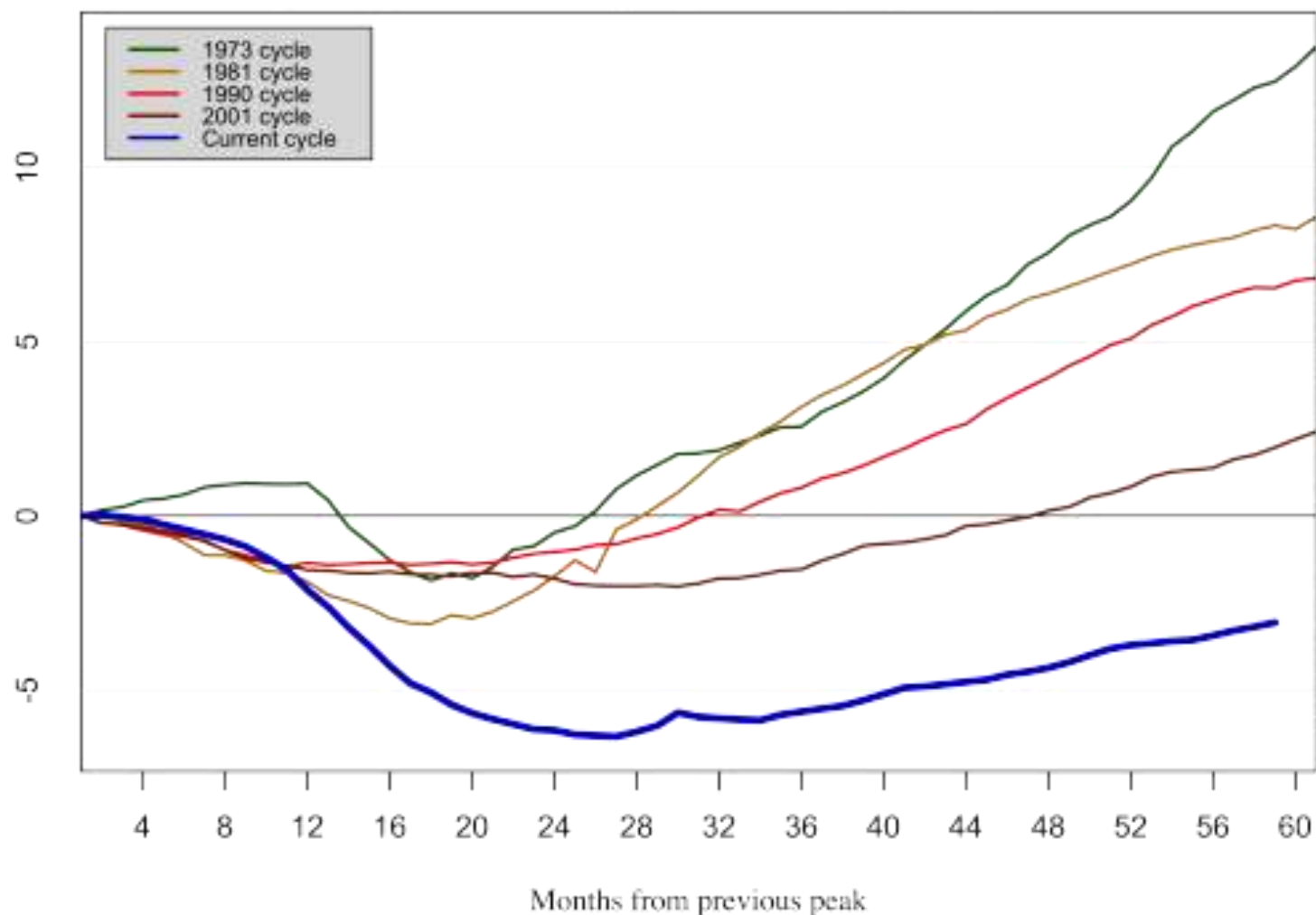


Cooley-Rupert Economic Snapshot; <http://econsnapshot.wordpress.com>

U.S. Bureau of Economic Analysis

Total Employment - Establishment Survey

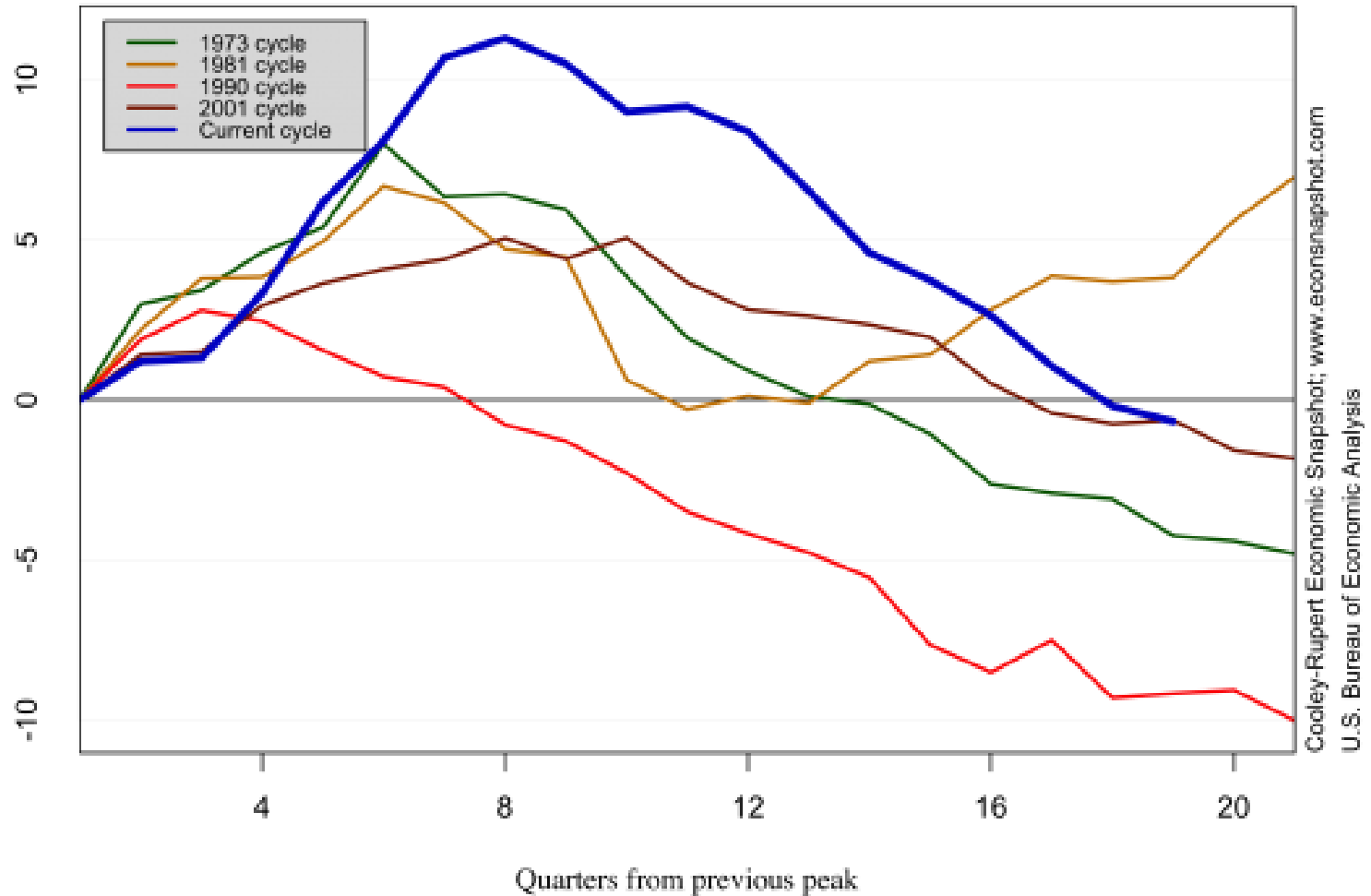
Percentage change from previous peak, Seasonally Adjusted, Nonfarm Business



Codley-Rupert Economic Snapshot; www.econsnapshot.com
Source: U.S. Bureau of Labor Statistics

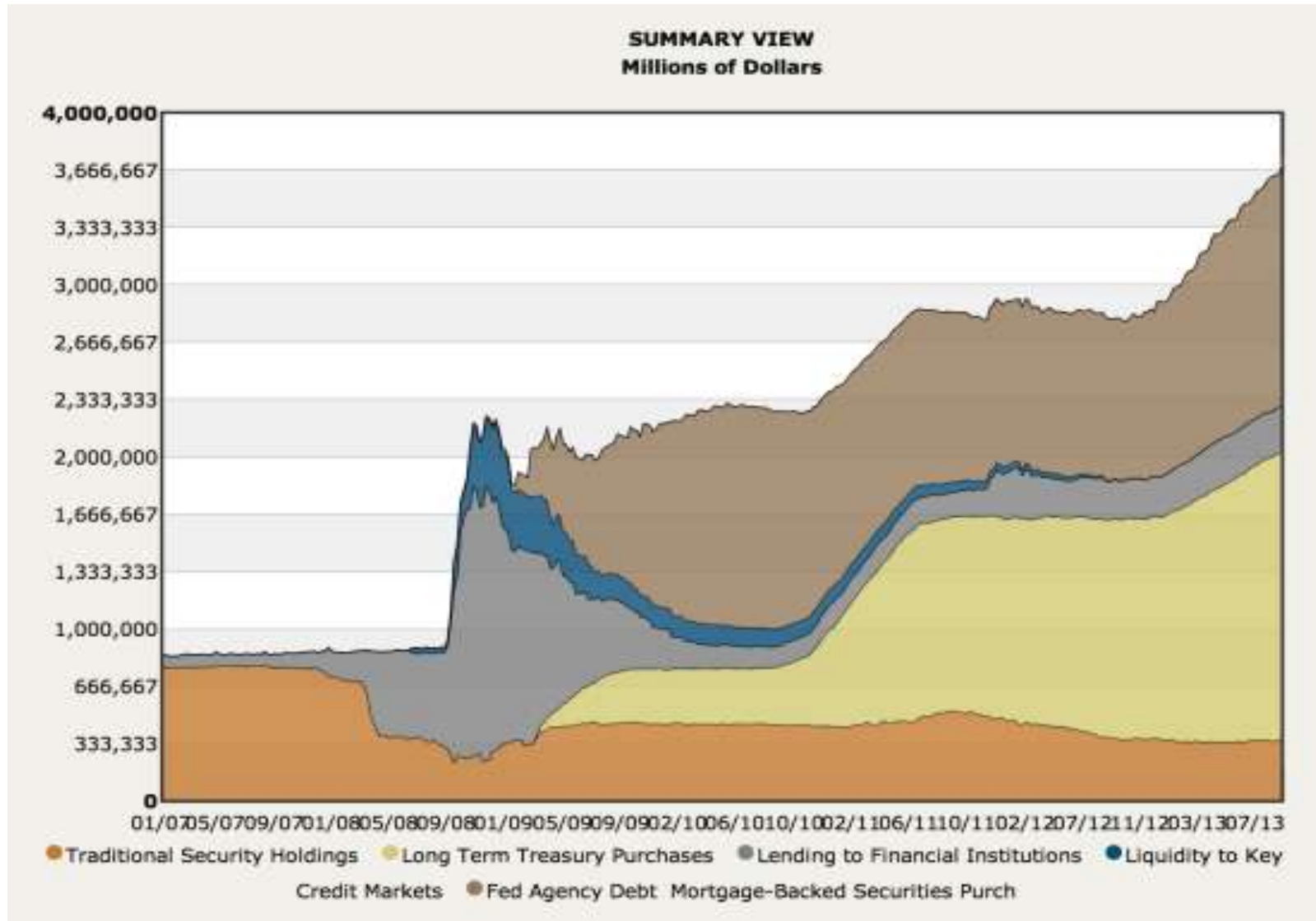
Real Government Expenditures & Investment as a % of GDP

Percentage change from previous peak, Seasonally Adjusted

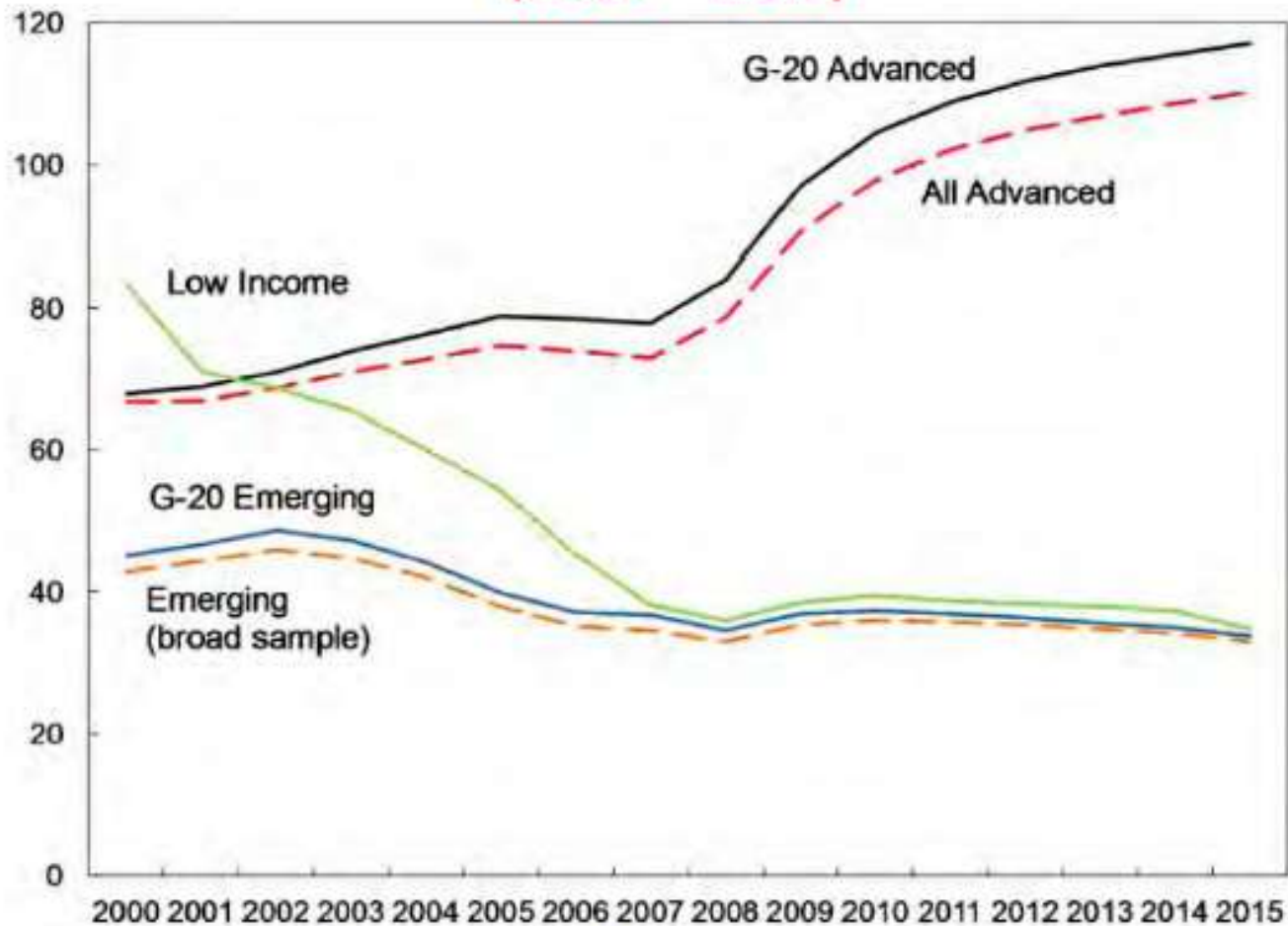


The Assisted Growth Model

Federal Reserve Balance Sheet



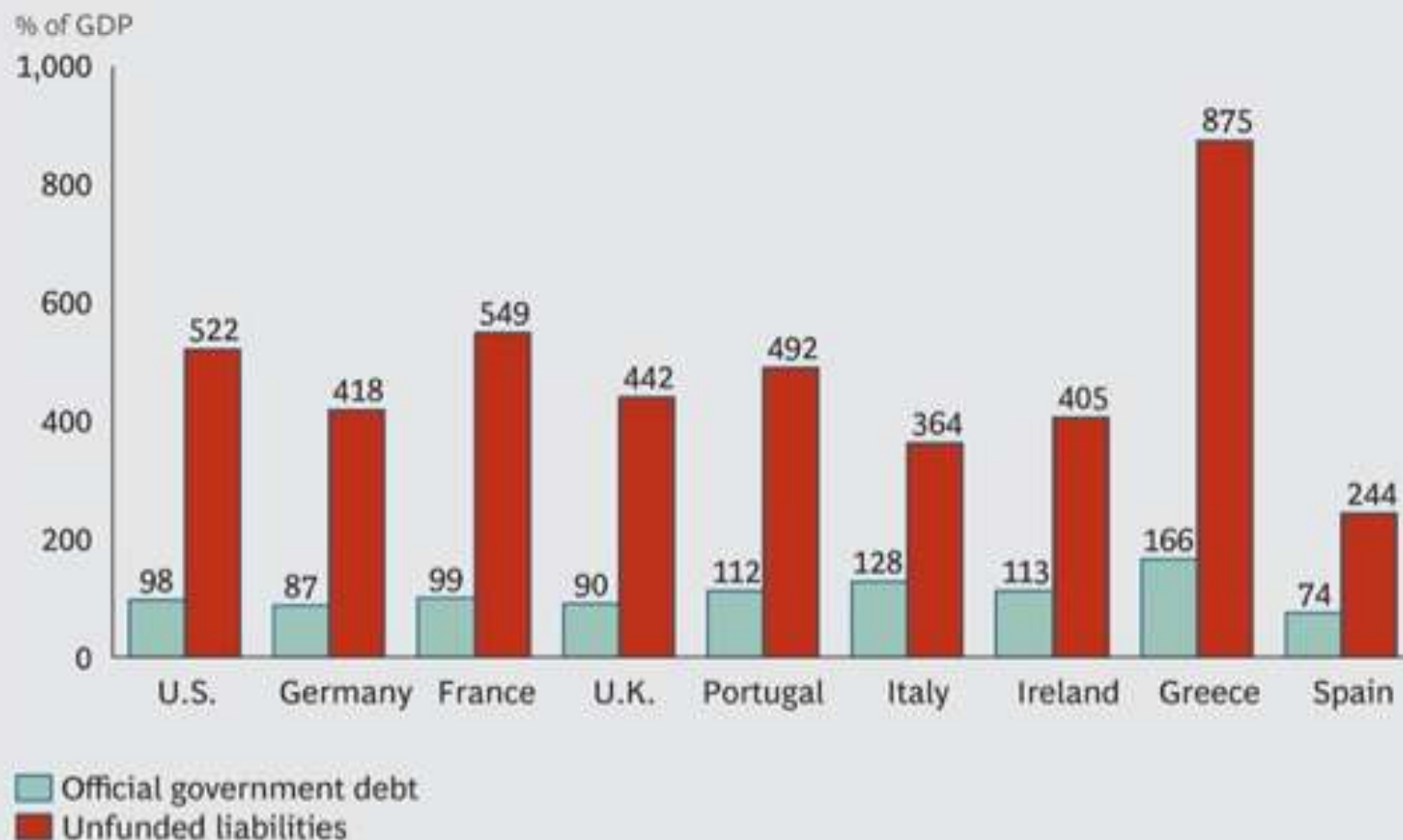
G20 Countries: General Government Debt to GDP Ratios (2000 – 2015)



Source: IMF, *Fiscal Monitor*, May 2010

EXHIBIT 1 | Net Expected Tax Revenues Are Not Adequate to Continue Funding Current Social Policies

Unfunded liabilities and official government debt



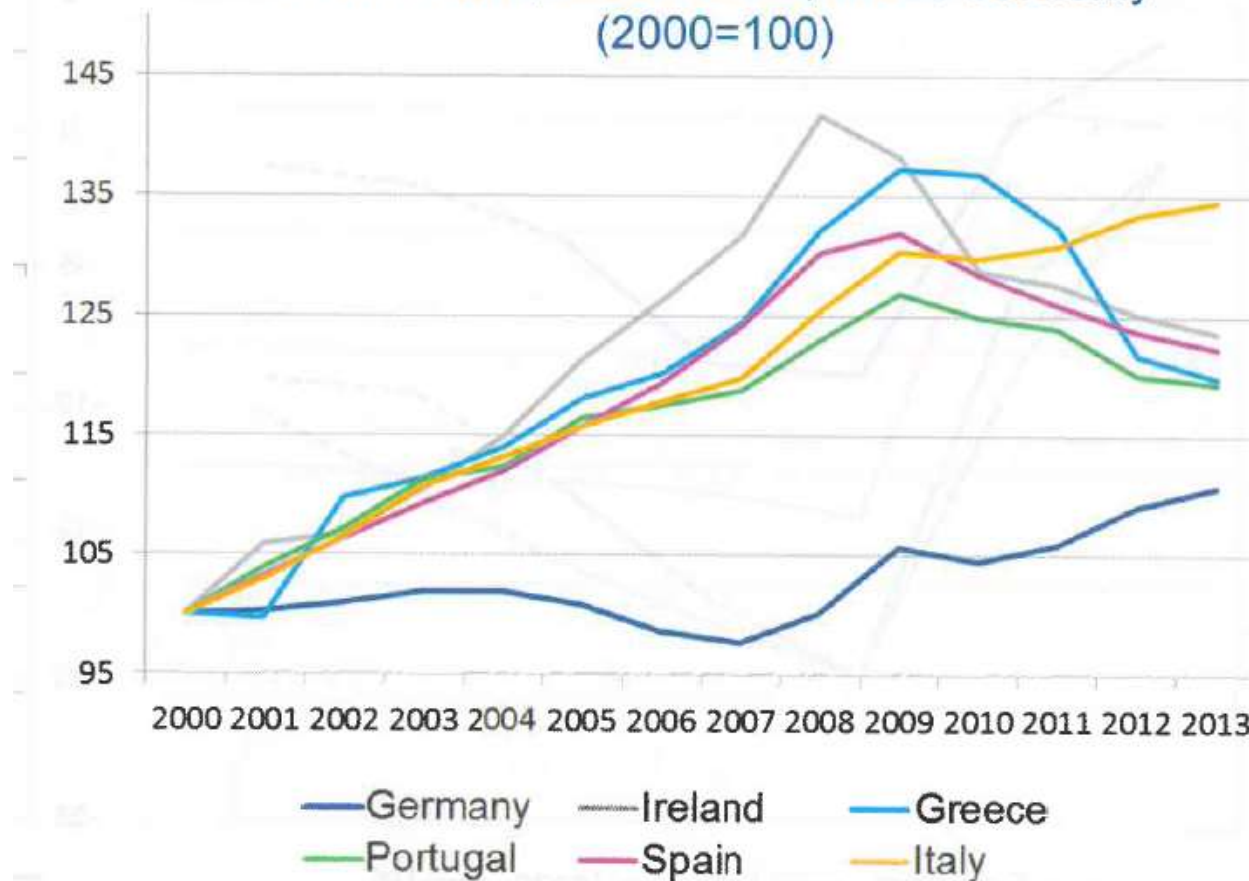
Sources: Jagadeesh Gokhal, "Measuring the Unfunded Obligations of European Countries," 2009; OECD.

Note: Unfunded liabilities are the difference between the projected cost of continuing current government programs and net expected tax revenues. Government debt based on 2011 forecasts from the OECD.

What About Southern Europe?

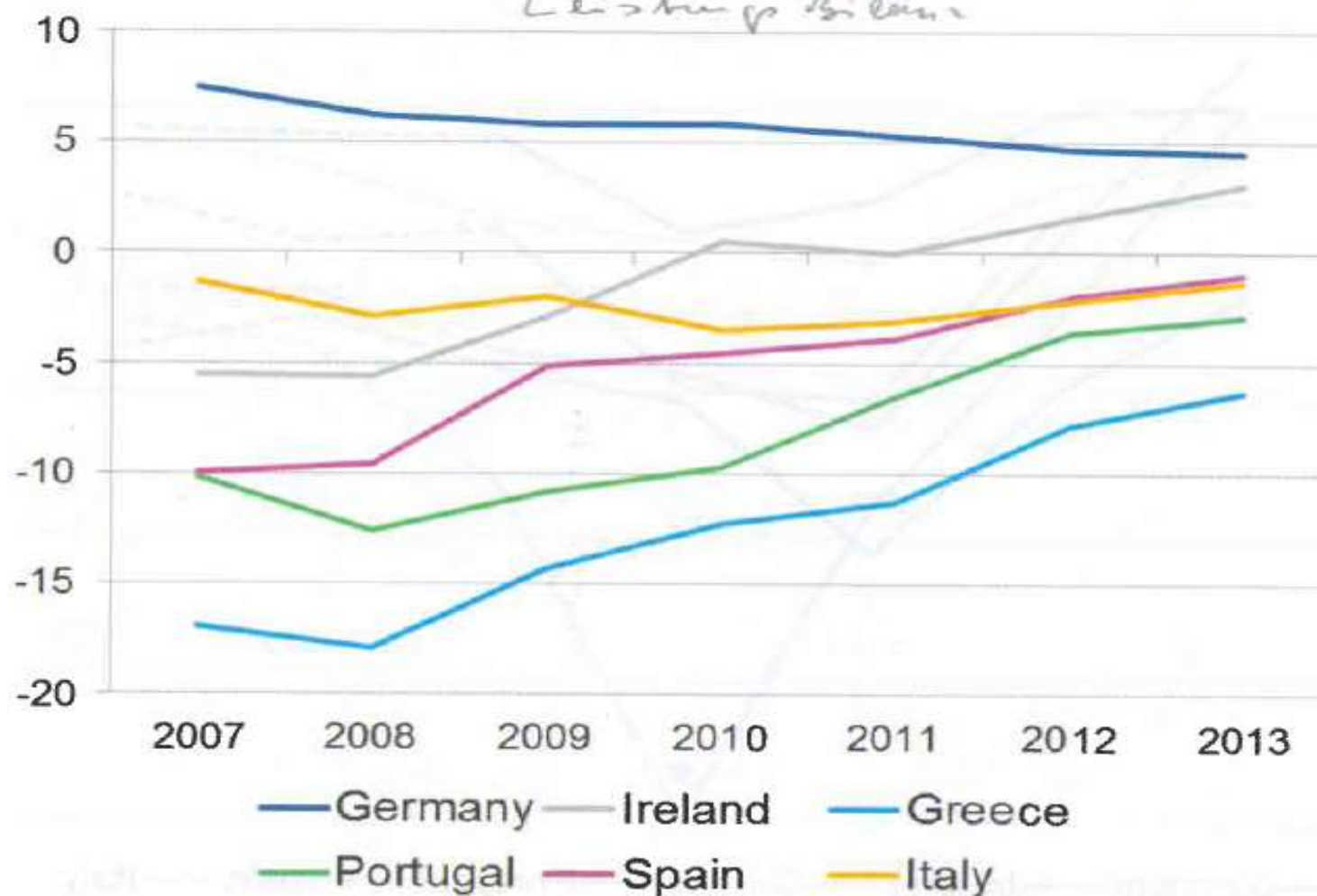
- There are two problems
 - Very large divergences in nominal unit labor costs relative to German
 - Impediments to structural shifts toward the tradable sector and external demand – in labor markets (also capital markets and product markets)
 - These are the impediments Germany had and removed in the reforms of 2003-2006
- Inflation and the common currency
- Nevertheless convergence in productivity and growth in the tradable sector is starting to happen
- The speed is determined mainly by structural flexibility in labor, capital and product markets
- Most countries have not yet had labor market reforms as large as those that occurred in Germany in 2003-2006

Nominal unit labour costs, whole economy
(2000=100)



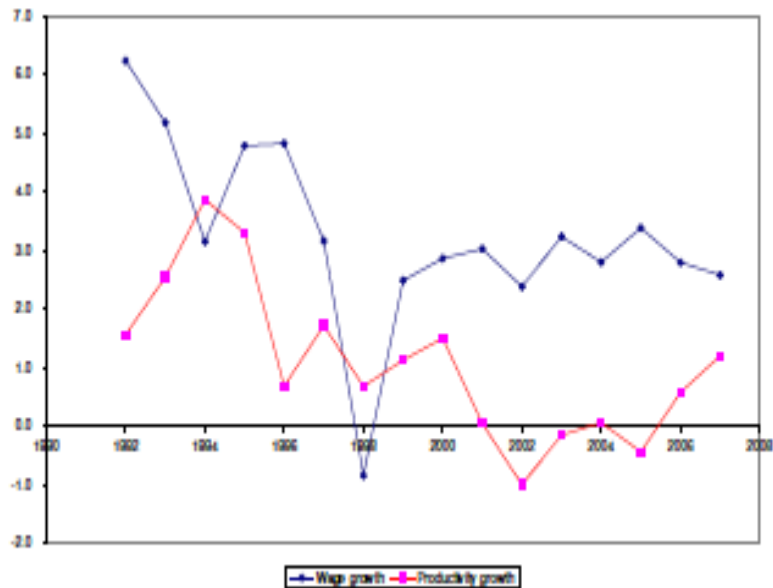
Current Account Balance (as % of GDP)

Leistungsbilanz

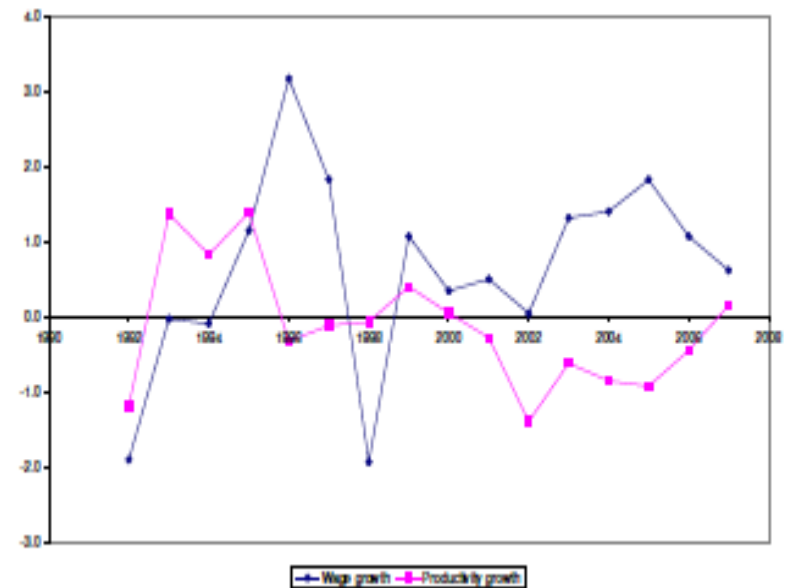


Italy: Productivity and Wage Growth

Italy. Productivity and wage growth



Italy. Productivity and wage growth, relative to Euro



Productivity and wage growth; Absolute and relative to the euro area

Italian Investment Rate

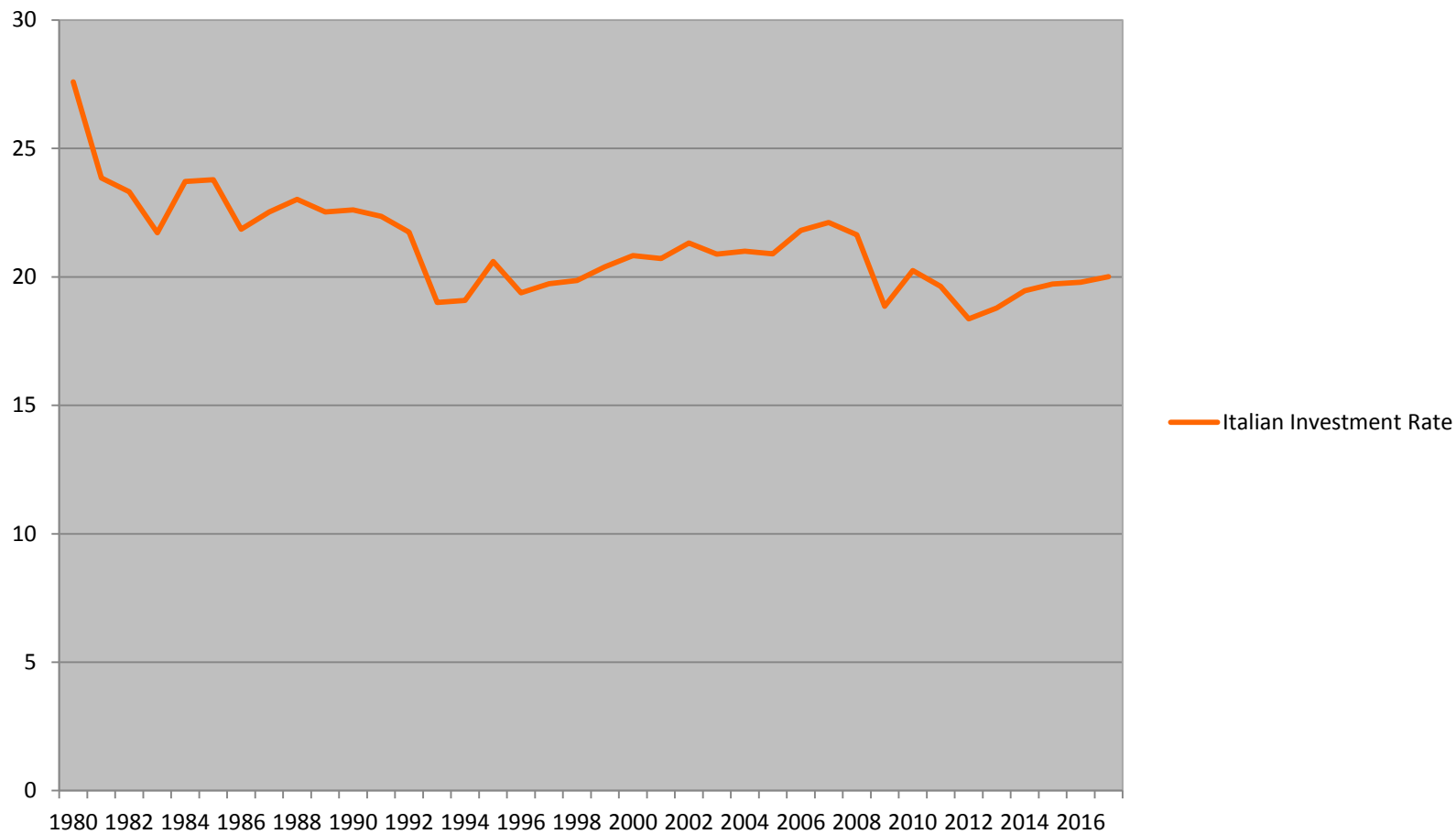
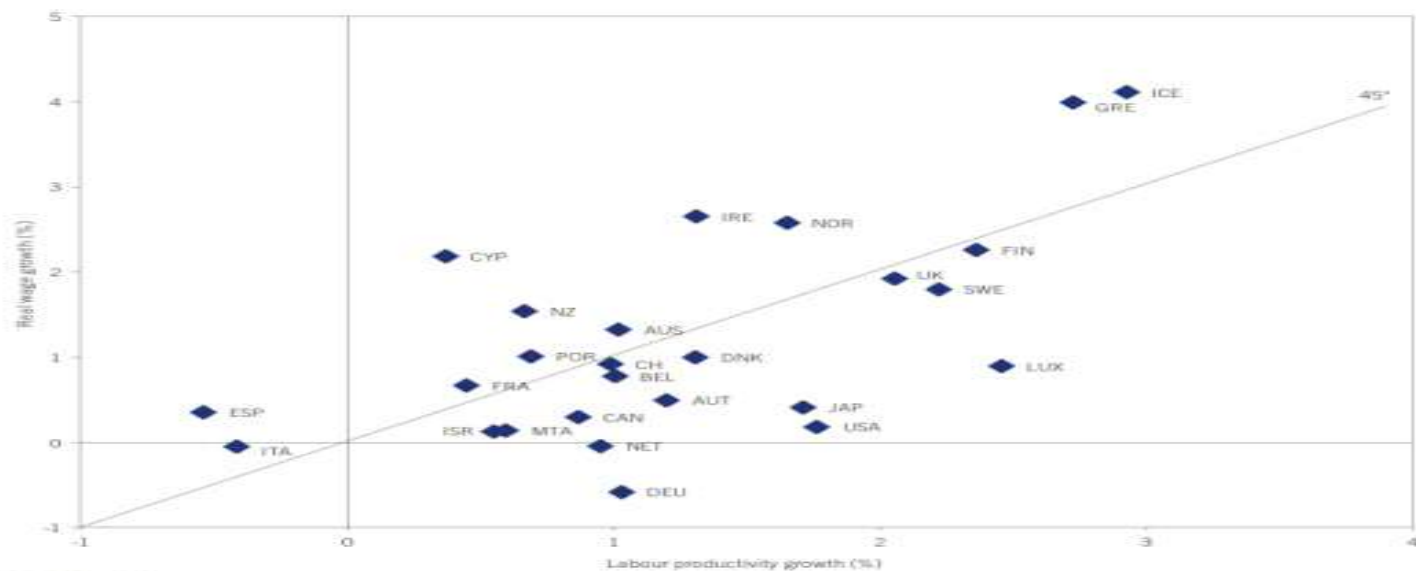
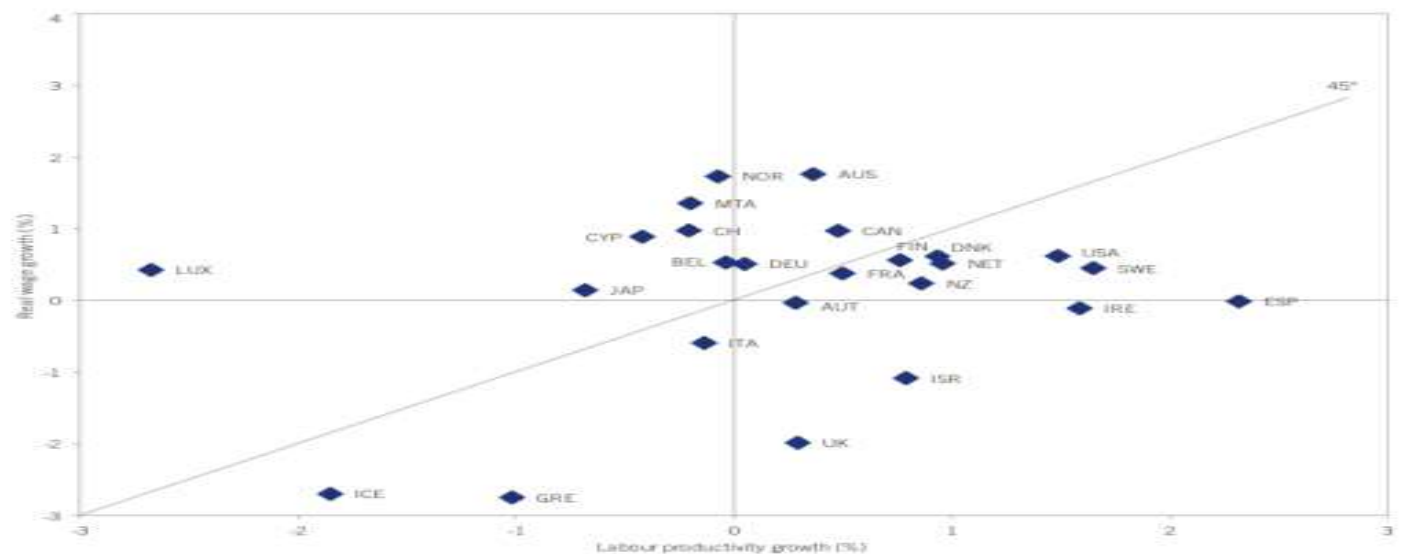


Figure 11 Growth in real wages and labour productivity in developed economies, 1999–2007 and 2008–11 (%)

(a) 1999–2007



(b) 2008–11

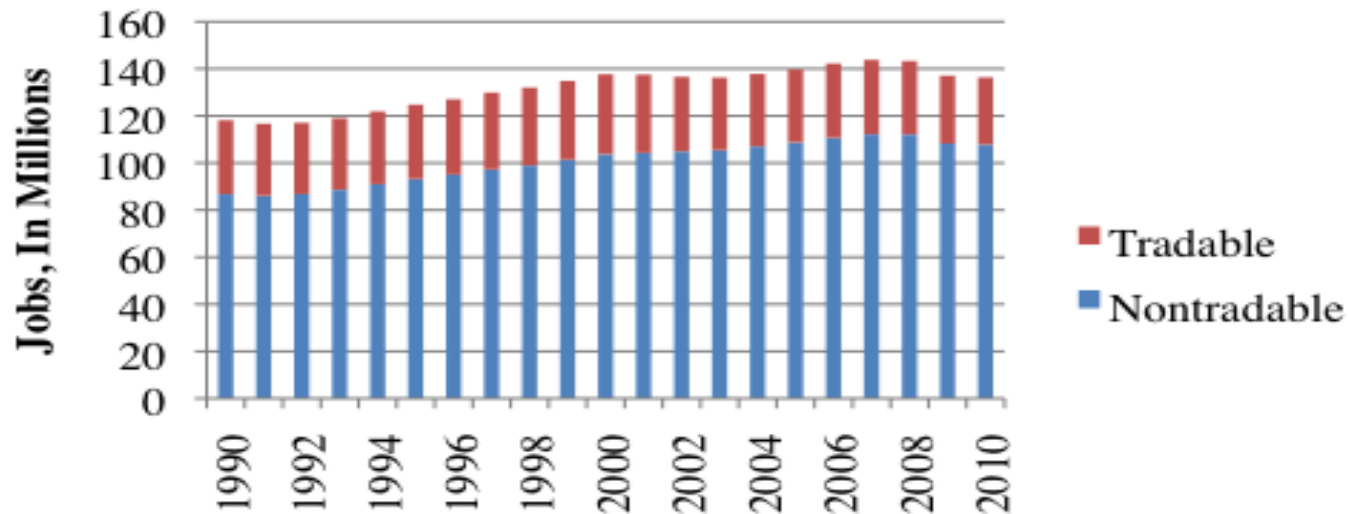


Employment and Distribution

Additional Headwinds Beyond the Growth Challenges

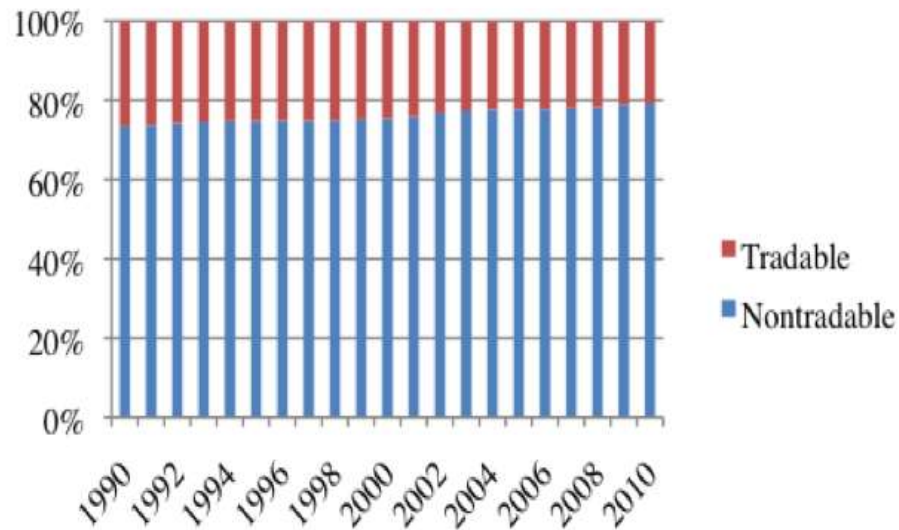
- Employment has been adversely affected by the negative growth shocks
- But that compounded a longer term adverse trend in employment across the tradable and non-tradable sectors
 - Which I will show you in a minute
- These longer term trends are the combined result of powerful technological and global market forces
- The latter includes
 - The increasingly efficient atomization of global supply chains
 - The rise in size of the emerging economies (now over 50% of global GDP) – especially China

U.S. Tradable/Nontradable Jobs, 1990-2010

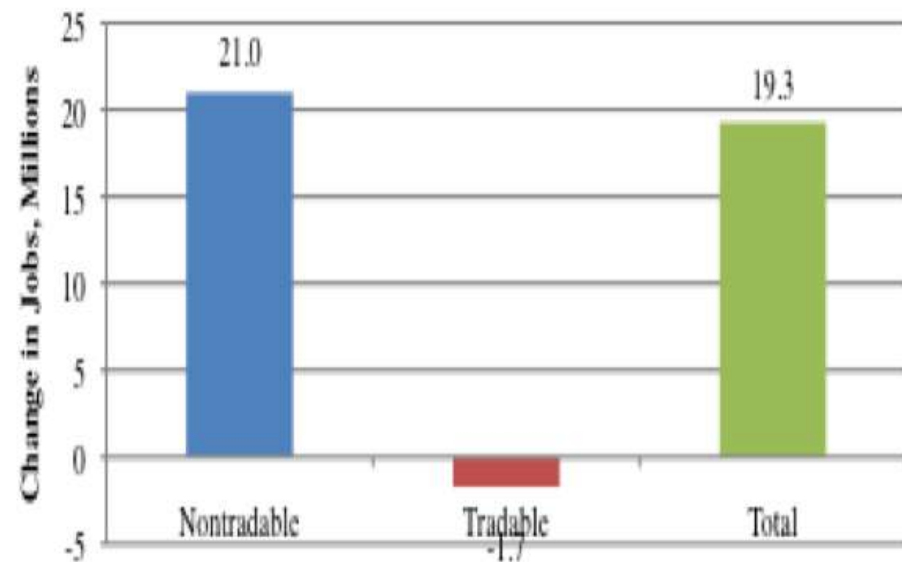


USA

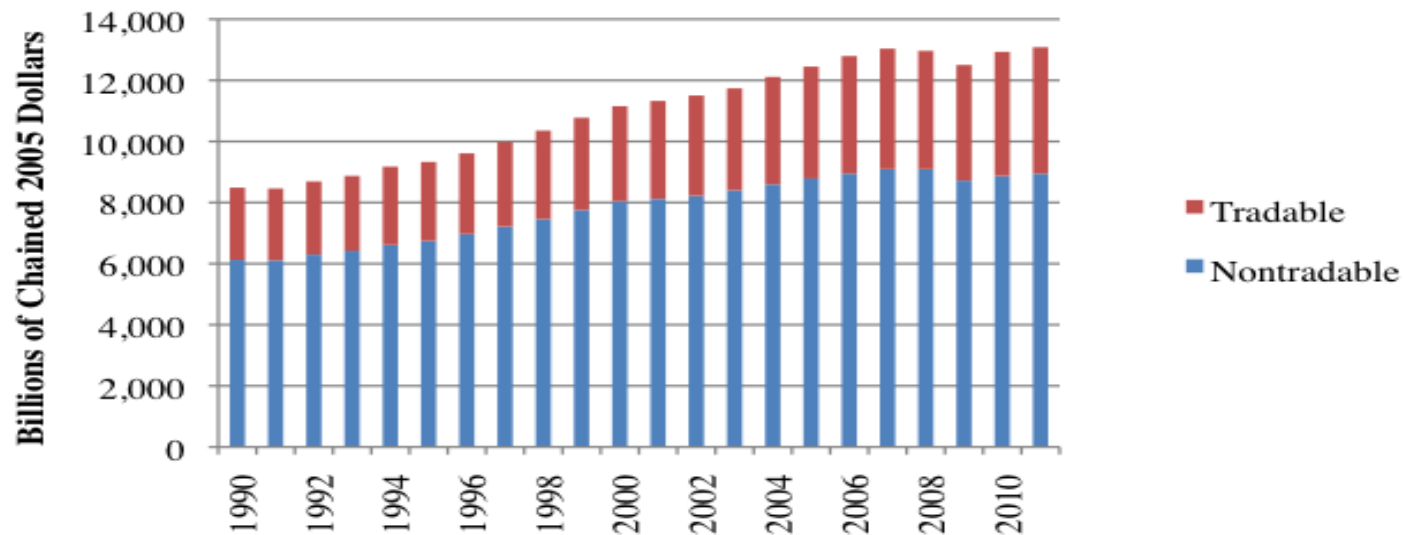
U.S. Employment Split (%)



U.S. Total Change in Jobs, 1992 to 2010

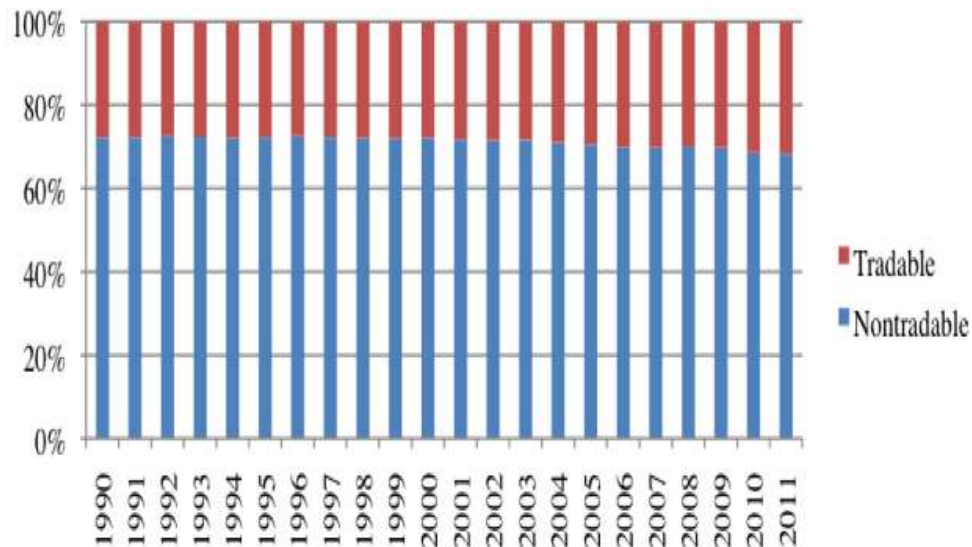


US Tradable/Nontradable Value Added, 1990-2011

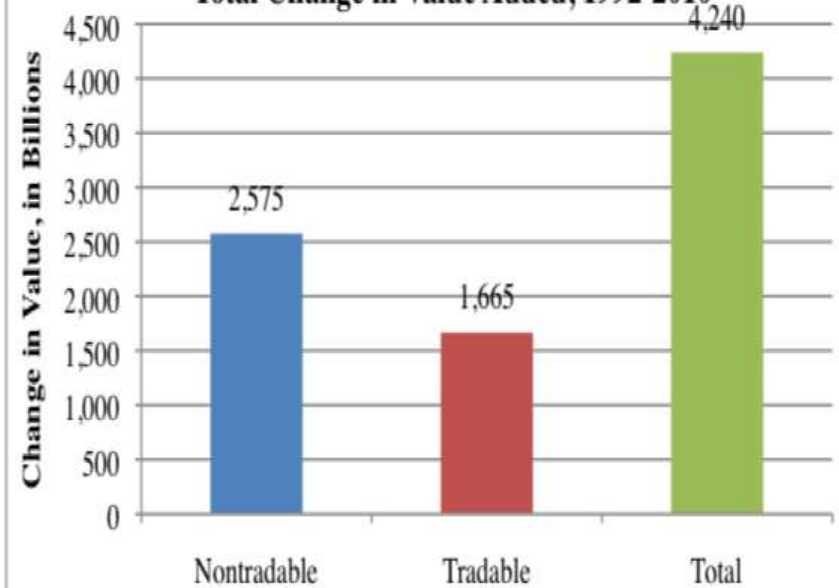


Value
Added

U.S. Value Added Split (%)



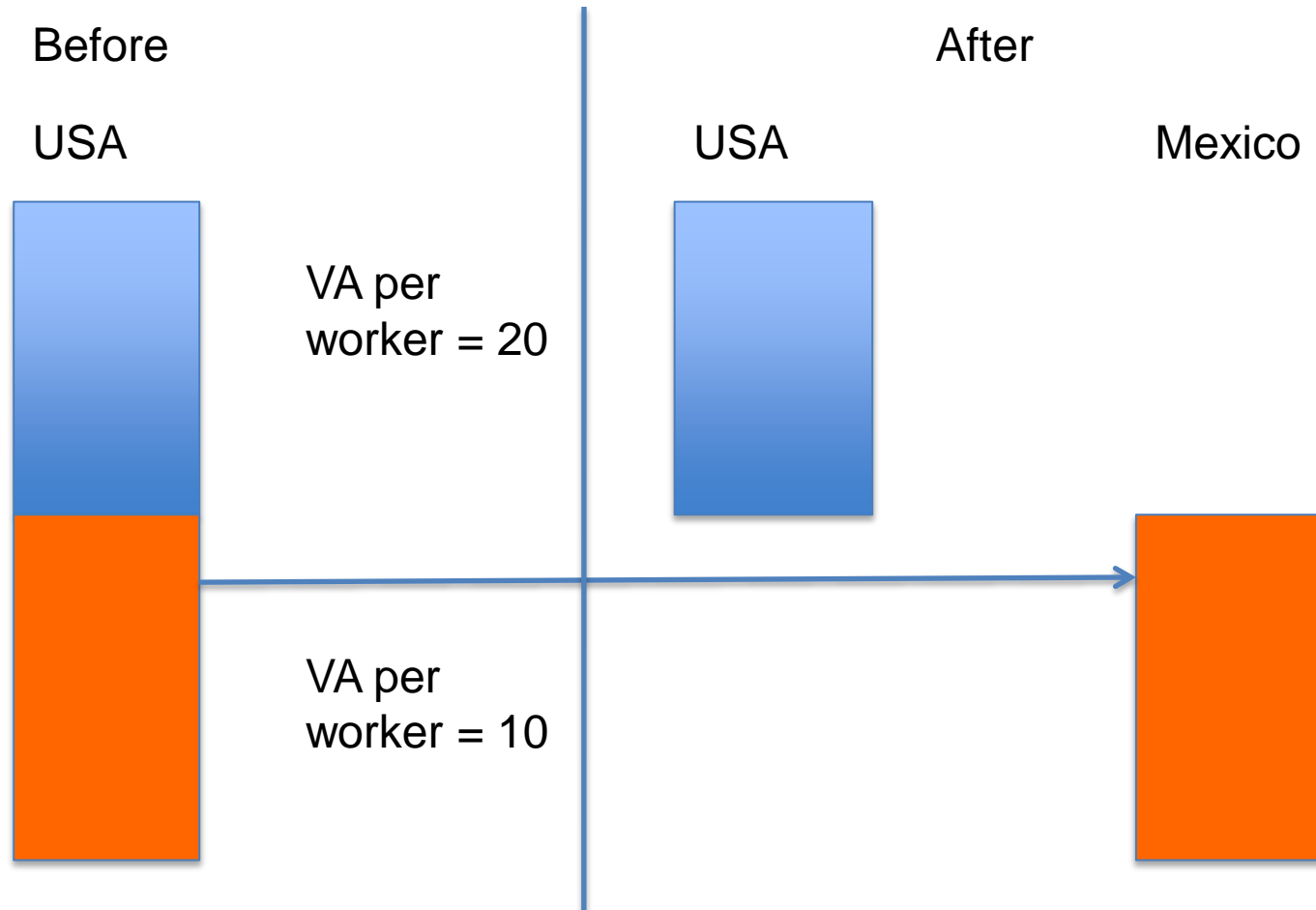
Total Change in Value Added, 1992-2010

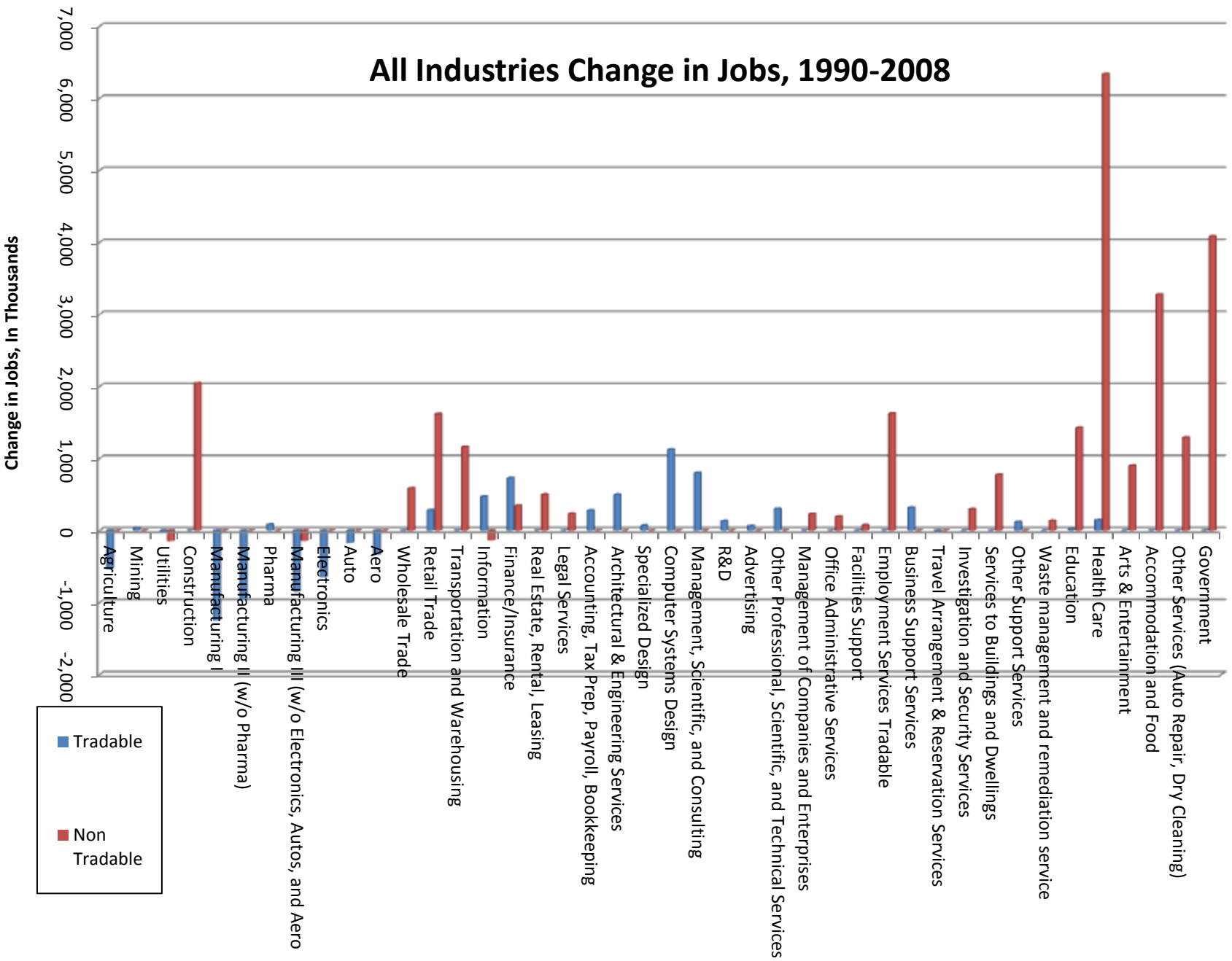


Value Added per Worker



Value added per worker and the global economy
This is often mistaken for a “normal” productivity increase





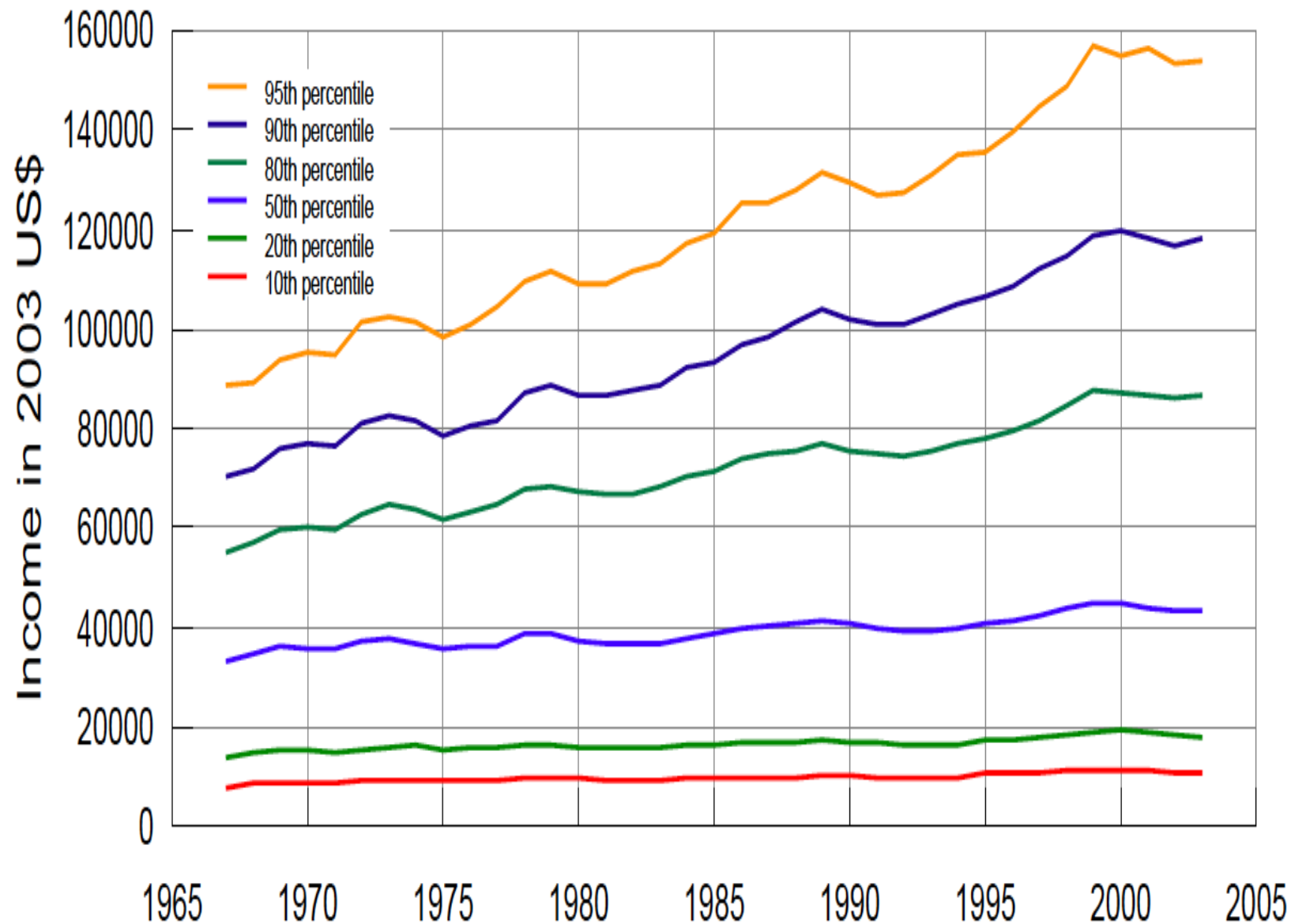


Figure 3: Percent Change in Employment Shares by Occupation Group

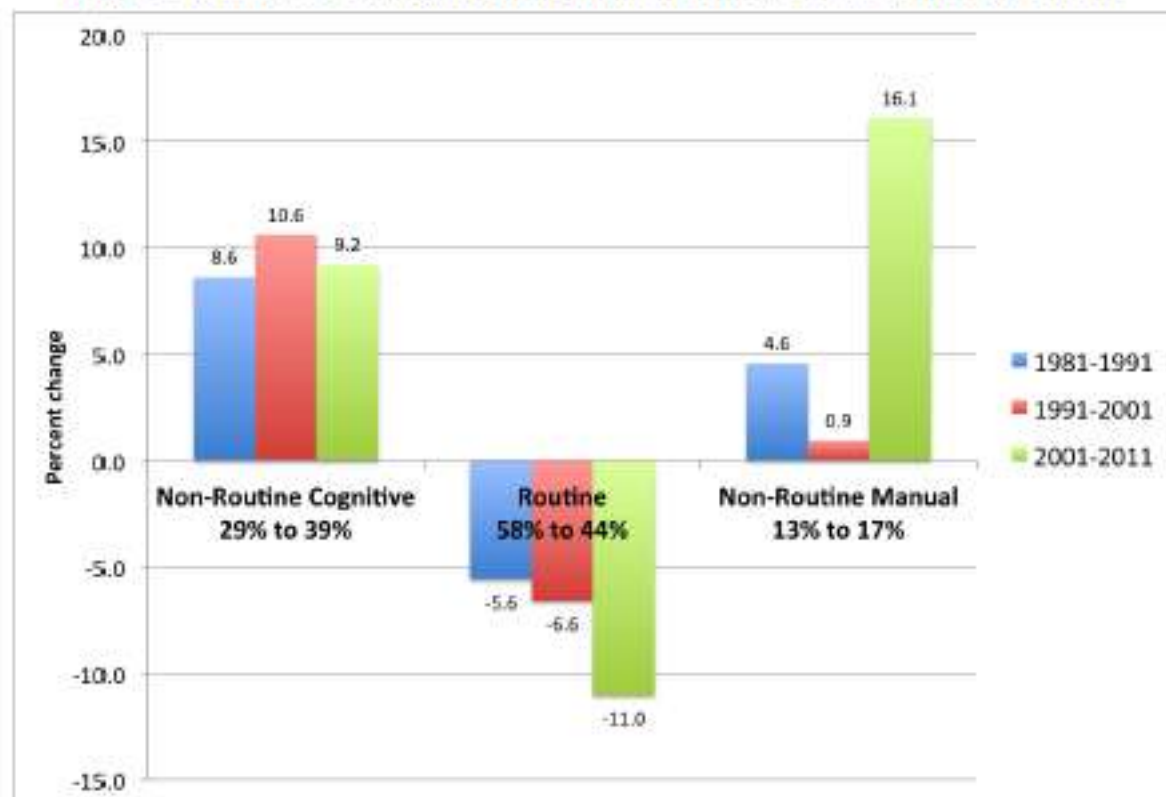
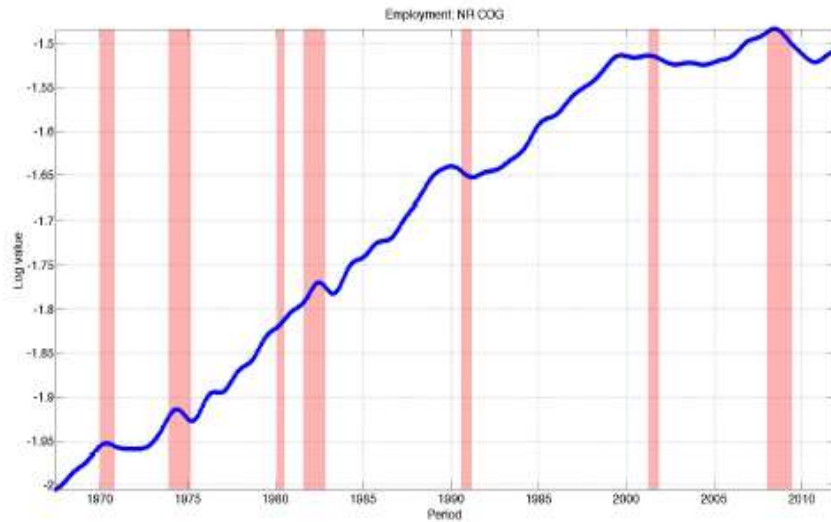
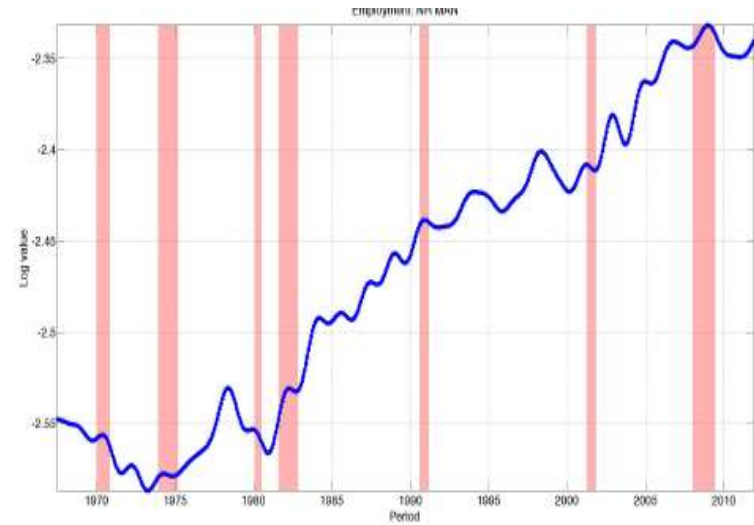


Figure 4: Employment in Occupational Groups: 1967 – 2011



Non-Routine Cognitive



Non-Routine Manual



Routine – Manual and Cognitive

THE TREND IS THE CYCLE:
JOB POLARIZATION AND JOBLESS RECOVERIES

Nir Jaimovich
Henry E. Siu

USA Income Distribution Trends

Income Inequality and Political Polarization
1947 - 2009

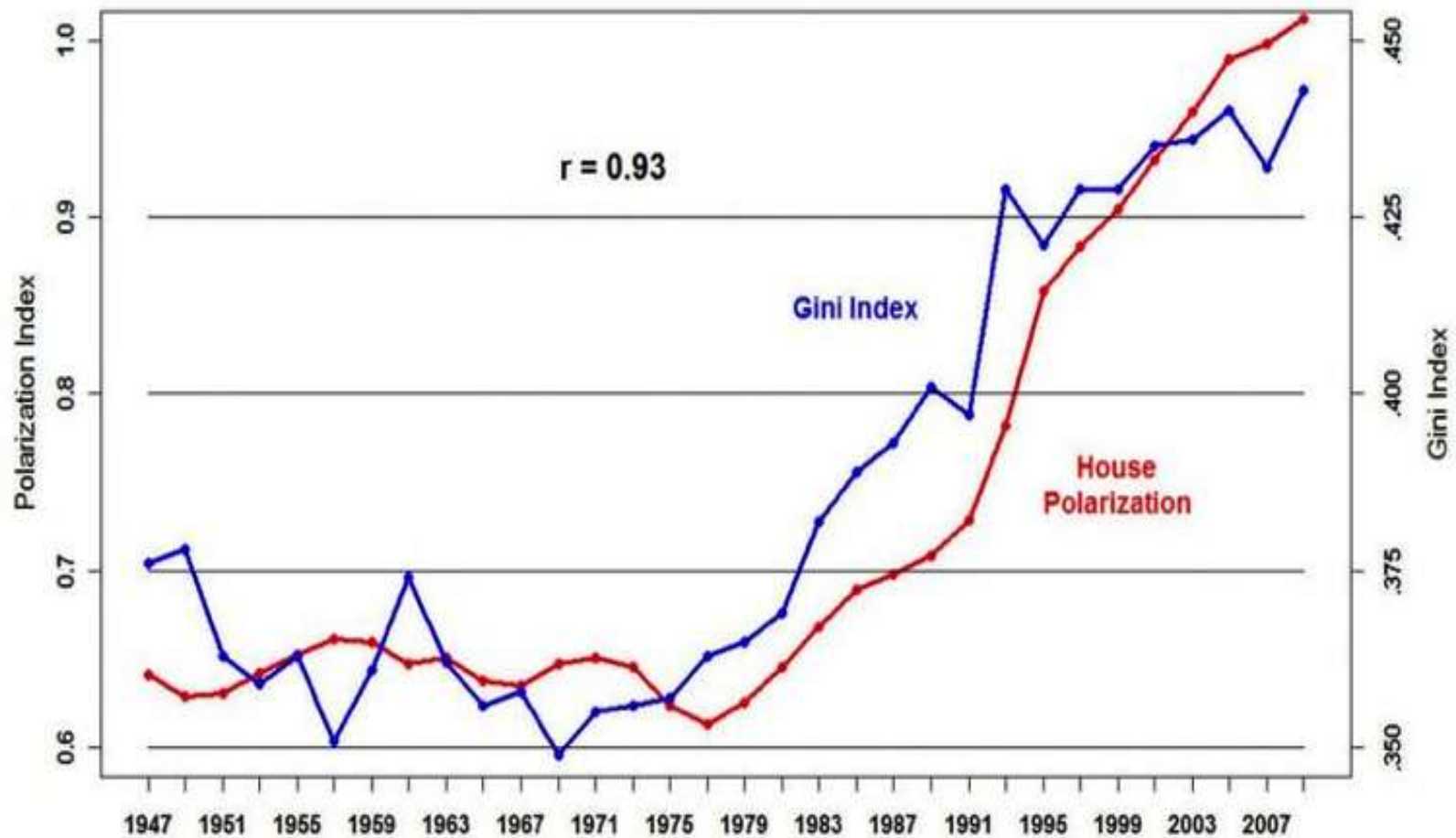
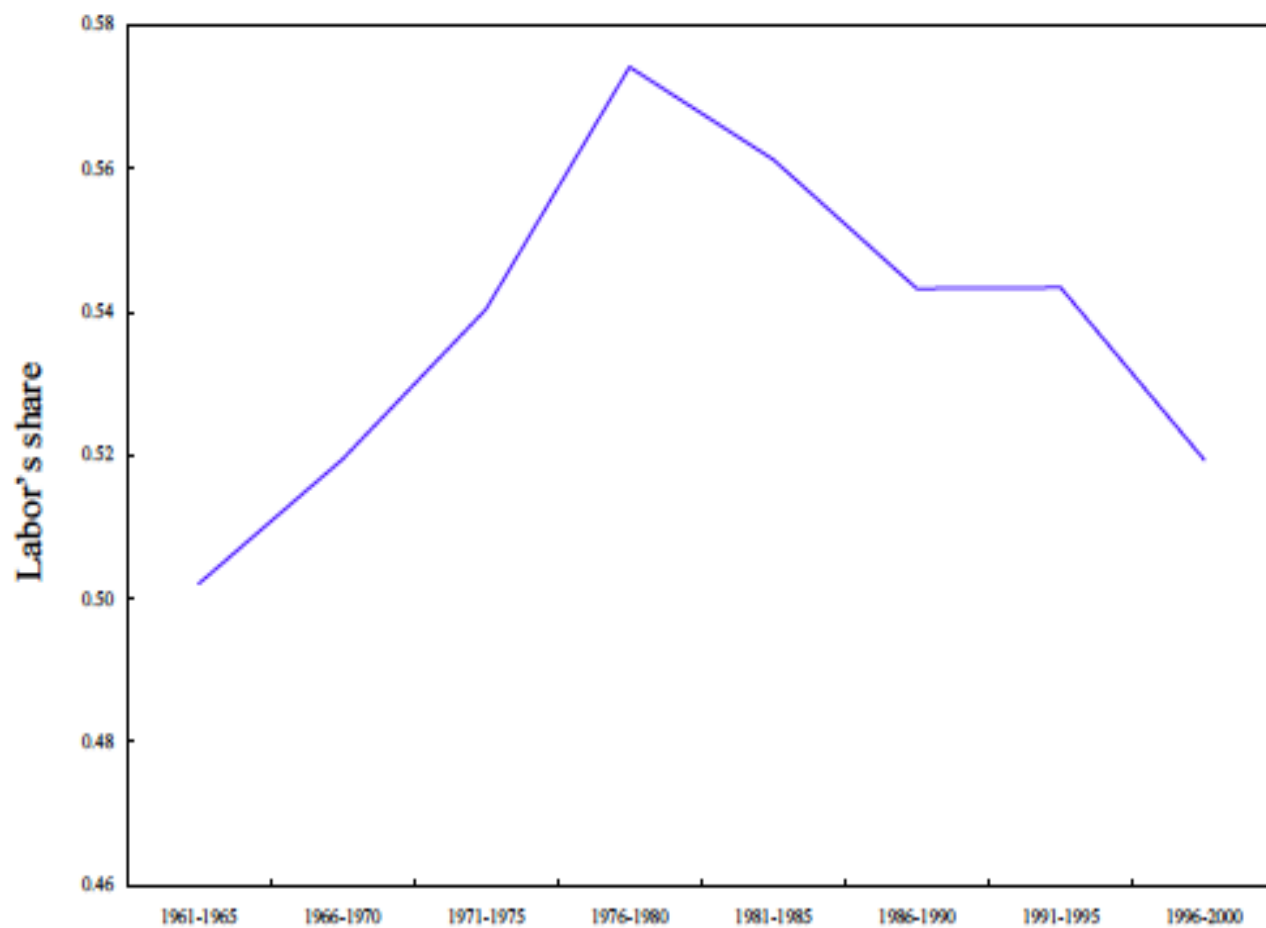


Figure 1. Cross-Country Average Labor's Share in National Income
(Ratio of labor income to national income)



Source: OECD, Structural Analysis Database.

COUNTRY	INCOME OF THE RICHEST 10% OVER THE POOREST 10%	INCOME OF THE RICHEST 20% OVER THE POOREST 20%	GINI COEFFICIENT
Australia	12.5	7	35.2
Austria	6.9	4.4	29.1
Belgium	8.2	4.9	33
Brazil	51.3	21.8	57
Canada	9.4	5.5	32.6
China (PRC)	21.6	12.2	46.9
Denmark	8.1	4.3	24.7
Finland	5.6	3.8	26.9
France	9.1	5.6	32.7
Germany	6.9	4.3	28.3
Greece	10.2	6.2	34.3
India	8.6	5.6	36.8
Israel	13.4	7.9	39.2
Italy	11.6	6.5	36
Japan	4.5	3.4	24.9
South Korea	7.8	4.7	31.6
Mexico	24.6	12.8	46.1
Netherlands	9.2	5.1	30.9
New Zealand	12.5	6.8	36.2
Norway	6.1	3.9	25.8
Russia	12.7	7.6	39.9
South Africa	33.1	17.9	57.8
Spain	10.3	6	34.7
Sweden	6.2	4	25
Switzerland	9	5.5	33.7
Turkey	16.8	9.3	43.6
United Kingdom	13.8	7.2	36
United States	15.9	8.4	40.8

China and the Middle Income Transition

- Third largest economy if Europe is counted as a unit
- About half the size of US or Europe
 - Will be same size in 10-15 years
 - When it grows at 8% real - that is the equivalent of 4% growth in Europe or North America
- Leading export market for India, Brazil, Japan, Korea, Australia, most of east Asia, in the near future, Africa
- Huge amount at stake
- The growth model for first 30 years yielded impressive results, but has reached the end of its useful life
- The most common developing country mistake is to find a successful strategy for growth and do it too long
- Despite the high growth, there is widespread consensus (internally and externally) that reform momentum declined seriously in the past decade – and that a reversal of that trend is critical to alter and then sustain the growth pattern at this level of income

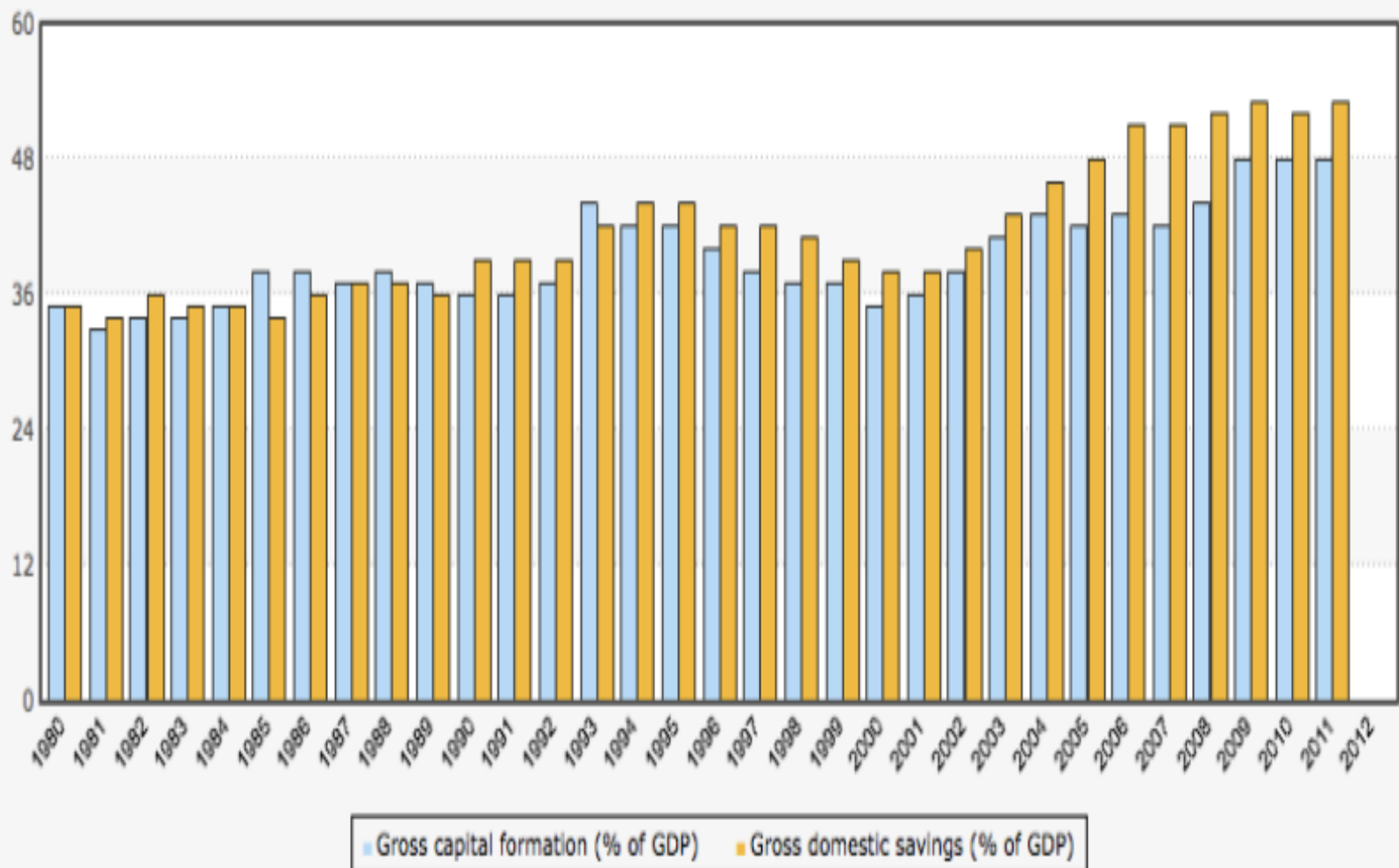
Five High Speed Transitions

- Japan
- Korea
- Taiwan/China
- Hong Kong/China
- Singapore

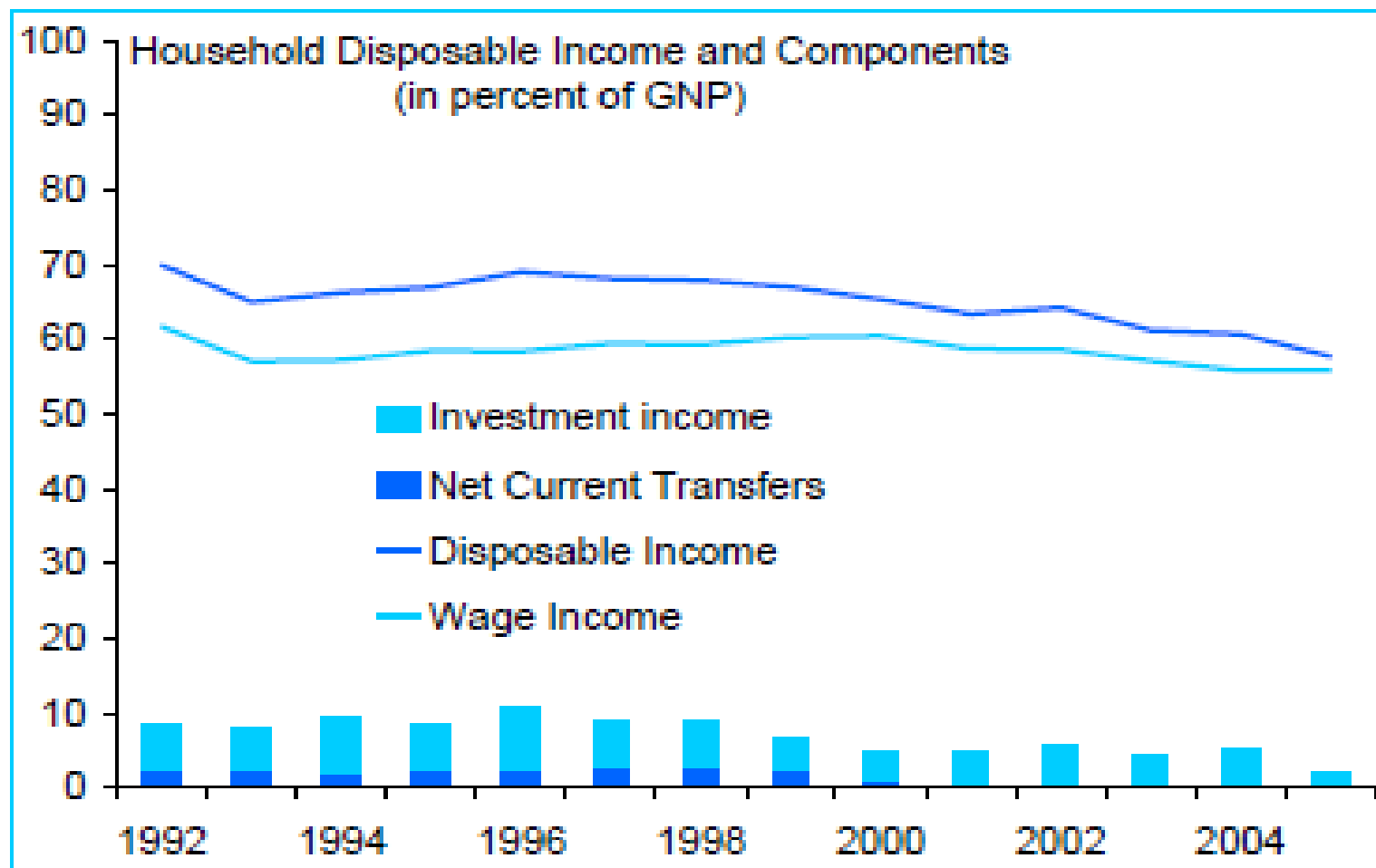
- None at China's scale
- None with strong global economic headwinds
- No predecessor was systemically important

- Most importantly – China's growth depends on no slippage in generating domestic aggregate demand
 - Unlike earlier cases (Korea, Taiwan, China, Japan)
 - One way to do that is high and rising investment levels – but that will drive investment returns (private and social) down and is not a sustainable growth pattern
 - This is all well understood in China – so the challenge is to shift the mix to consumption and high return investment – and that takes major system reforms

Country: China



China: Disposable Income Declining Percentage of National Income
Combined with Household Savings at 30%
Consumption is below 40% of GDP

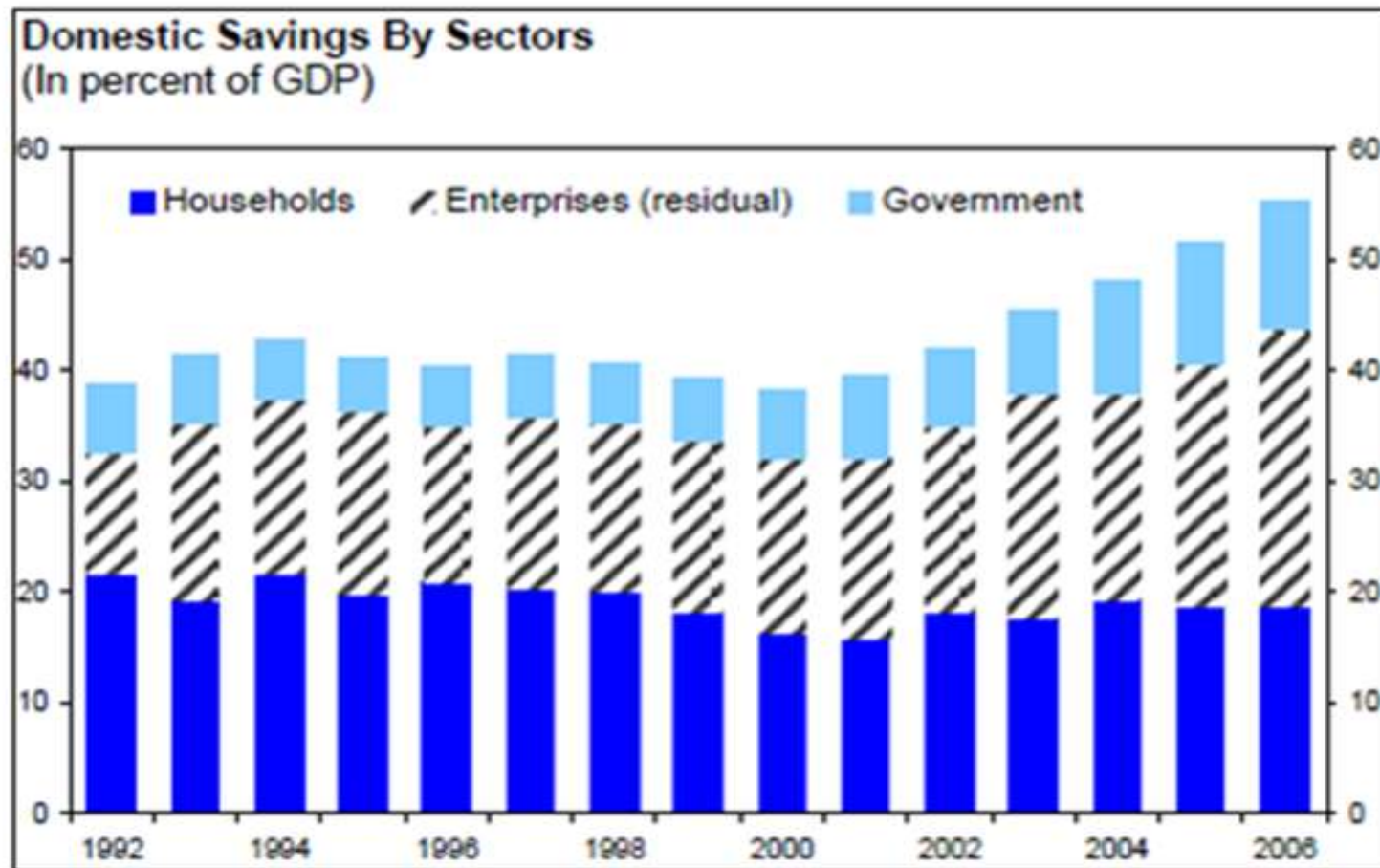


Explaining China's Low Consumption:
The Neglected Role of Household Income

Jahangir Aziz and Li Cui

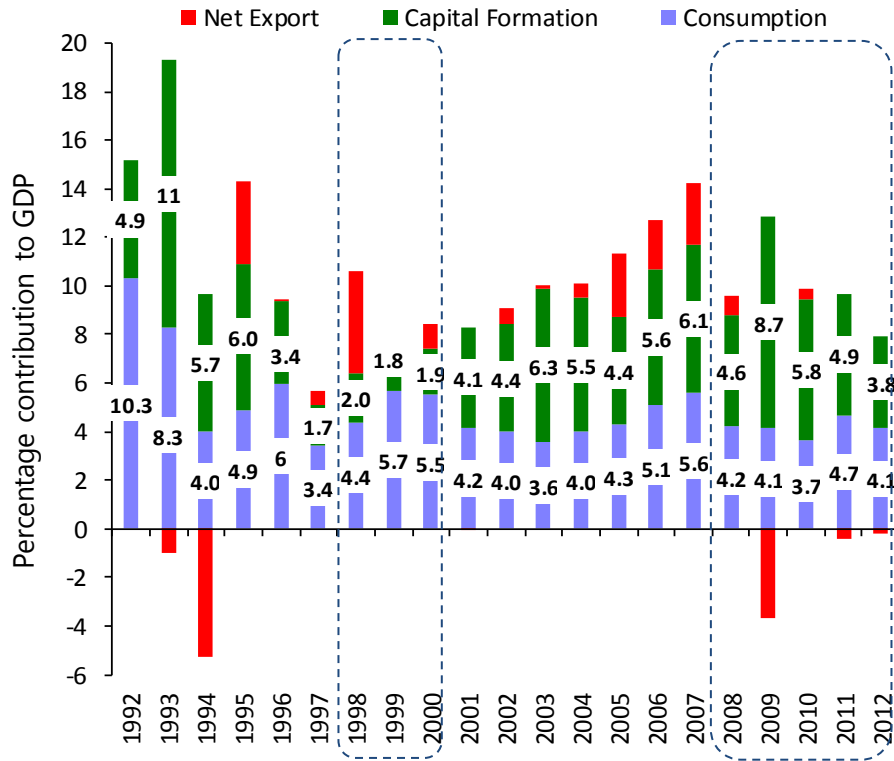
IMF WORKING PAPER 2007

Components of Savings: The Increase is in the Corporate Sector
Built in bias in the system to investment without adequate risk adjusted return filters

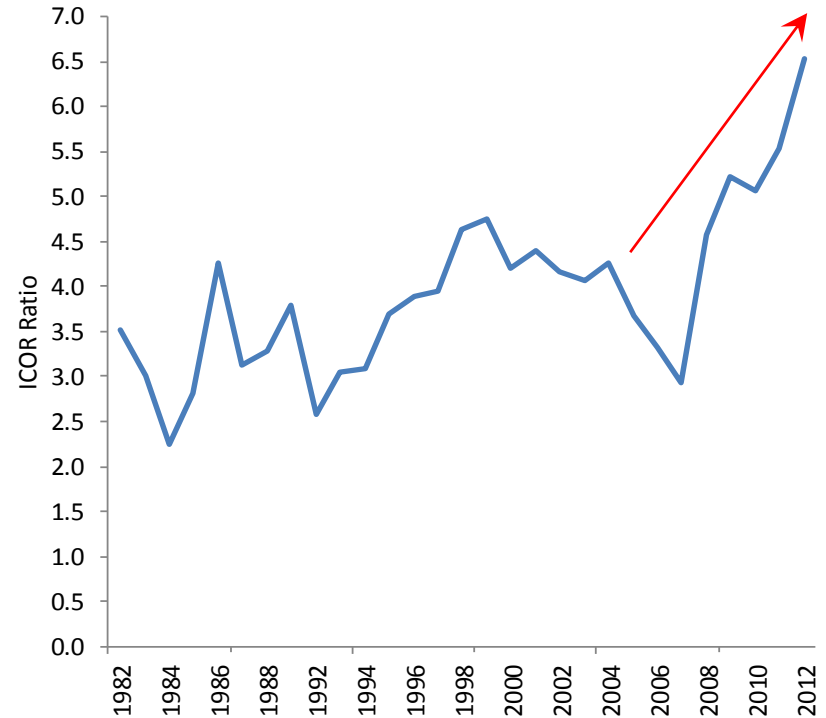


Investment-Led Growth is Showing Signs of Reaching Its Limits...

Demand Contributions to GDP Growth



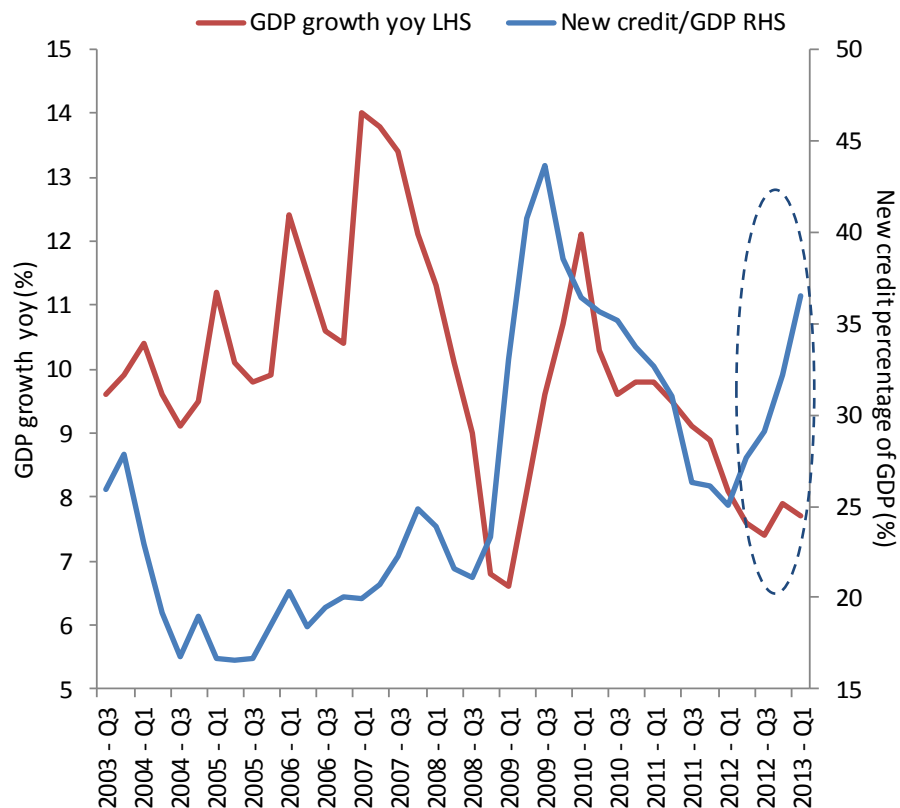
Incremental Capital / Output Ratio



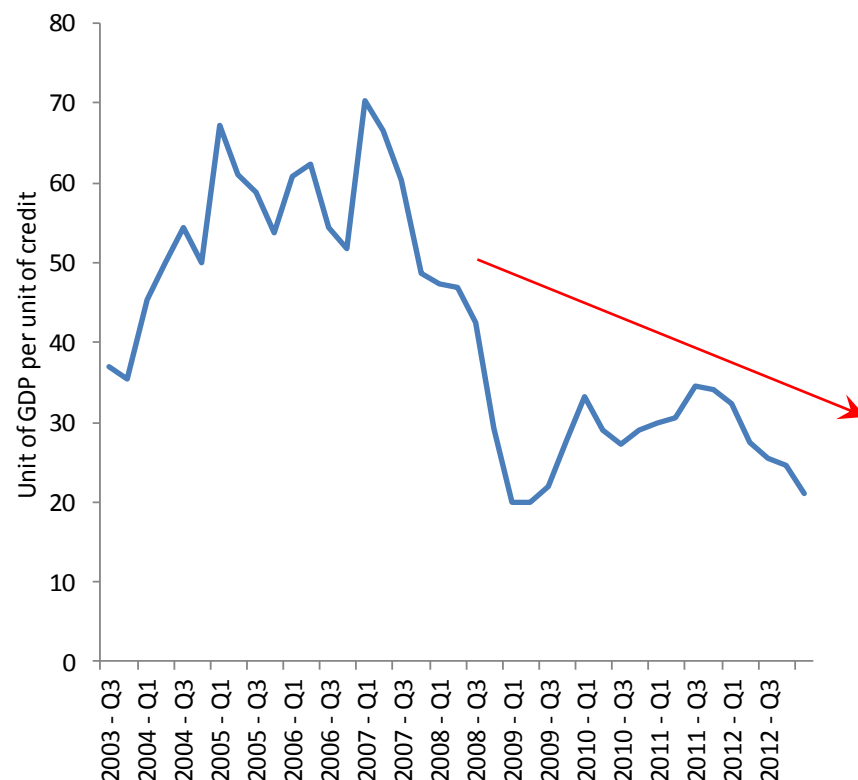
SOURCE: CEIC, PBOC, PIMCO

...Which is Also Evident in Credit Channel Losing Traction on Growth

New Credit/GDP vs. GDP Growth



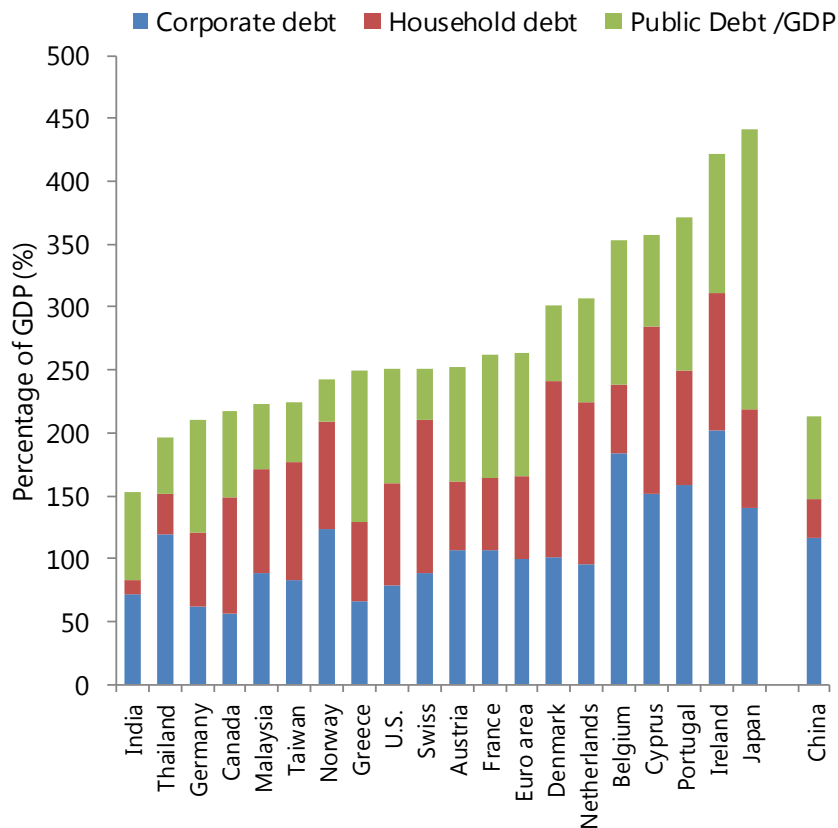
Marginal Return of New Credit



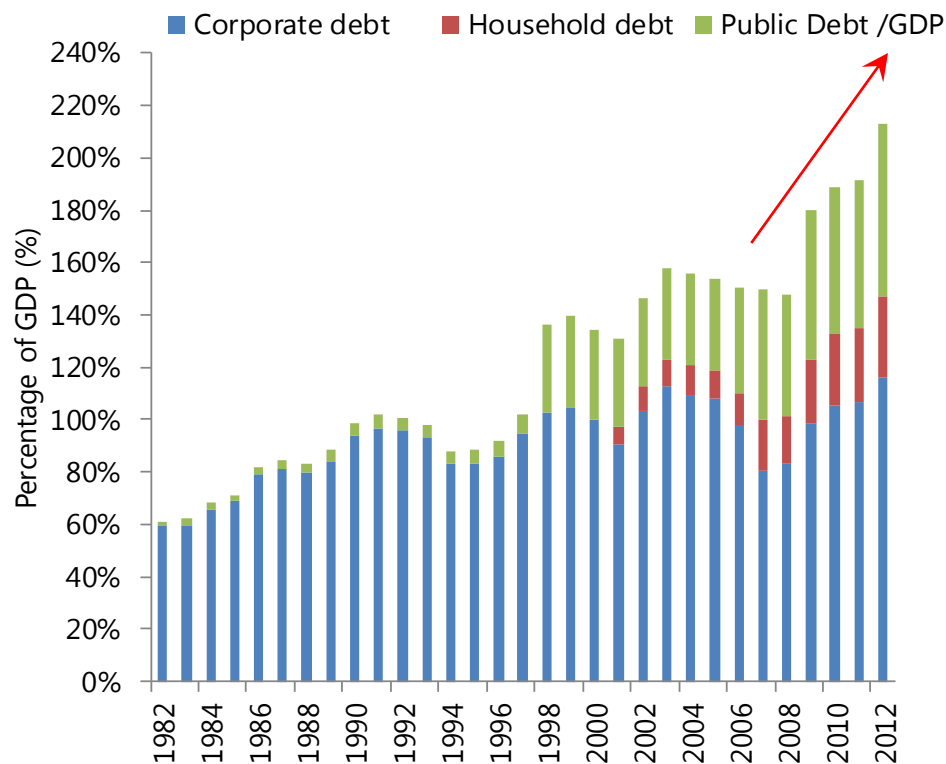
SOURCE: CEIC, PBOC, PIMCO

By International Comparisons China's Debt Level is Not Flashing Red; Trajectory, Channels, and Rate of Growth is Source of Risk

Total Debt/GDP Ratios By Country (2012)



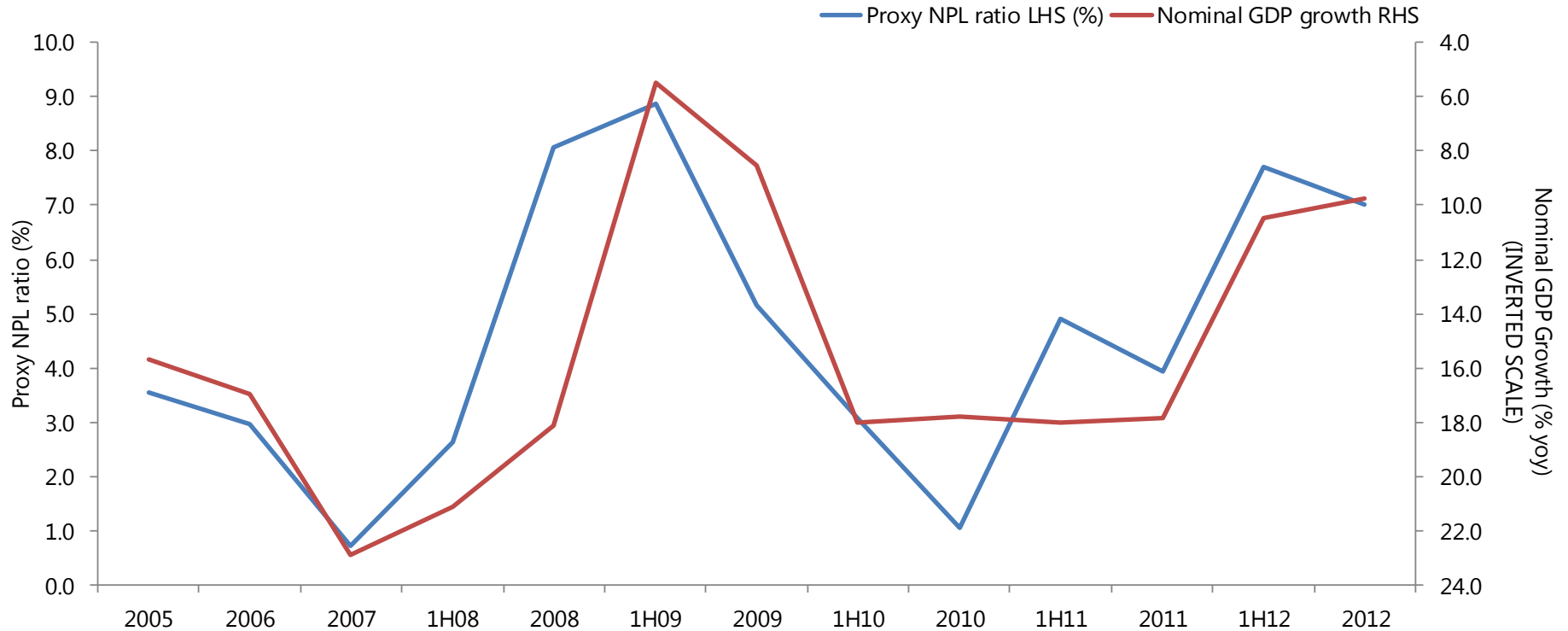
Composition of China's Total Debt to GDP



SOURCE: CEIC, PBOC, Fitch Rating, PIMCO

NPL Trends Linked to Nominal GDP Growth

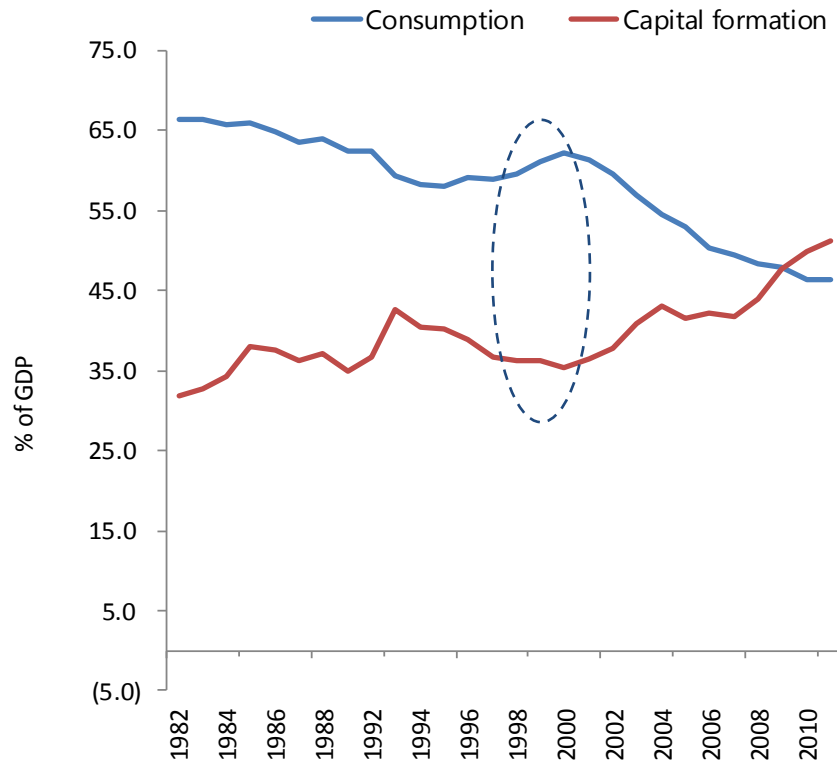
Nominal GDP Growth & Proxy NPL Ratio



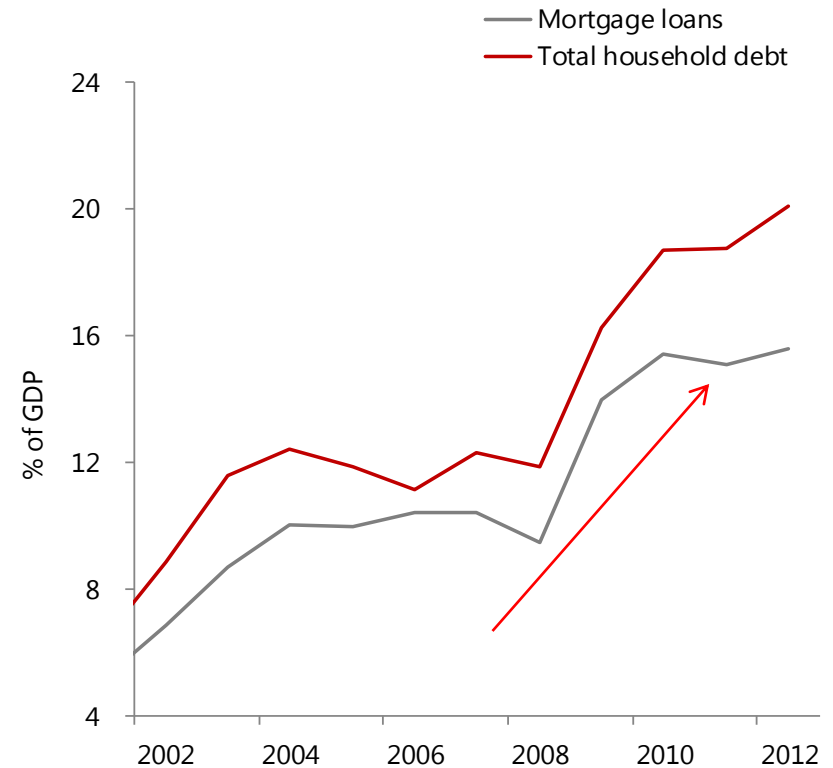
SOURCE: CEIC, PBOC, PIMCO, CS

Potential for Households is Significant When Viewed through Both National Income & Balance Sheet Perspectives

Consumption vs. Capital Formation as % of GDP

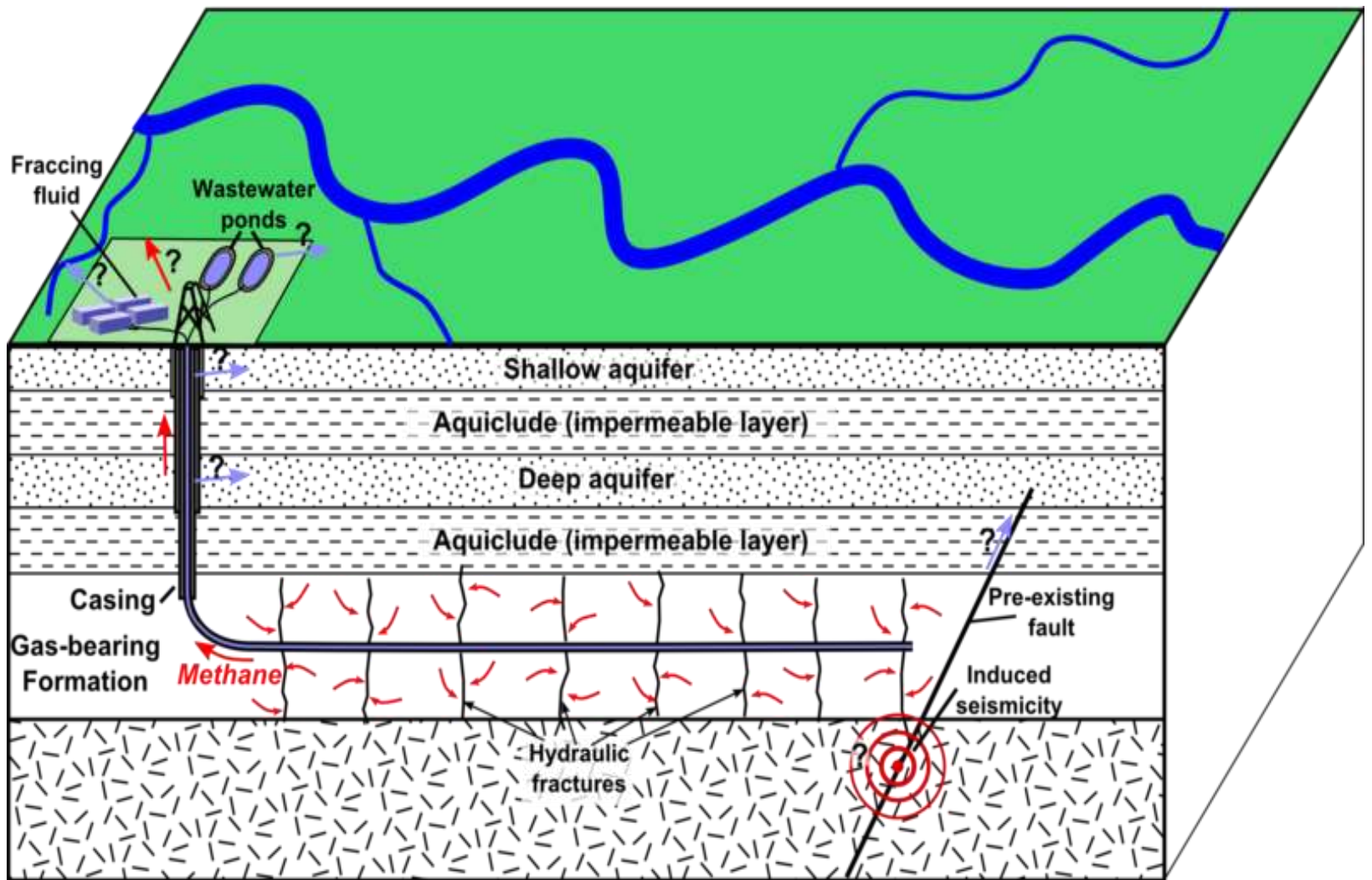


Household Balance Sheets

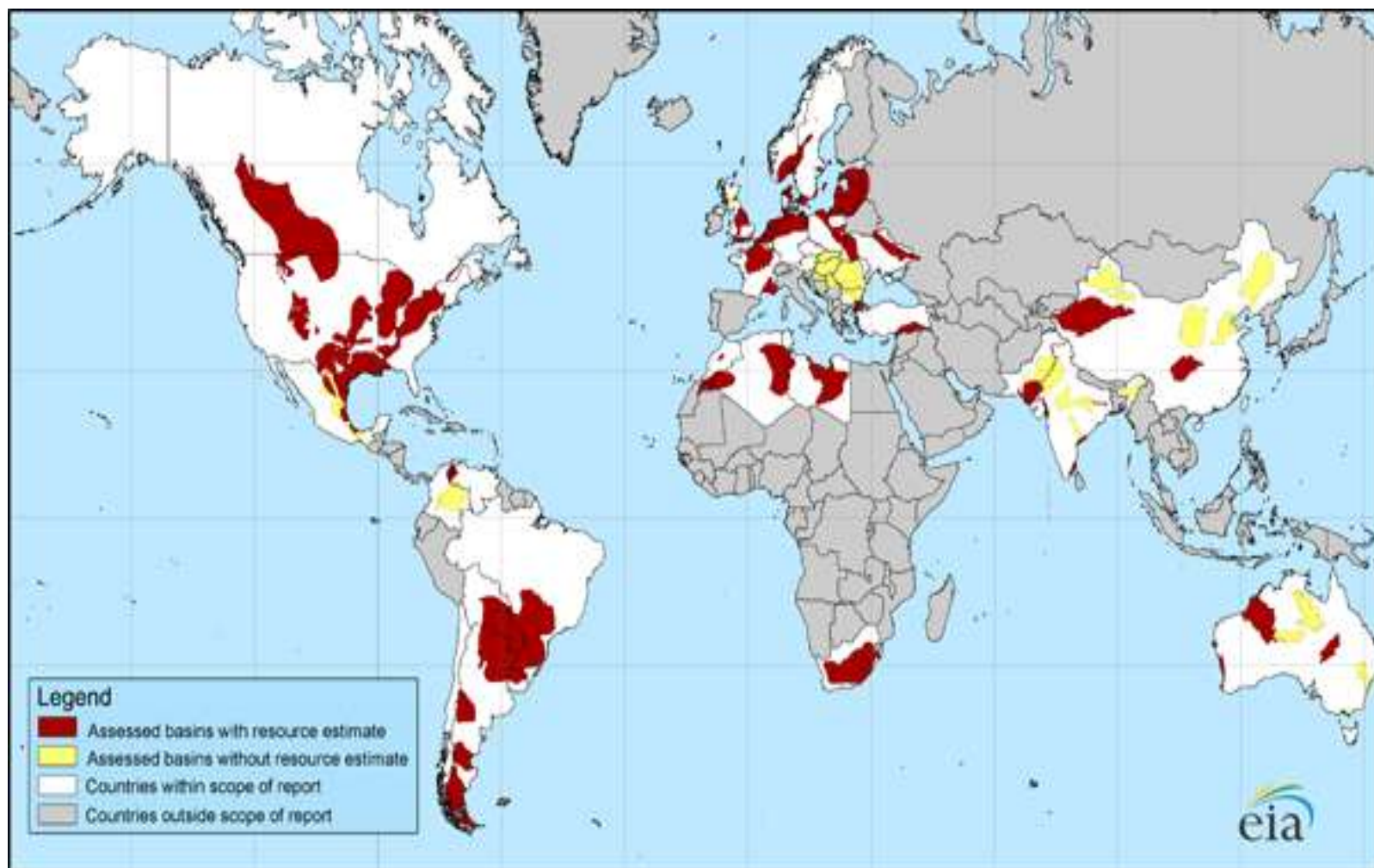


Game Changing Technologies

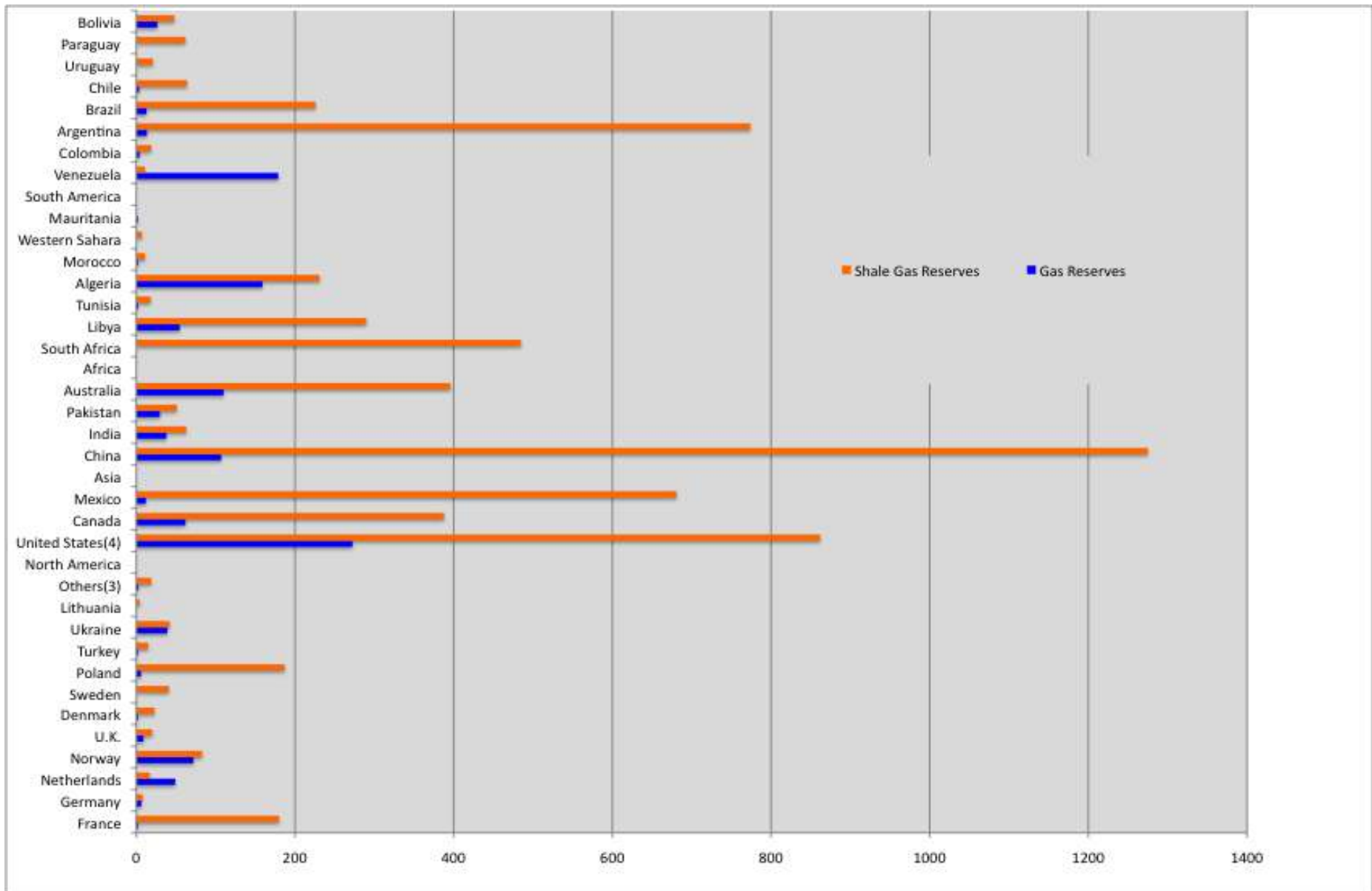
- Shale Gas
- Mobile Phones
- 3D Printing
- “Smart” Robotics with Sensors
 - Manufacturing
 - Logistics



Location



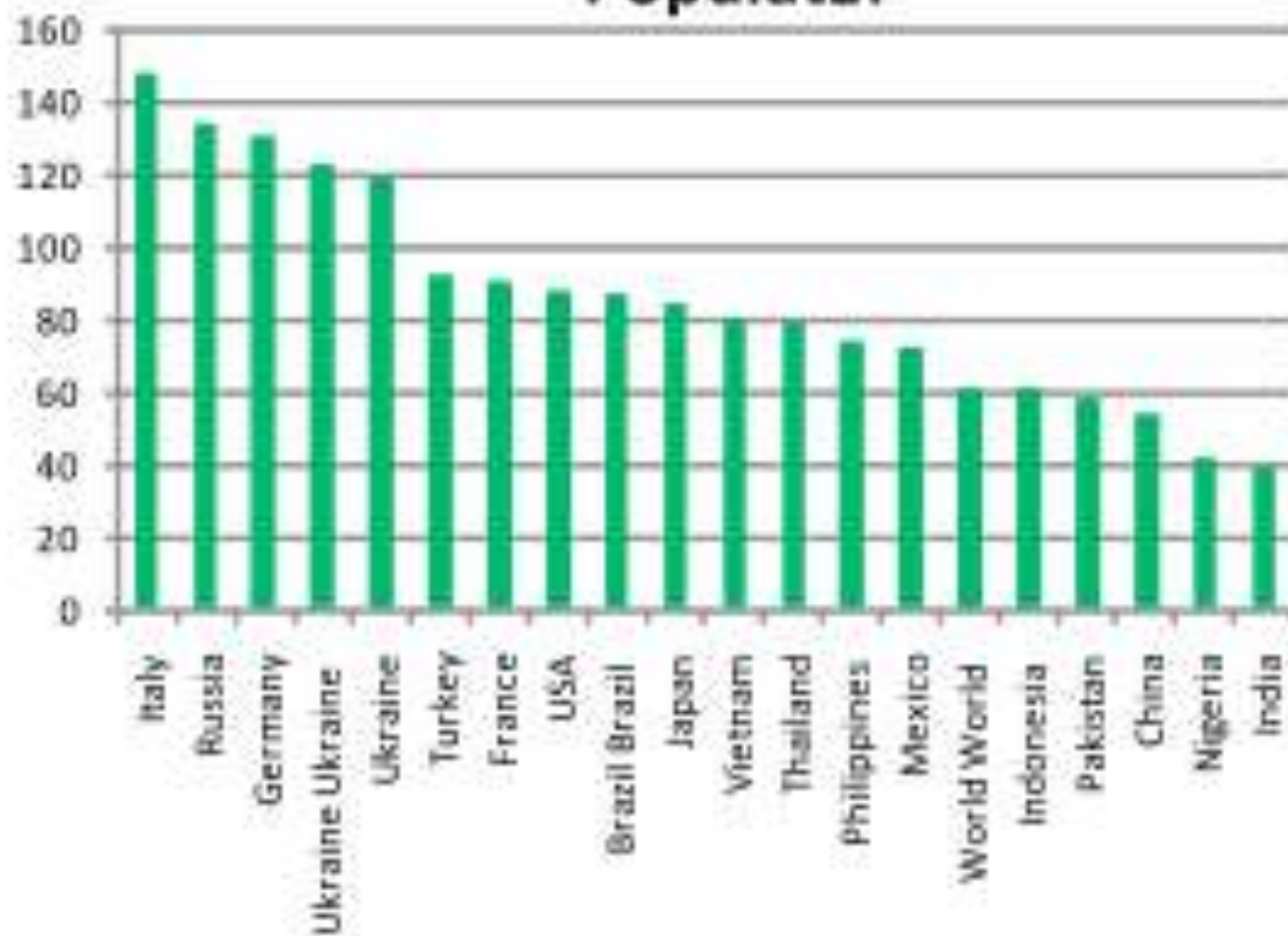
Conventional and Shale Gas Reserves



Mobile Phone Growth: Elimination of the Digital Divide



Cell Phones as Percentage of the Population



3D Printing



Electronics Assembly

