



How Countries Compete

Professor Richard Vietor
Harvard Business School

Iceland
February 2010



Markets have become global

Globalization, underway for more than half a century, is a process of economic integration and cultural homogenization across national borders. Fostered by advances in transportation and communication technologies after World War II and a eight rounds of trade negotiations under GATT, trade has grown at twice the rate of world GDP. Floating exchange rates, sovereign lending and the liberalization of capital accounts have accelerated this process.

Today, nearly 73,000 multinational corporations manage more than 880,000 multinational subsidiaries.

Is Torn Over Korea Trade Pact
China's Remarks Cast Doubt
Support for Sanctions

THESESSLS—The European and South Korea concluded negotiations over a trade agreement...
GERIA
Chief Sees Interest in Foreign Institution
A number of foreign banks...
2004 '05 '06 '07 '08

Trading
The EU's
Korea, in
€50
40

Thai Stocks Drop 5.3%

A WSJ News Roundup
Thailand's financial markets

Iran Threat

Weapons Effort Had Been Halted

problems with the agreement...
auto industry. "It's...
right to veto the...
aspects have...
with," he said.
♦ MEXICO
Tens of Thousands March To Protest Utility Takeover
Tens of thousands of members of a Mexican electricians' union marched in Mexico City

BEIJING—China praised its growing energy and trade ties with Iran in remarks that diminished any expectation Beijing will support efforts to...
Mr. Wen said China "would continue playing a constructive role in seeking a peaceful...
Iran's economy...
already...
S. trad...
led by...
of Mr. H...
Iswens...
initially...
one Hoffr...
purseme...
to...
may...
sales...
has made it...
cult to economically isolate...
Persian Gulf country.
Washington and its allies...
ing new sanctions again...

Siemens to Buy Solar Firm

BY VANESSA FUHRMANS AND ARCHIBALD PREUSCHAT

Siemens AG, long one of the world leaders in equipment to...
electricity from coal or...
against Tehran.



Tea-Party Activists Complicate GOP Comeback Plans

Continued from Page One
discomfort at the event. "I knew wasn't going to be an easy audience for me," she said.

Robin Stublen, 53, of Punta Gorda, co-state coordinator for the Tea Party Patriots, a loose national coalition. "He sold us out

THE WALL STREET JOURNAL.

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Pakistan Faces New Wave of Attacks

BY ZAHID HUSSAIN AND MATTHEW ROSENBERG

A series of well-planned...
adacious...
govern...

of Hamas's behavior or...
Israel's right to self-de...
may have voted in fa...



Russia Opposition Political Parties Plan to End Walkout

Russian opposition parties said Thursday they will likely return to work in parliament the next day or so, ending a rare protest, having achieved little more than a promise of a meeting with President Dmitry Medvedev.

Britain's Terror Double Take

British Prime Minister Gordon Brown called this week made a call, no more than another contingent of British troops to Afghanistan. Perhaps President Obama, planning Ham...
whether...
forces, can take inspi...
commitment. The Br...
wavering

Iraqis Miss Target Date On Election

BY GINA CHON

BAGHDAD—Iraq's parliament missed a deadline Thursday to pass a law needed to hold...
elections slated

terrorize a civilian population."...
s could be held...
international...
H...
stan, a...
1 Gaza.
Five men were convicted...
today of stockpiling bomb...
sed serious issues" and "is perfectly...
d," though it allows that the report fails...
give a full account of Hamas's behavior or...
properly acknowledge Israel's right to self-de...
r. Bringing Goldstone to the Security Council...
serves Hamas's purposes to a tee and...
the ability of Western democracies...
against all such terrorist...
accepted rules of...

Nokia Sags

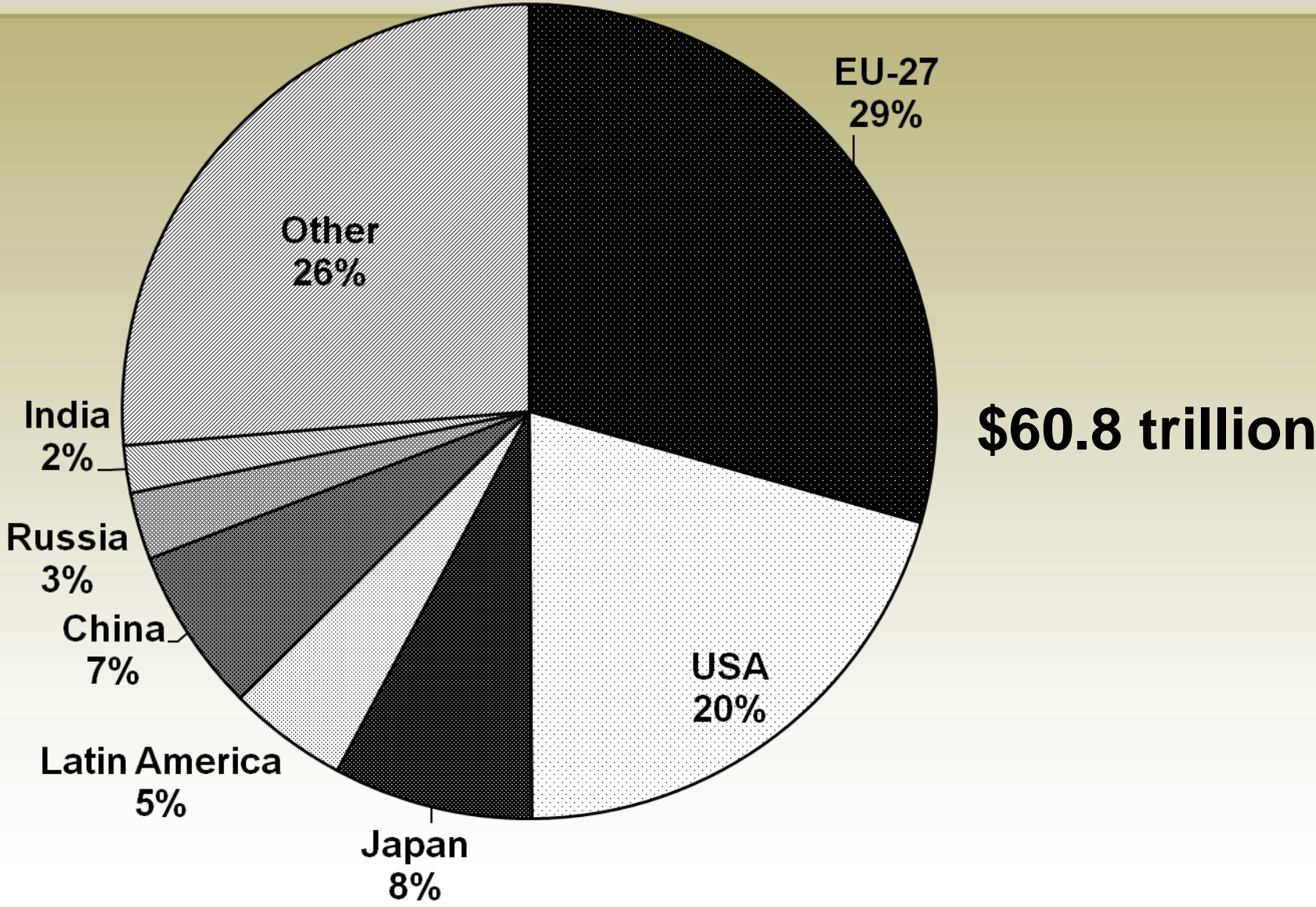
China's Metal Imports Drops Bid For Anglo

Israel's Secret War on Hezbollah

Carrefour, in Shift, to Exit Russia

Likely in Afghan Vote

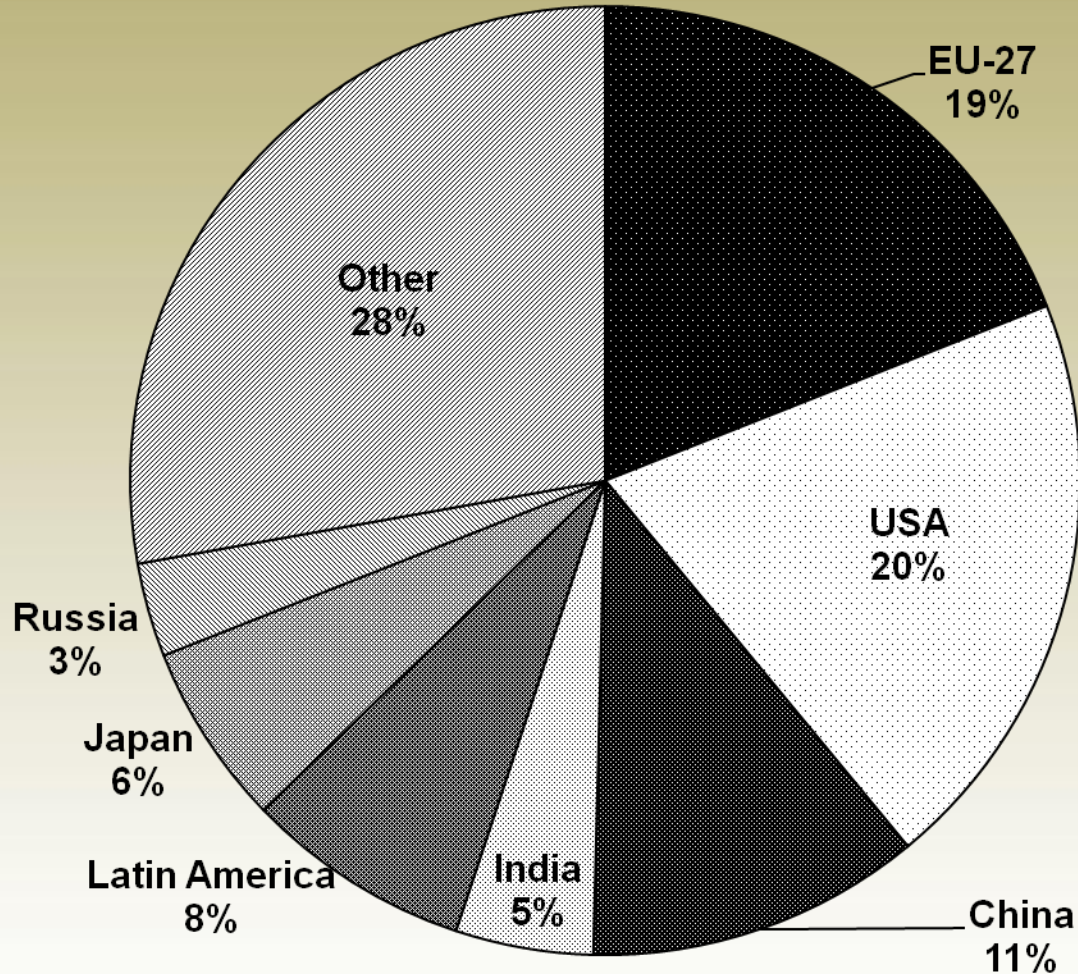
Share of the World GDP 2008



Source: IMF, 2009.

Share of the World GDP 2008

Purchasing power parity adjusted




\$69 trillion

* Adjusted for Purchasing Power Parity
Source: IMF, 2009



Countries compete

- Within this global market place, **countries compete** for exports, for foreign direct investment and other capital resources, for technology and managerial know-how and for access to natural resources.
- The purpose of this competition is growth and development – to reduce poverty, accommodate urbanization, create jobs and increase living standards.



“Preparing our nation to compete is a goal that all of us can share... In a dynamic world economy, we are seeing new competitors, like China and India, and this creates uncertainty.”

President George W. Bush
State of the Union Message, 2006



National Development Strategy

Countries have development strategies:

- either explicit (carefully formulated and discussed by senior government officials);
- or implicit (a loose collection of goals and policies that merely net to strategy, after the fact).



Organizational structure

- **Countries – like companies – need an organizational structure suited to implementing the strategy;**
- **That structure must fit the domestic context – the skills, assets, polity and culture of its people – and the international context – its geography and political relationships abroad.**



The Role of Government is *Crucial*

- **Mediates the strategy**
- **Determines the organizational structure**
- **Shapes the context by building and regulating the *institutions* that shape the market**



Essential role of state:

- **Provide security – domestic and international;**
- **Enforce contracts, property rights and laws;**
- **Back risk – incorporation, bankruptcy, unemployment insurance, pensions, nuclear facilities;**
- **Provide money;**
- **Manage macro-economy;**
- **Implement industrial policy (explicit or implicit).**



Developmental Strategy of Government

- **Fiscal policy**
 - Revenue sources
 - Expenditure choices
 - Deficit/Debt management
- **Monetary policy**
 - Control money/inflation
 - Regulate banking
 - Control exchange rates
- **Incomes policy**
 - Wages, prices, work rules, distribution of income
- **Trade policy**
 - Tariffs, taxes, non-tariff barriers
- **Foreign direct investment controls**
- **Nationalization/privatization**
- **Economic regulation**
 - Externalities (environment) and market failures (telecom, banking, infrastructure and competition)
- **Provision of subsidies**



Government Management of Institutions

- **Corporations, partnerships, proprietorships**
- **Infrastructural resources**
 - (water, power, roads, rails, air traffic, telecom)
- **Human resources**
 - (schools, colleges/universities, healthcare)
- **Technological resources**
 - (patents, defense and public-science research)
- **Capital resources**
 - (banking, securities, insurance)



Trajectories of Development

- ✓ Asian high growth
- Post Soviet restructuring of Russia and East Europe
- ✓ Latin American recovery from debt crises
- ✓ Islamic resurgence
- ✓ African renaissance
- European integration
- ✓ Deficits and debt in Japan, Iceland and the United States




Singapore – Desperation Strategy:

- Build on the entrepot advantage;
- Free trade and foreign direct investment
- Tight monetary policy
- Market exchange rates
- Forced savings
- Invest in public housing and infrastructure
- State sector → 25% GDP
- Balanced budget (by late 80s)



Singapore's Institutional Web

- Ministry of Trade and Industry
 - Economic Development Board (EDB)
- Housing Development Board
- Jurong Town Corporation
- Temasek Holdings
 - Singapore Airlines, Singapore Technologies
- Monetary Authority of Singapore (MAS)
- Central Provident Fund
- SPRING (productivity board)
- ASTAR (science and biotechnology)
- National Trade Union Congress
- Corrupt Practices Investigation Board



Singapore – Results!

- Real GDP growth – 7.5% for 37 years;
- Savings 51% GDP; Investment 38%
- X&M = 3xGDP
- Inflation → 2.1%
- Balanced budget
- Current account 23% GDP
- GDP/capita (PPP) - \$41,000



Lee Hsien Loong's New Strategy

- **Cut taxes to 20%; 18%**
- **Higher value-added tax - balance budget?**
- **Move to higher value-added exports?**
- **Attract intellectual talent?**
- **Refocus on biomedicine?**
- **Deal with Chinese (and Indian) competition?**

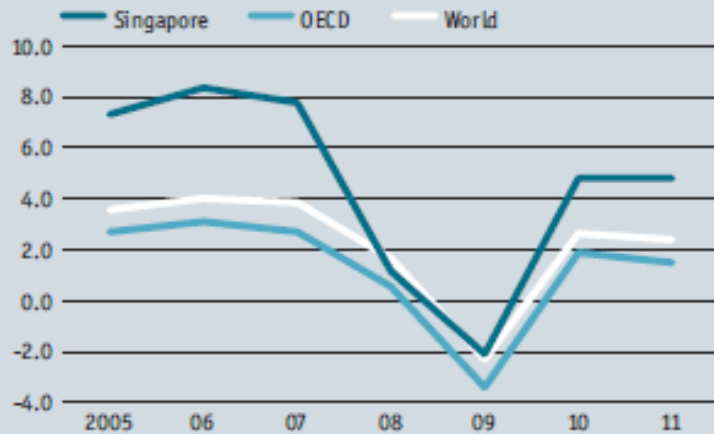


The global crisis was tough on trade....

- **GDP down -2.1% '09**
- **Investment down -3.1%**
- **Inflation down 0 in '09**
- **Exports down -20%**
- **Imports down -22%**
- **Trade balance down -> (at \$31 billion)**
- **Current account -> down slightly 12.5%/GDP**
- **Unemployment up from 2.2% -> 3.4%**
- **Gov't surplus 1.5% -> -2.7%**

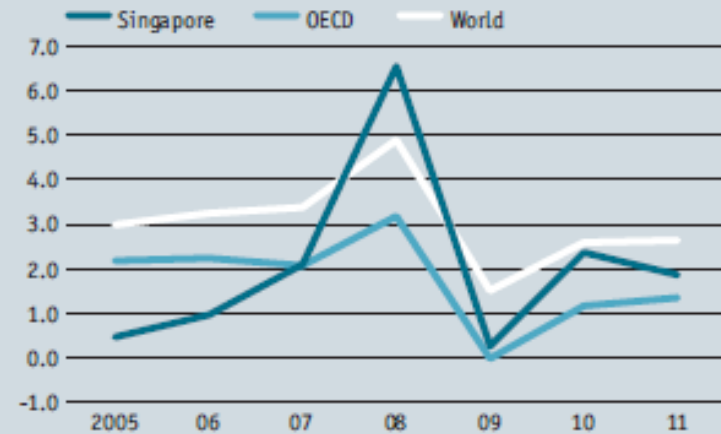
Singapore

Real GDP growth
(% change)



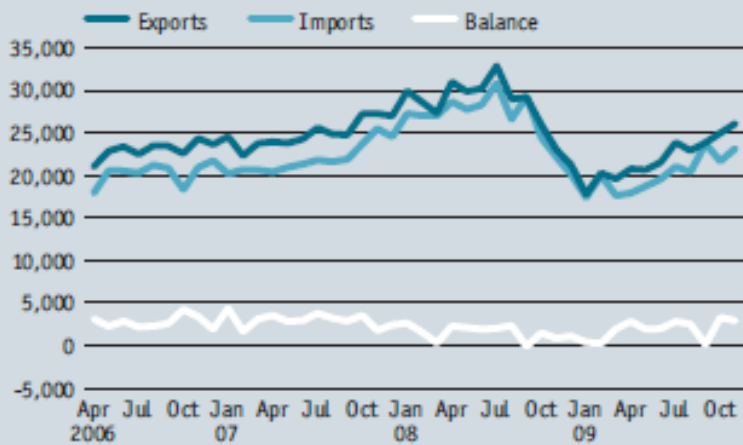
Source: Economist Intelligence Unit.

Consumer price inflation
(av; %)



Source: Economist Intelligence Unit.

Foreign trade
(US\$ m; goods only)



Source: Economist Intelligence Unit.

Exchange rate
(S\$:US\$; av; inverted scale)



Source: Economist Intelligence Unit.



China – a Greater Challenge

- \$200 per capita
- Closed, Communist economy
- Inefficient collective agriculture
- State-owned enterprise
- 987 million people
- “Cultural Revolution”



Deng's Pragmatic Liberalization

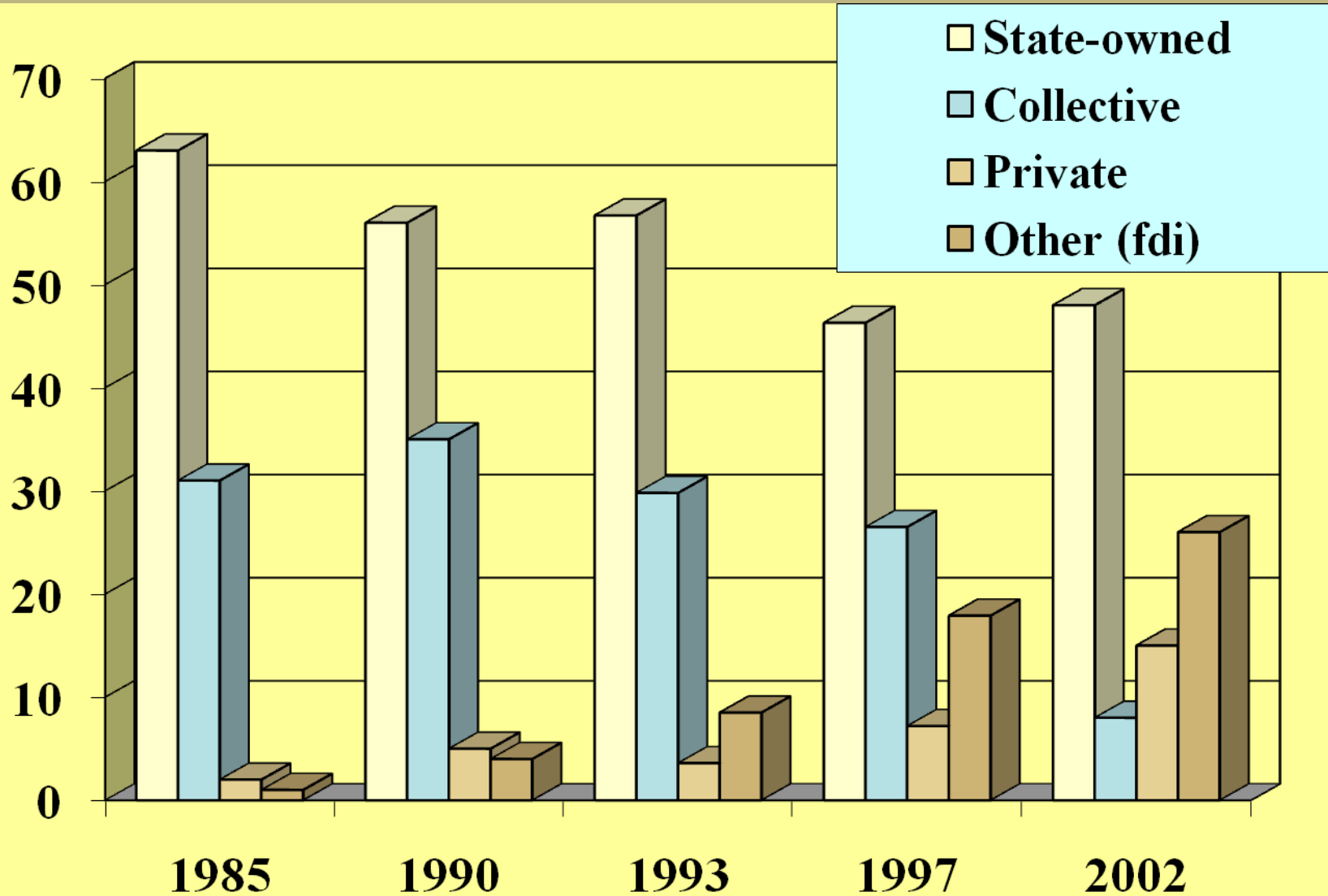
- One-child policy
- Agriculture – household responsibility system
- TVEs – Township & village enterprises
- SEZs – Special economic zones
- SOEs – management responsibility system; then privatization
- Gradual price decontrol
- Tax reform (1994)
- Currency reform (1994)
- WTO - 2001



China - Results

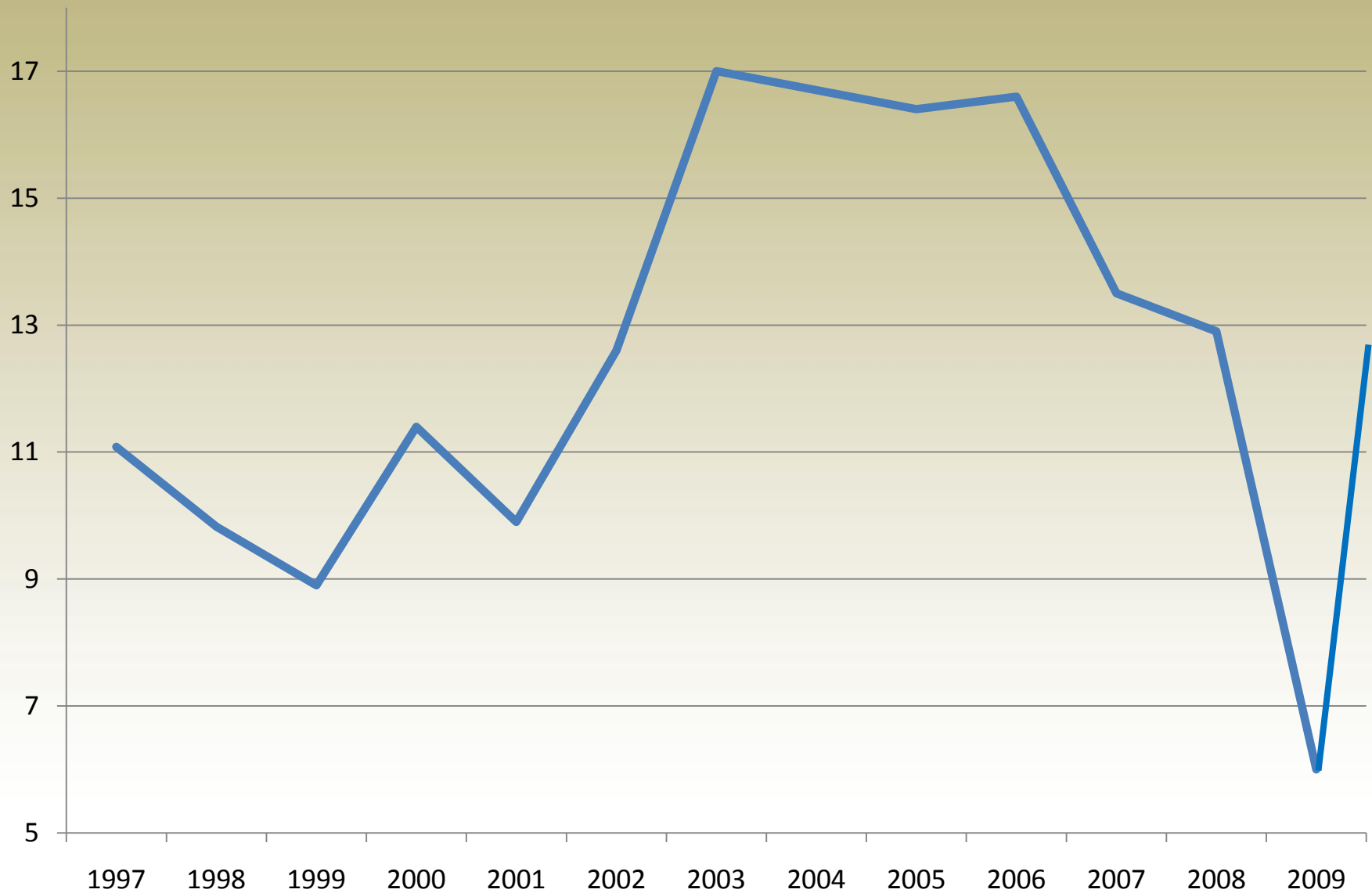
- 9.4% real GDP growth
- Investment 42%; Savings 52%
- Consumption down to 36%
- Exports 3% -> 35%
- Imports 3% -> 28%
- Inflation 3.5 -> 1.0%
- Unemployment – 9+%
- Balance of trade \$360 bil; current account \$440 bil.
- Cumulative FDI - \$900 bil

Structure of China's Industrial Output percent of total value





China Industrial Production: Value Added (yearly percent change)

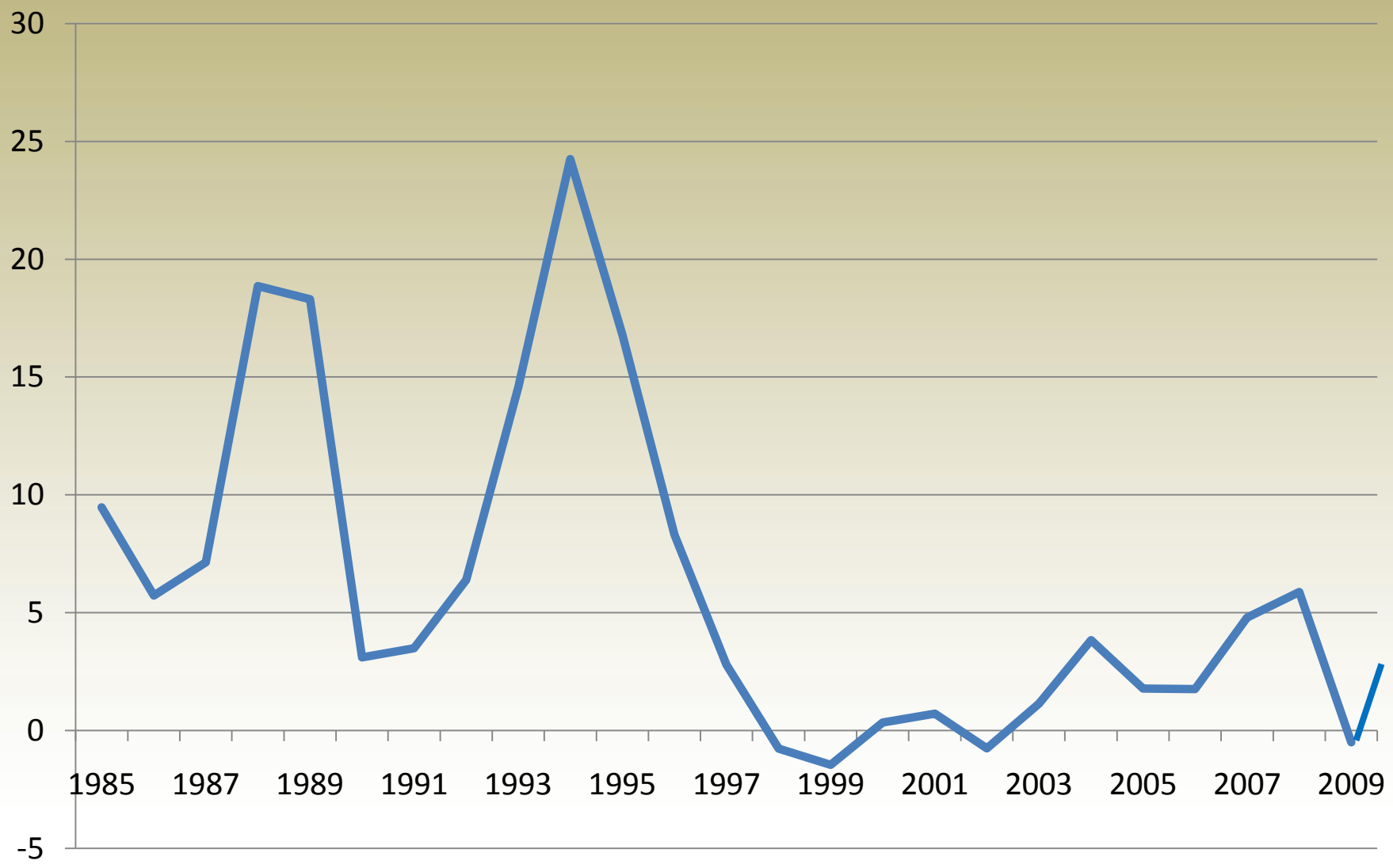


Source: Compiled with data from the *Economist Intelligence Unit*.



China inflation

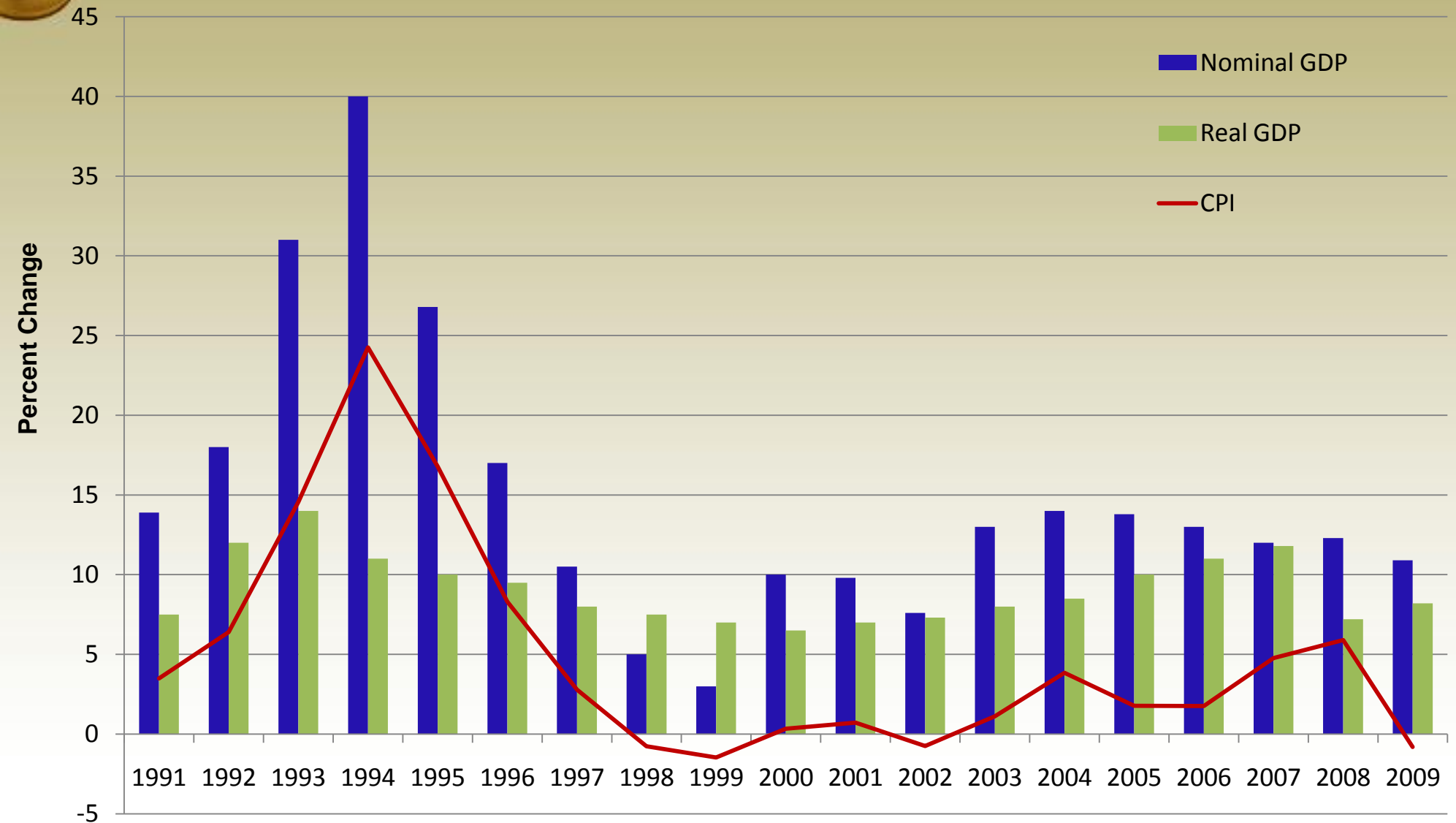
(yearly percent change)



Source: Compiled with data from the *Economist Intelligence Unit*.

China's Growth

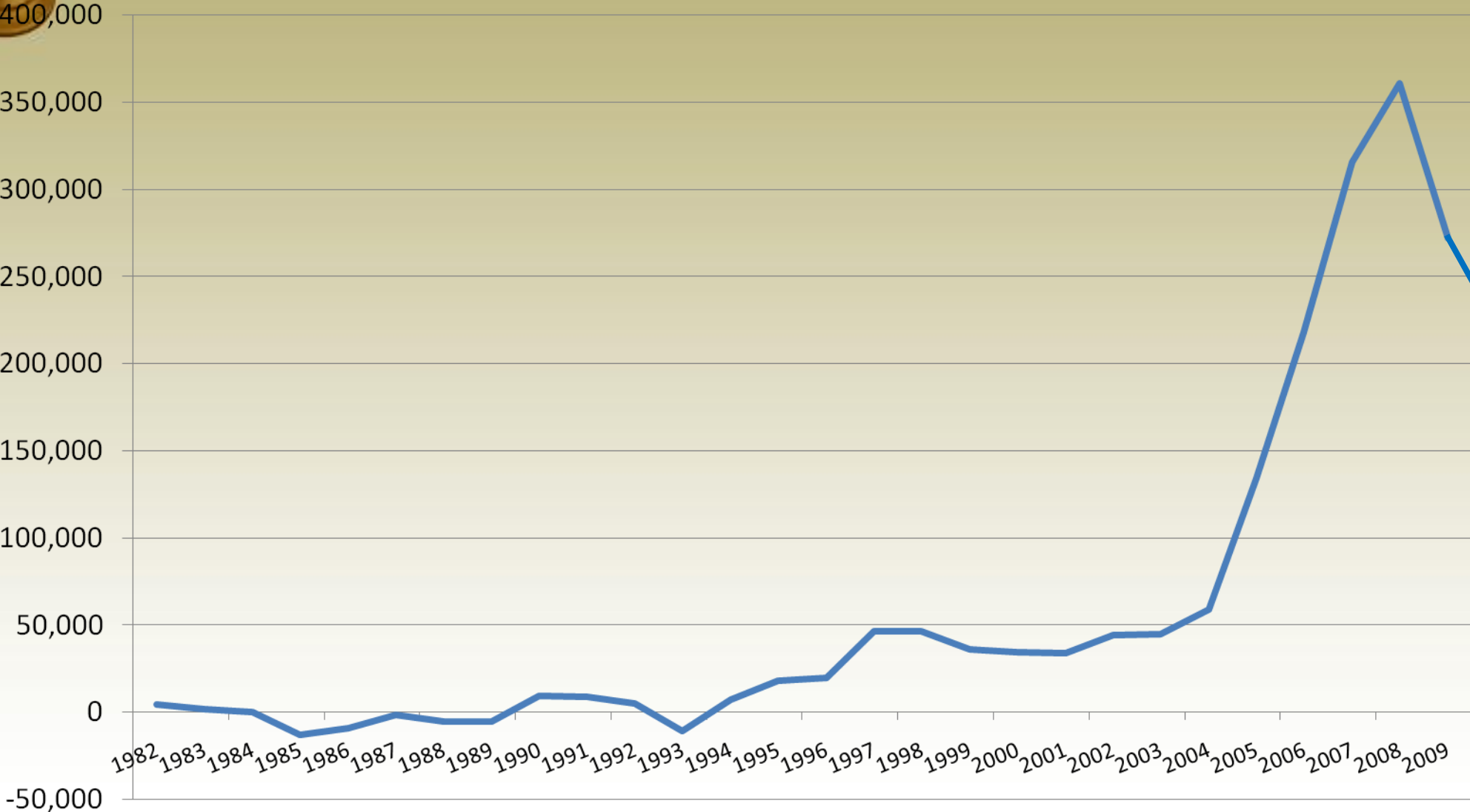
Nominal GDP, Real GDP, CPI



Source: Compiled with data from the *Economist Intelligence Unit*.

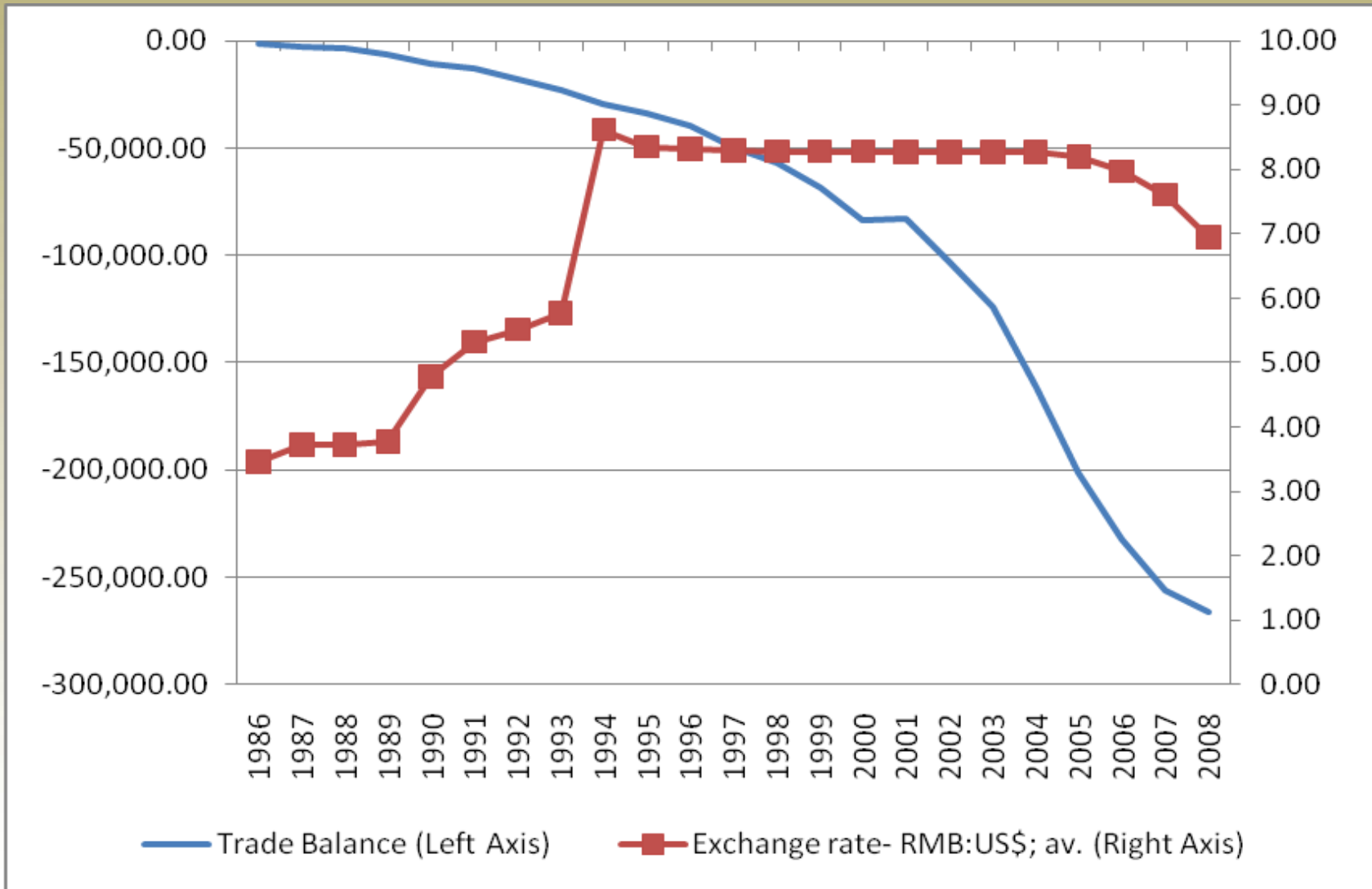


Trade Balance



Source: Compiled with data from the *Economist Intelligence Unit*.

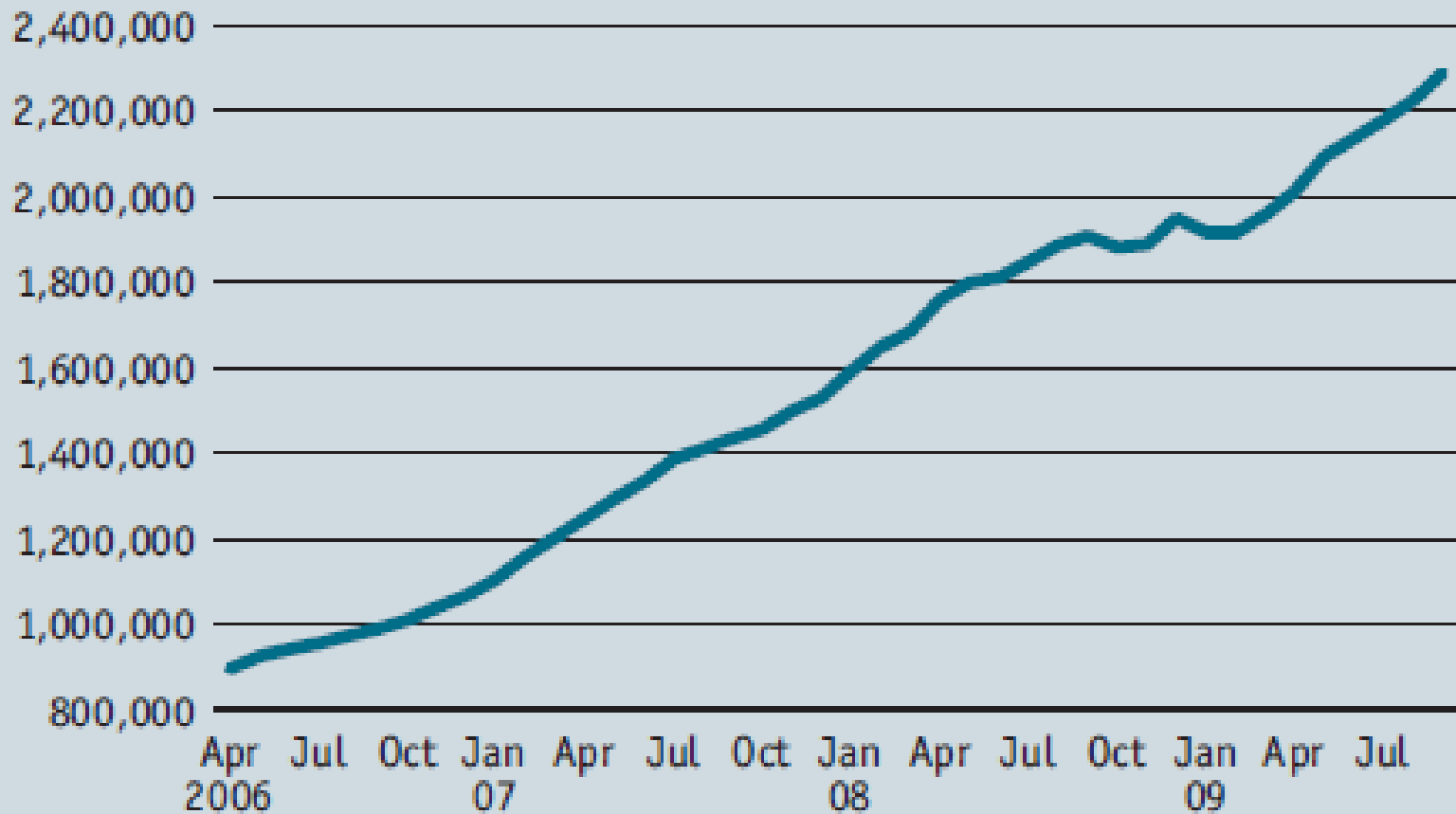
U.S. Merchandise Trade Balance and Exchange Rate with China (inverted scale, millions \$)



Source: Economist Intelligence Unit.

CHINA's

Foreign-exchange reserves
(US\$ m)



Source: Economist Intelligence Unit.



China – Great Performance, but...

- Tightly managed economic liberalization;
- Institutional reform still lagging (e.g., SOEs, banks, federalist relations);
- Externalities mounting (e.g., environment, under-employment, corruption, food and energy dependence);
- Income distribution, rural population chafing...
- WTO – partial implementation;
- Trade surplus with US (\$256 bn)– sustainable?
- Exports negative for first time in 25 years – unemployment up by 10 million?
- Next round – economic/political balance?



India – Failed Import Substitution

- Hindu rate of growth – 3.5% per year (with population growing 2.5% per year)
- 50% of output owned by public sector;
- 100% of banks and insurance firms;
- Highest tariffs, capacity licensing, imports allocated and price controls;
- “Sick units” protected;
- Widespread corruption.



India after 1991

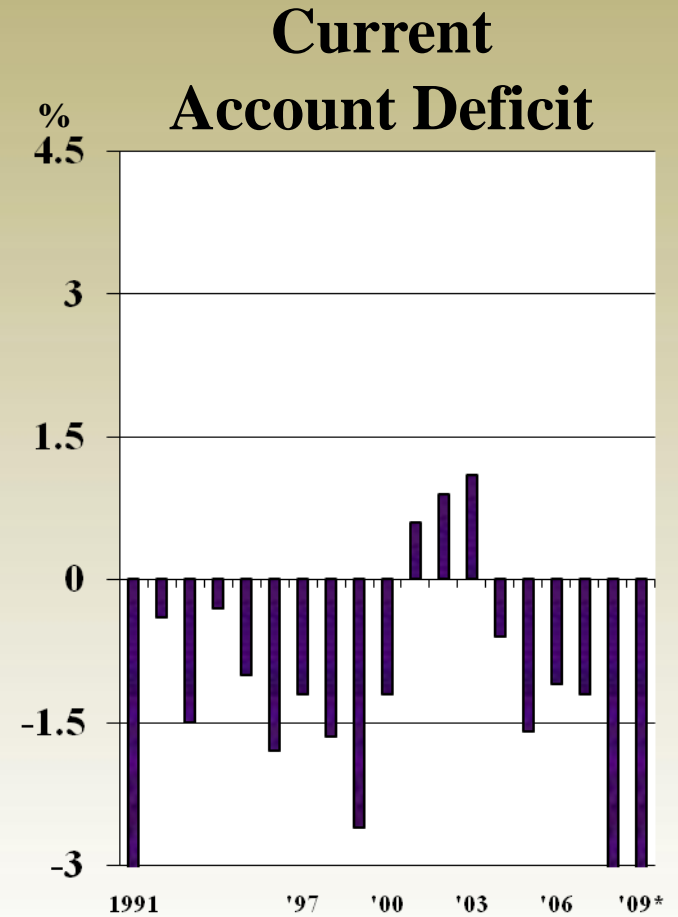
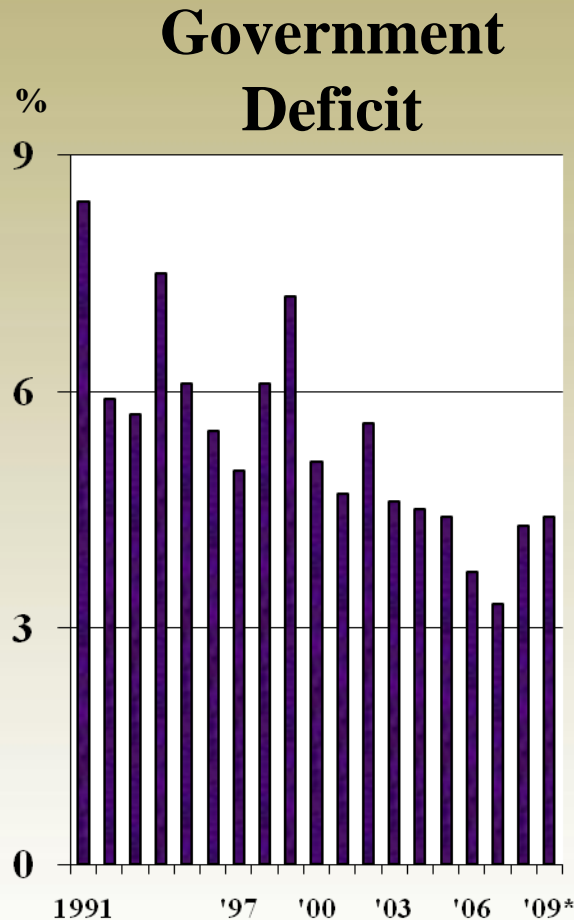
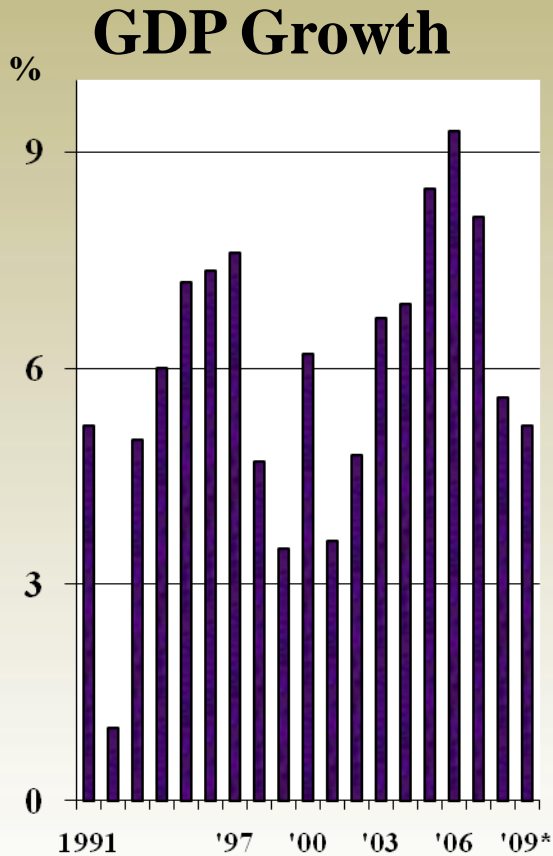
Washington Consensus...gradually

- Fiscal policy – deficit reduction;
- Monetary policy – tightened;
- Exchange rates – floated;
- Capacity licensing – removed;
- Price controls – removed;
- Tariffs lowered;
- Privatization begun;
- Foreign direct investment allowed;
- Spending on infrastructure and education increased.



India's Results:

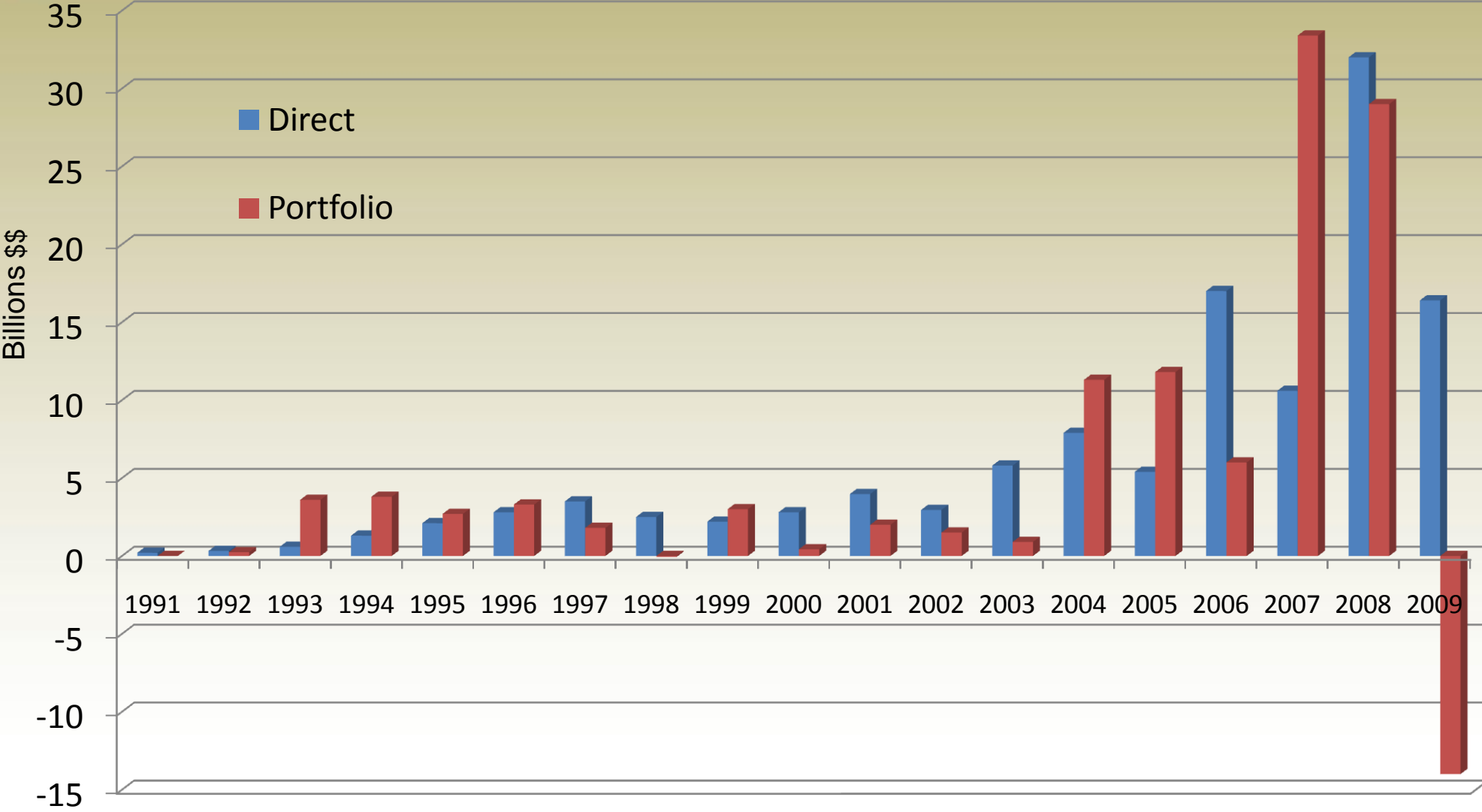
Year-to-year percentage growth in gross domestic product, and government deficit and current account deficit as percent of GDP; all figures for year ending March 31



Note: Fiscal deficit is the difference between revenues and spending; current account balance is the broadest measure of goods, service and money that crosses a country's border, with a deficit indicating more imports than exports.

* estimated

Foreign Investment in India Since 1991

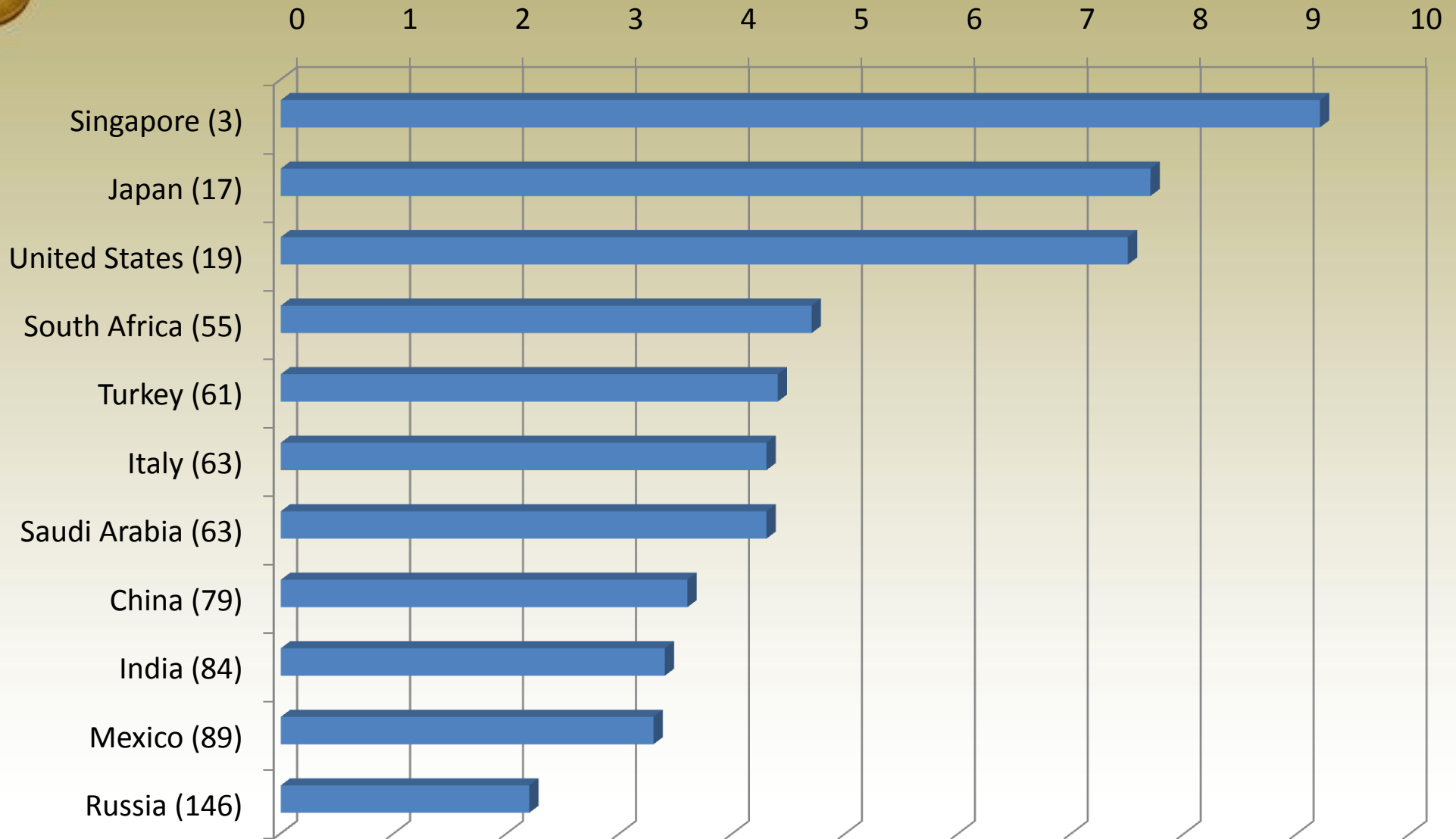


Source: Compiled with data from the *Economist Intelligence Unit*.



Corruption 2009

(0 = most corrupt 10 = least corrupt)

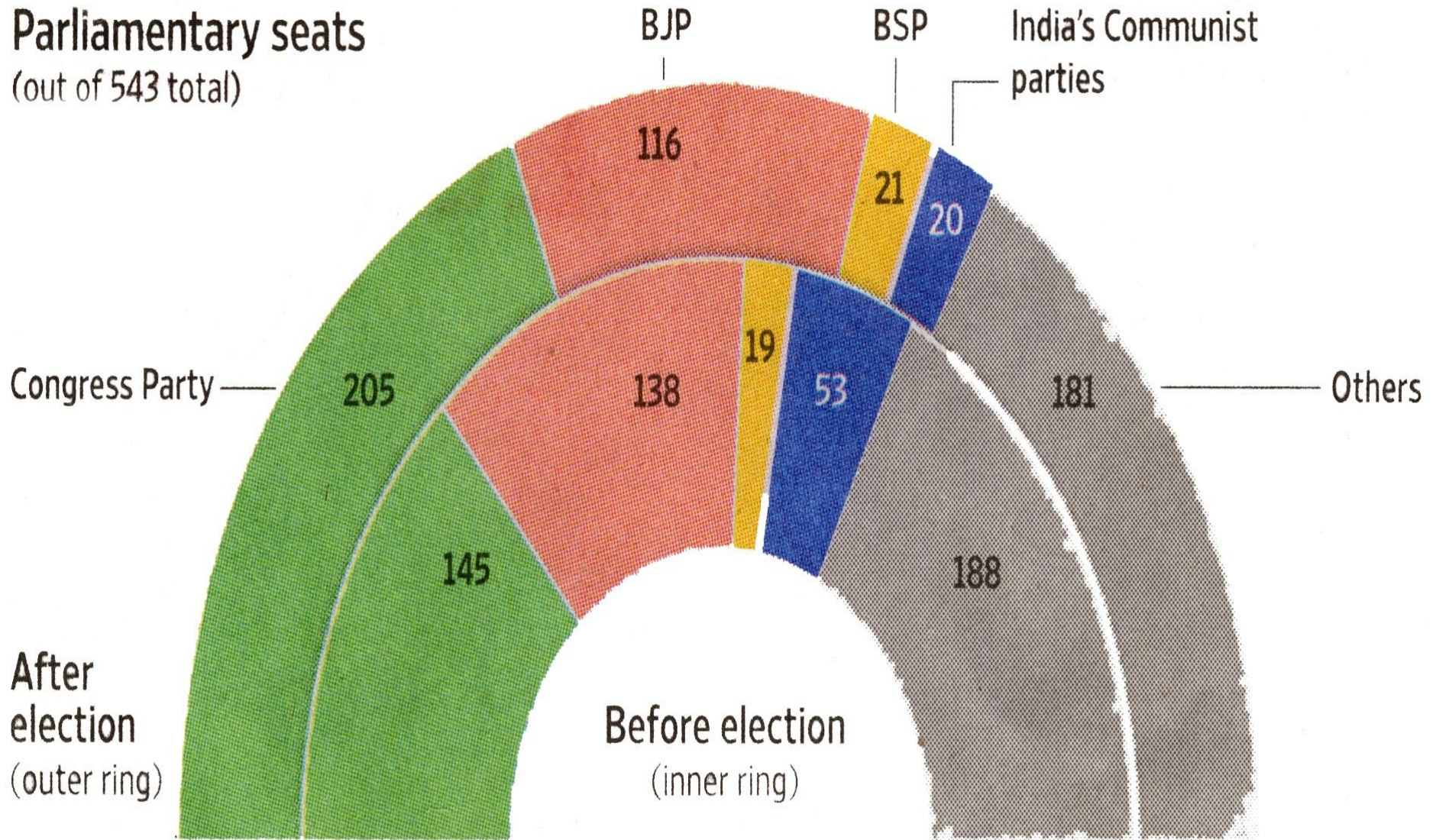


Note: rank among other countries is in parentheses

Source: Compiled from *Transparency International, 2009 Corruption Perceptions Index*, www.transparencyinternational.org.

Coalition Politics in India – May 2009

Parliamentary seats
(out of 543 total)



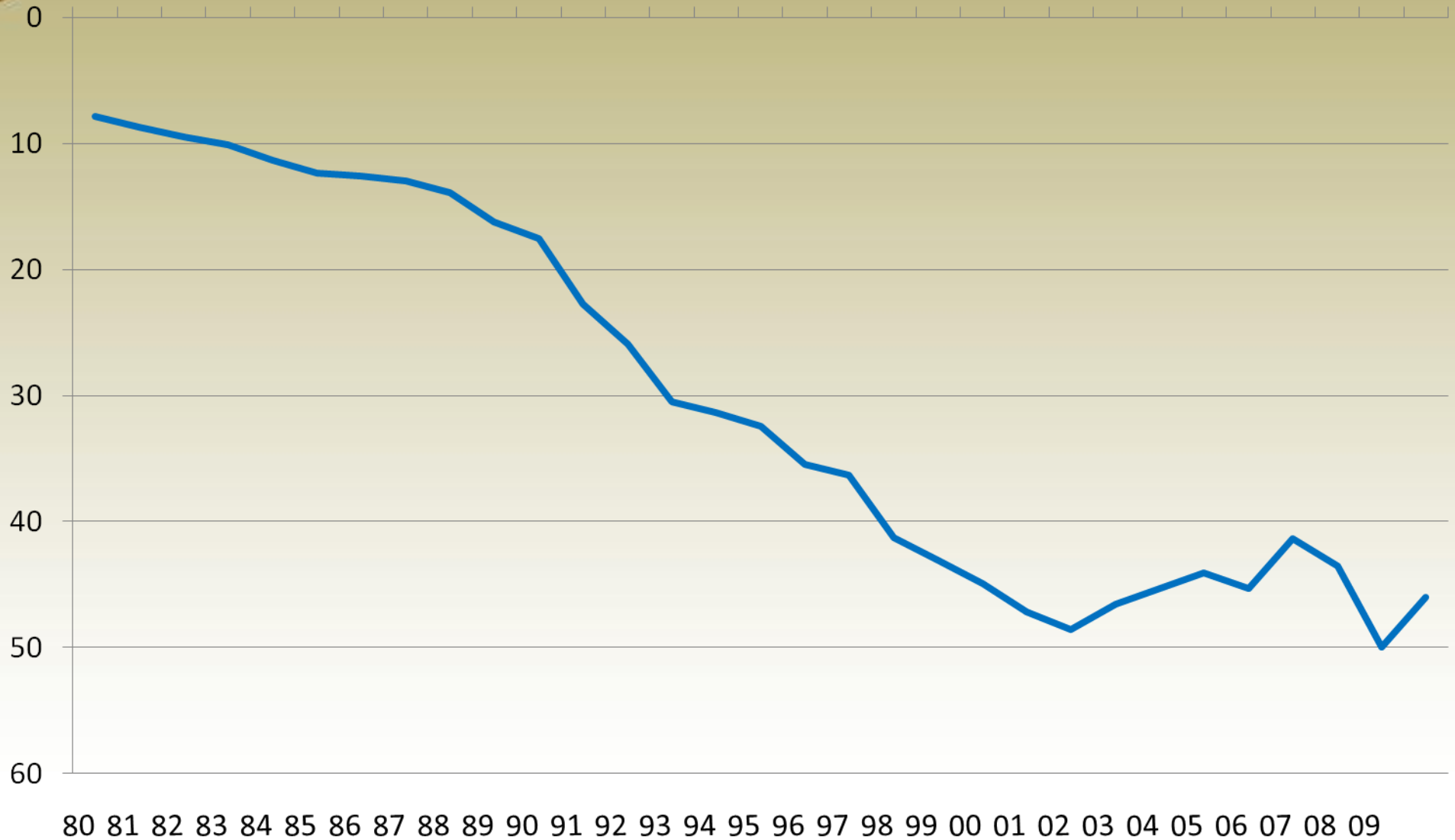
Note: Results are preliminary

Source: Election Commission of India



India's Exchange Rate

(Indian Rupee/U.S. Dollar, inverted scale)



Source: Compiled with data from the *Economist Intelligence Unit*.



Mexico and Latin America

(debt, structural adjustment, and micro-reform)

Old Strategy

- Import substitution strategies with resource-led growth
 - High tariffs, limited FDI, large public sectors, fiscal deficits, monetization, fixed exchange rates

Revised Strategy

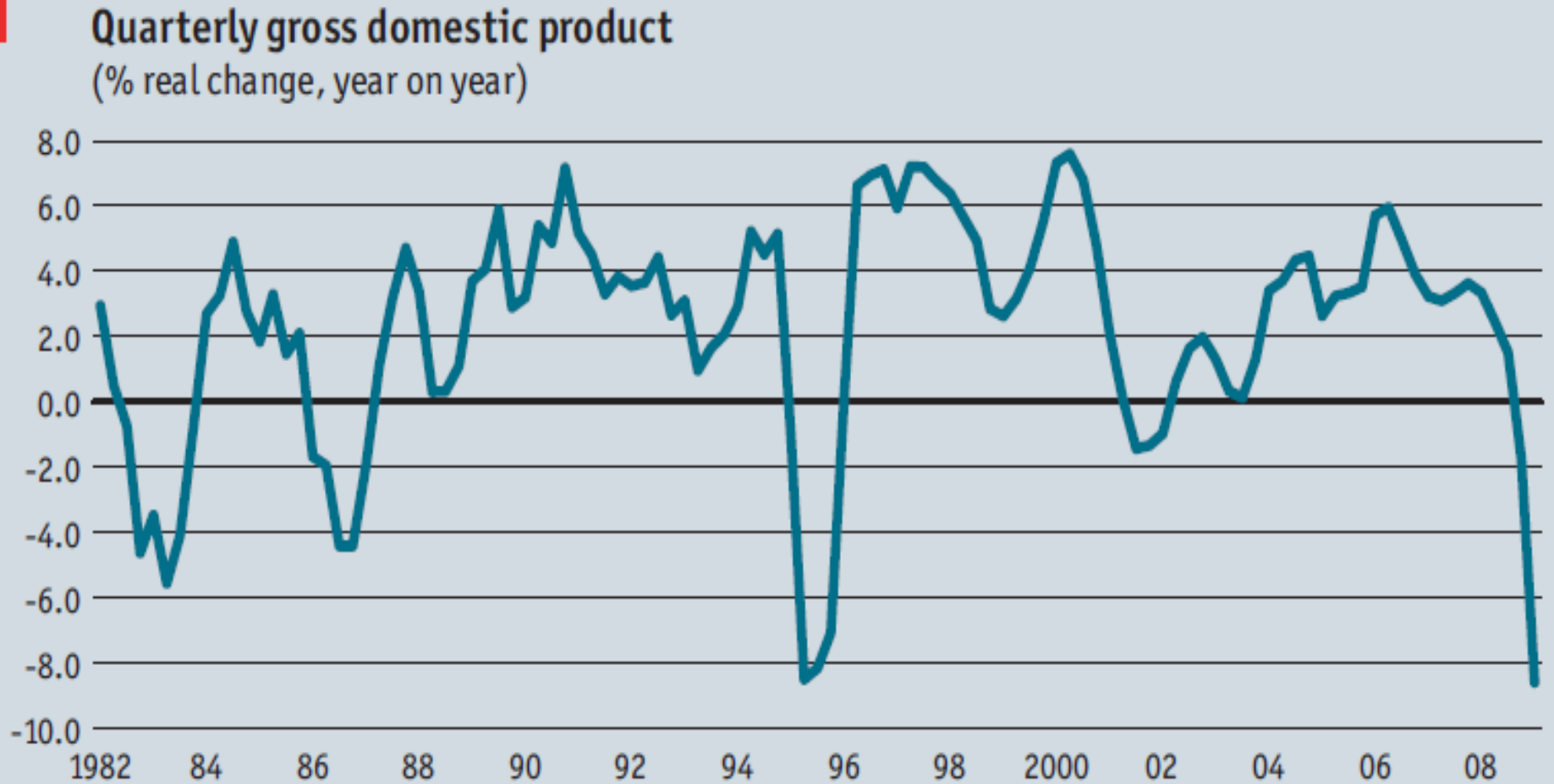
- Debt leveraged growth, 1974-1982;
- Debt crises & IMF bailouts



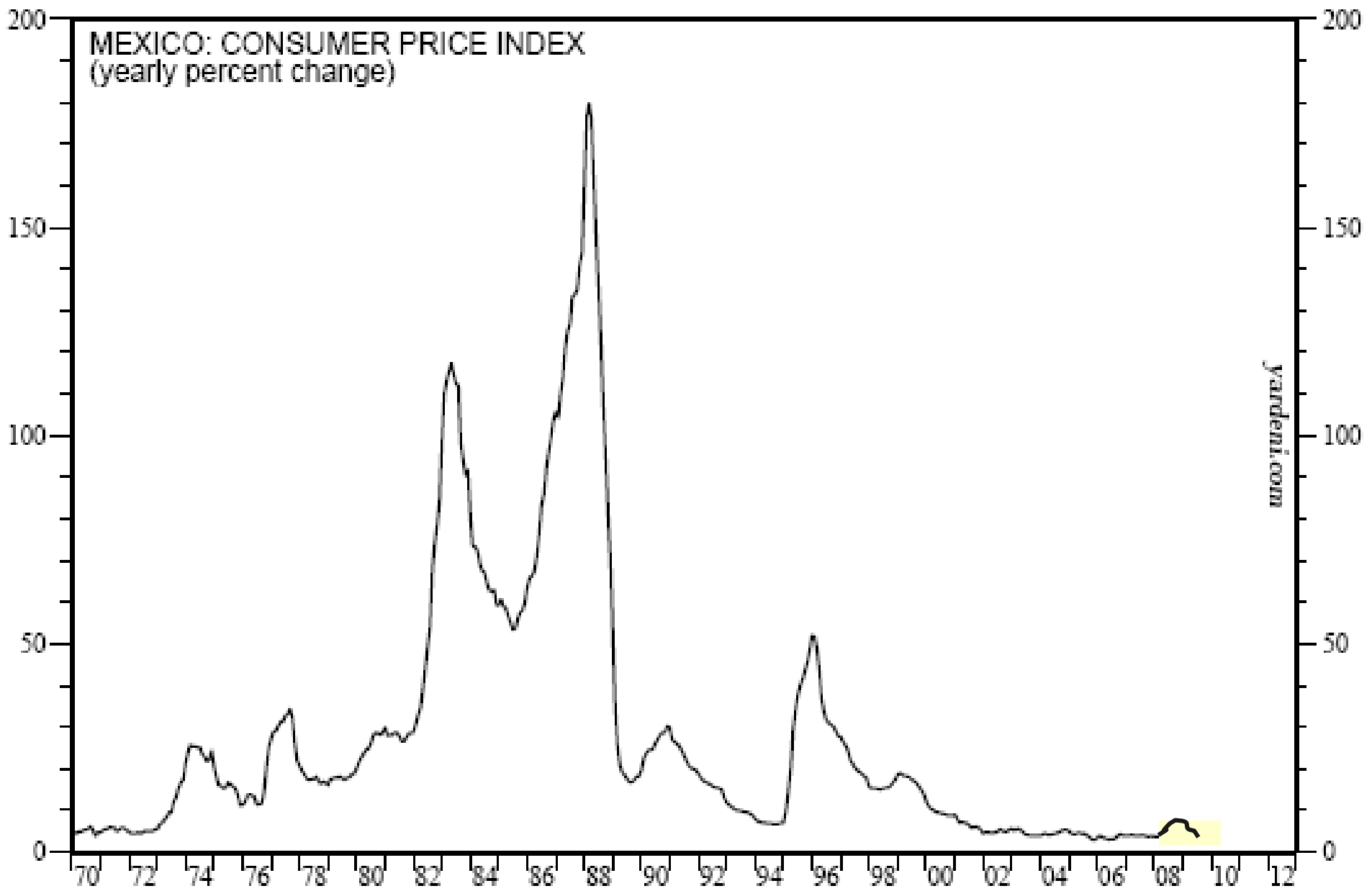
Economic Liberalization Strategy – 1982-1996

- Devaluations
- Fiscal and monetary control
- Tariffs down -> NAFTA
- Privatizations – domestic & foreign
- FDI – maquiladoras
- Wage controls
- Brady plan debt reductions
- But, overvaluation, current account deficits and foreign debt up – second “tequila” crisis.

Mexico Recovery (real GDP)



Source: Banco Central de México.





Political Liberalization Strategy under Vicente Fox (2000-2006)

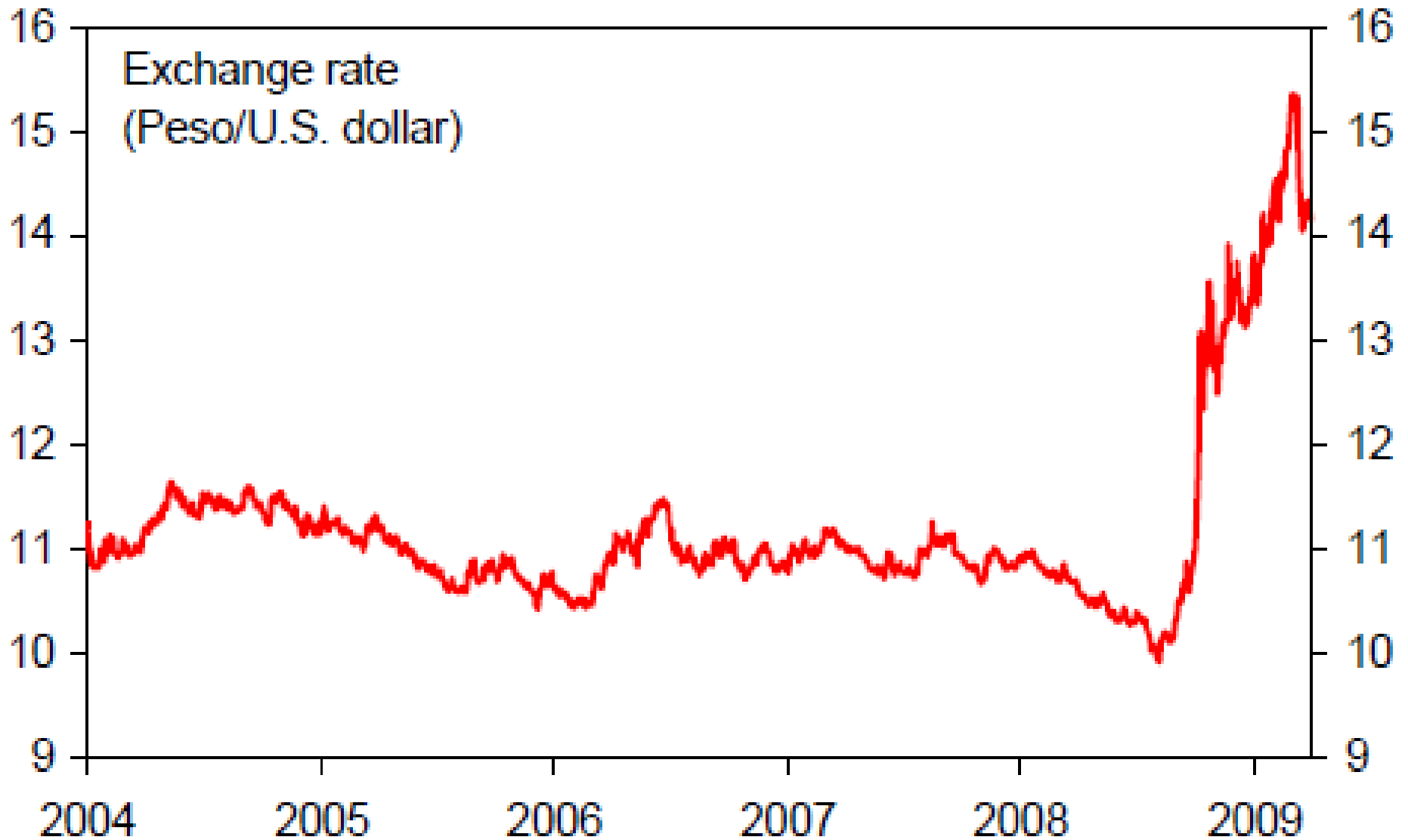
- Macro-economy stable – now microeconomic and institutional reform;
- Fix pensions;
- Poverty, education, income distribution, labor law, oil and gas sector, environment;
- Control crime and drugs
- And China competition threatening maquilas!
- But PAN a minority party...little accomplished.



More Effective Reform under Felipe Calderon (2006 ->

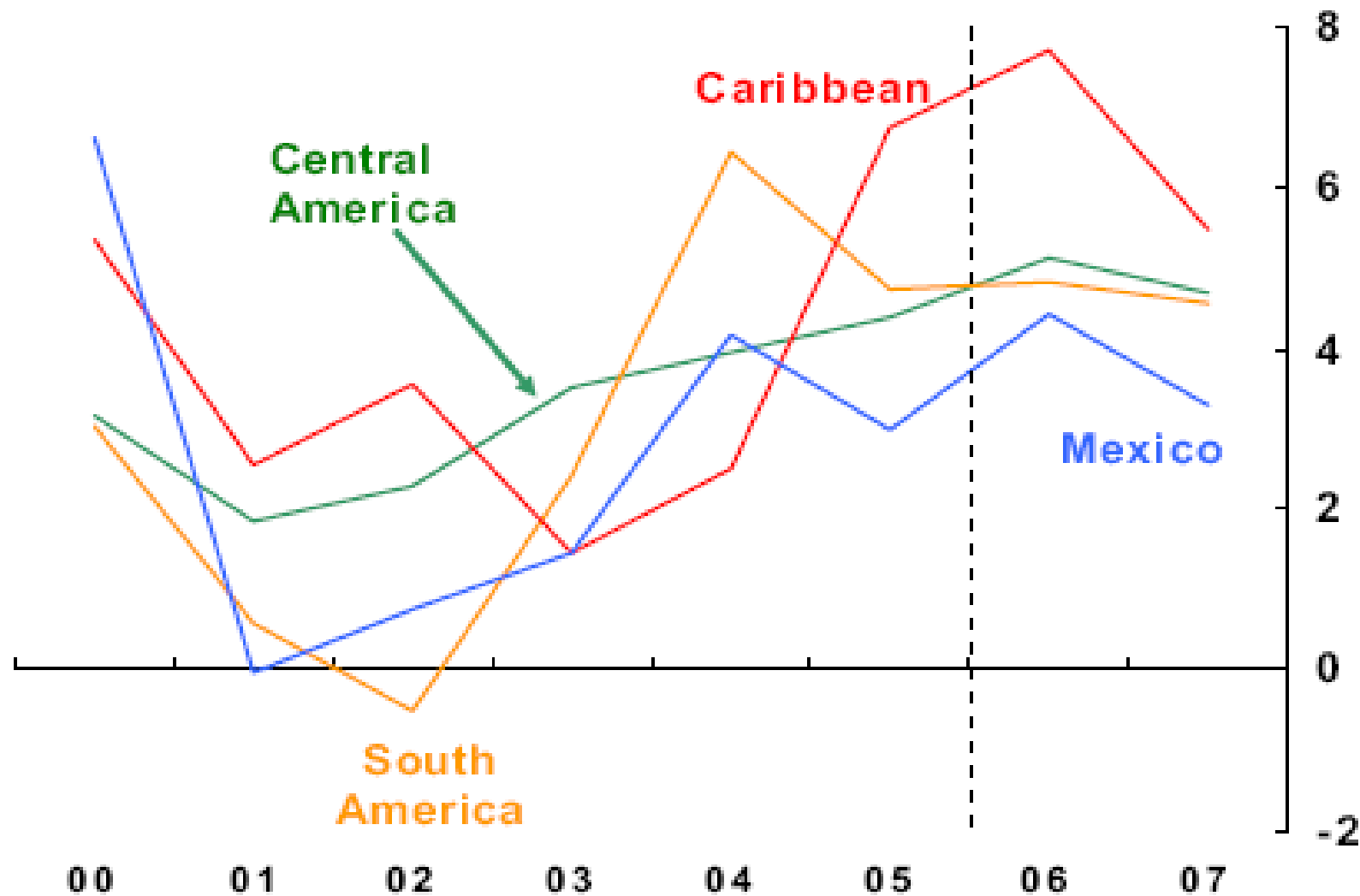
- **Drug war – 10,000 arrested; 20 leaders;**
- **Pension reform – retirement age up; defined benefits -> defined contributions;**
- **Electoral reform – shorter campaigns, limit to media spending;**
- **Fiscal reform – corporate flat tax, collection efficiencies -> revenue up 2%;**
- **Pemex – limited financial flexibility;**
- **Next – electoral reform – re-elections**

The peso has also depreciated markedly



Real GDP Growth

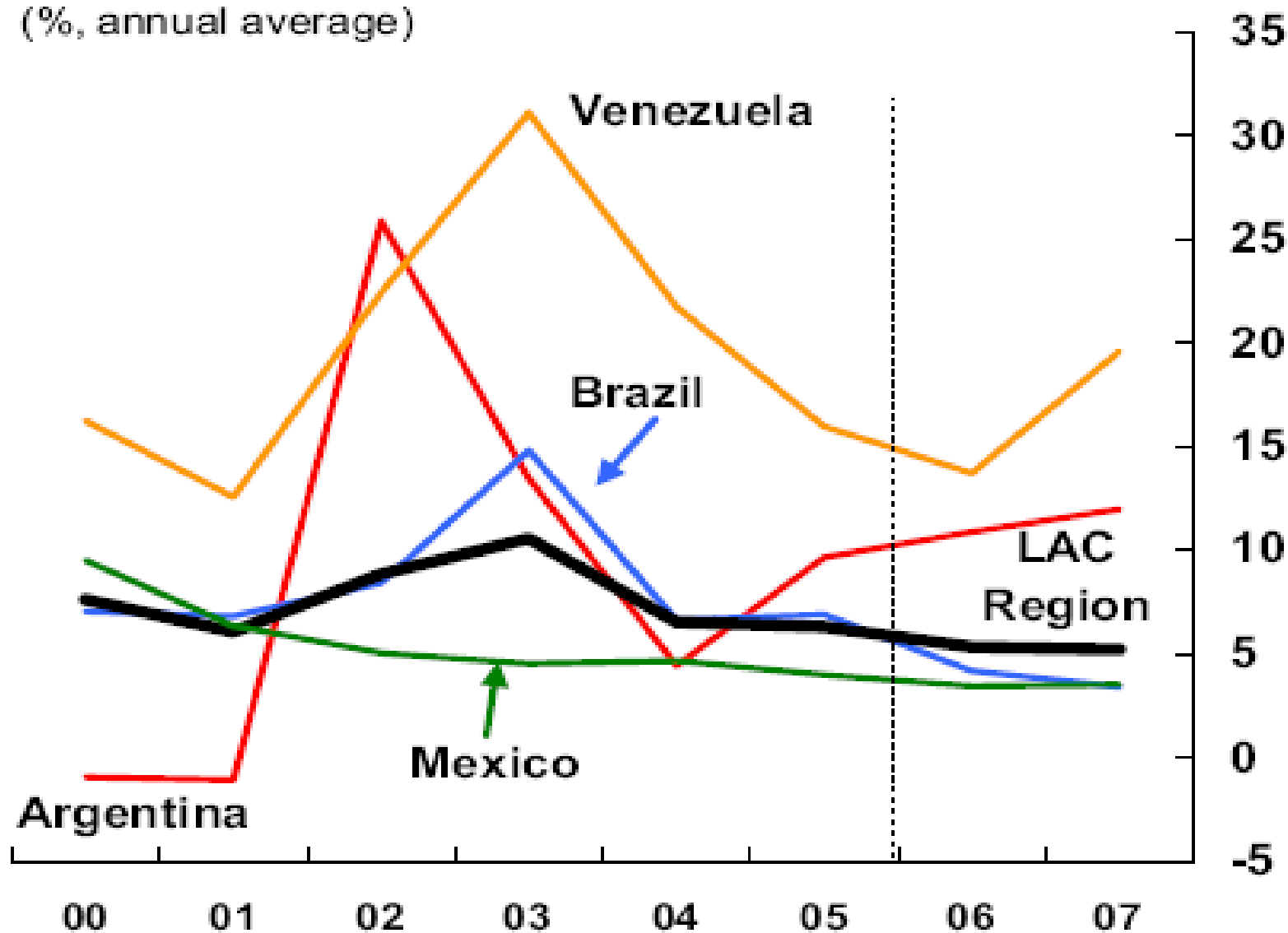
(Annual % change)



Source: IMF staff estimates.

Inflation

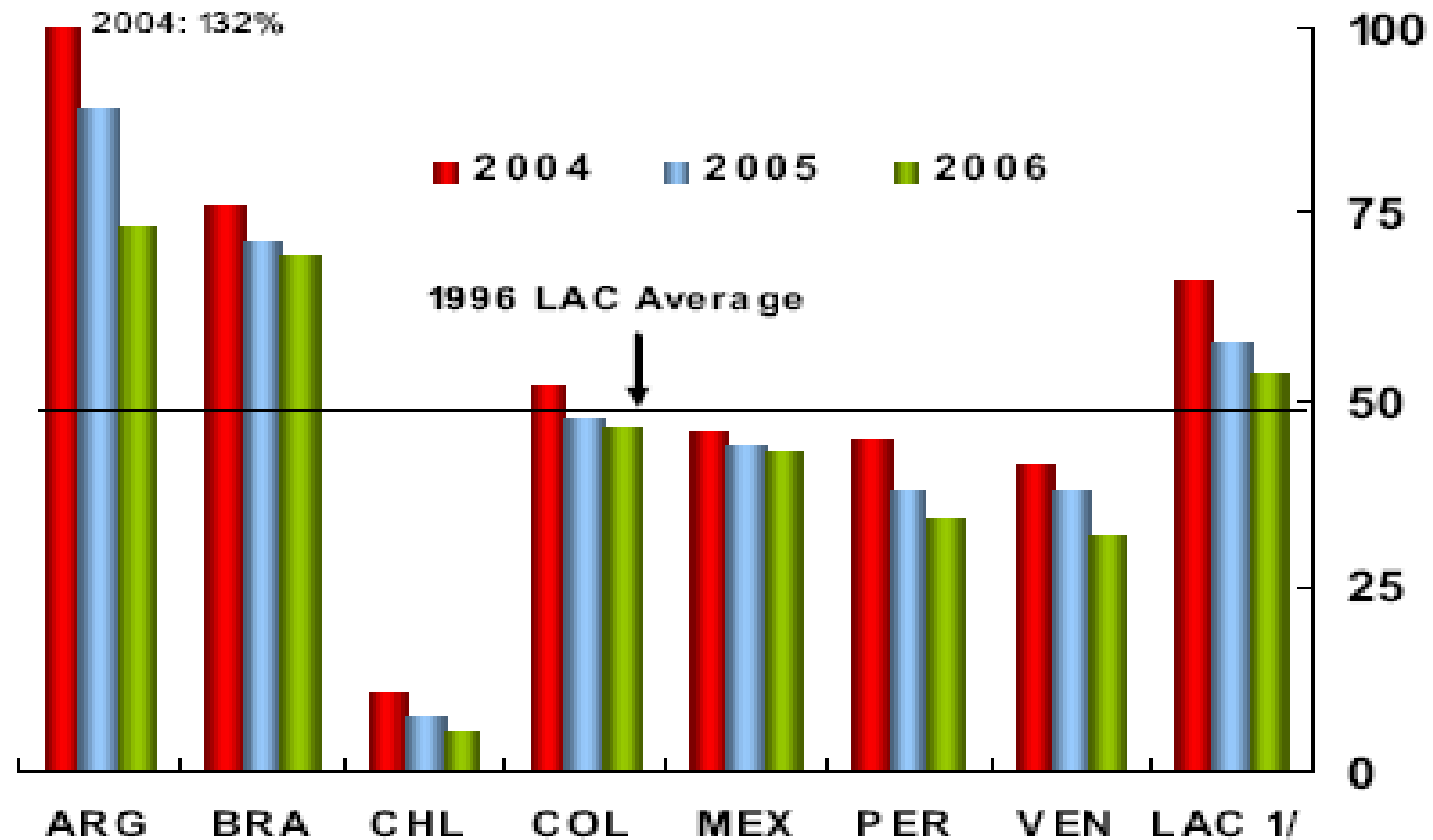
(%, annual average)



Source: IMF staff estimates.

Total Public Debt

(% of GDP)

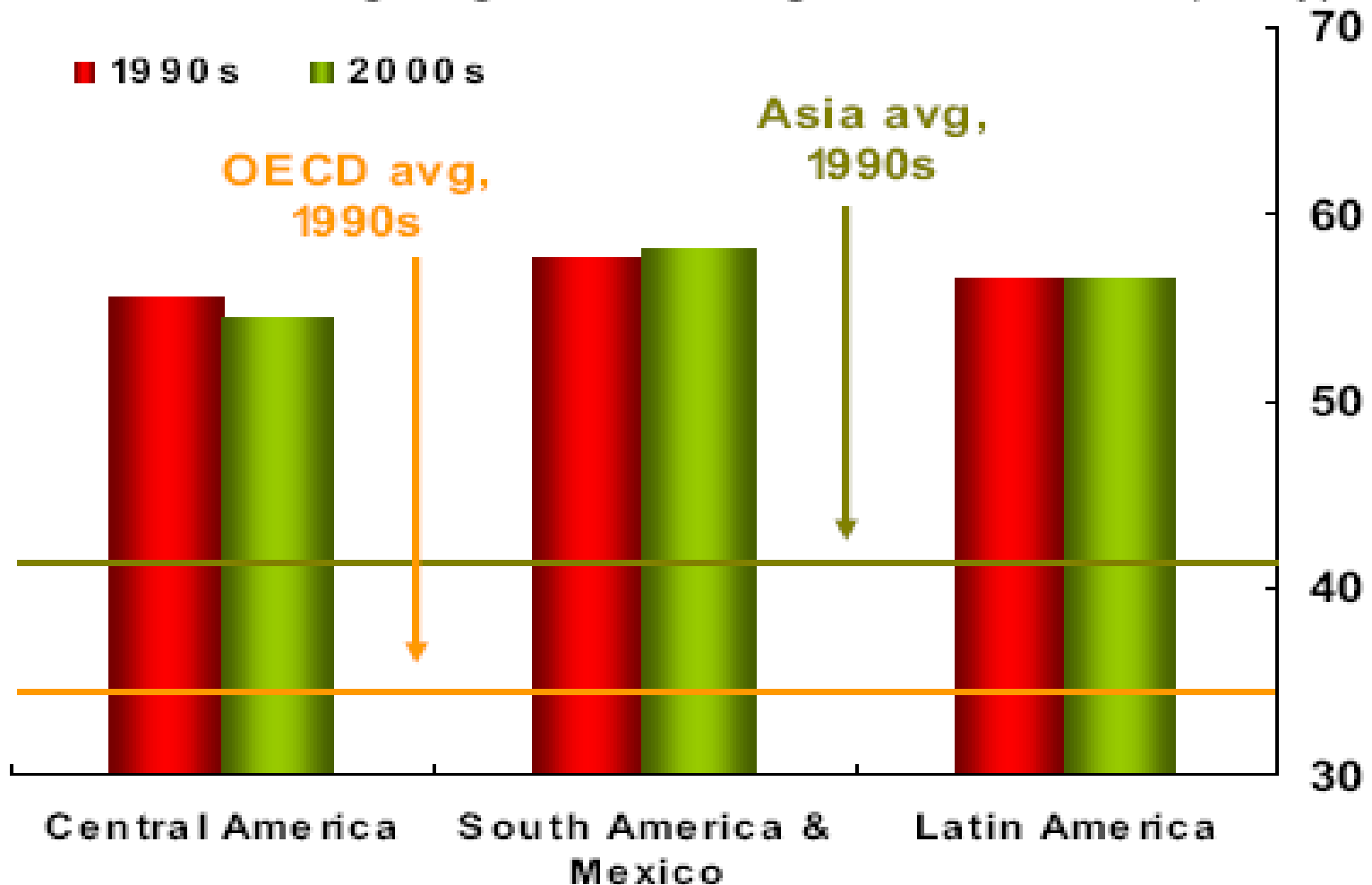


Source: IMF staff estimates.

1/ Weighted average.

Income Inequality

(Gini coefficient; larger figures indicate greater income inequality) ^{1/}



Sources: ECLAC; and de Ferranti et al. (2004).

^{1/} For Latin American countries, 1990s = available observation closest to 1990; 2000s = most recent available observation.



Latin American Recovery?

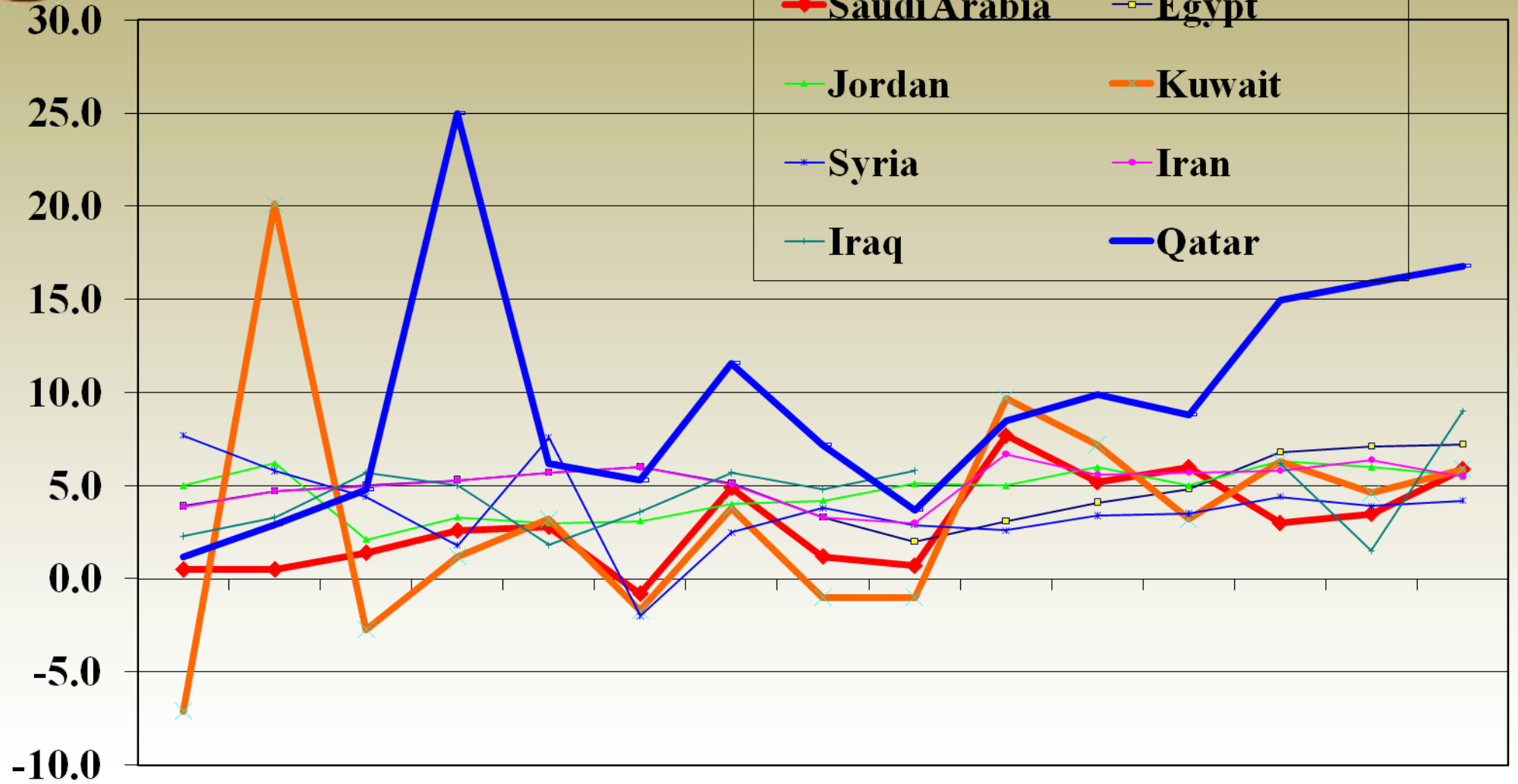
- Mexico – democratizing and economic reform – privatized, well-managed fiscal and monetary stability, and NAFTA dependent; now, crime and economic efficiency;
- Argentina – stable government ? Will Argentina inflate? Will it become competitive? Will default have lasting ill-effects?
- Brazil – Can institutional reform continue, with effective debt management, pension reform and income redistribution- will Lula alleviate corruption and manage responsibly?

	Growth of GDP			% Inflation			Cur acct (%/GDP)		
	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>
Mexico	1.3	-7.3	3.3	5.1	5.4	3.5	-1.4	-1.2	-1.3
Argentina	6.8	-2.5	1.5	8.6	5.6	5.0	1.4	4.4	4.9
Brazil	5.1	-0.7	3.5	5.7	4.8	4.1	-1.8	-1.3	-1.9
Chile	3.2	-1.7	4.0	8.7	2.0	2.3	-2.0	0.7	-0.4
Colombia	2.5	-0.3	2.5	7.0	4.6	3.7	-2.8	-2.9	-3.1
Venezuela	4.8	-2.0	-0.4	30.4	29.5	30.0	12.3	1.8	5.4

Islamic Resurgence/Saudi Arabia Annual GDP Growth



Percent



1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008

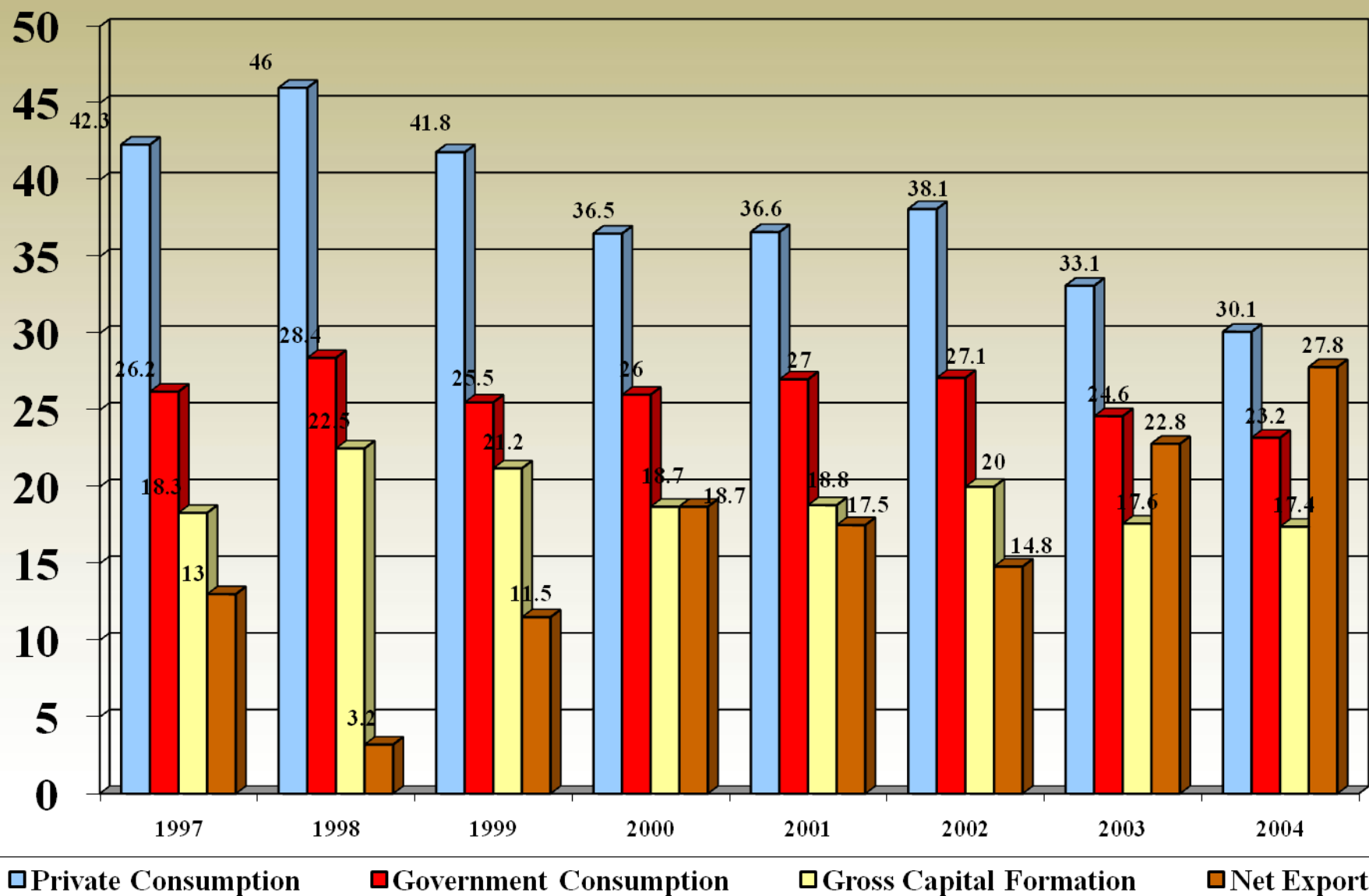


Saudi Arabia – Economic Issues until Oil Prices Rose

- Slow economic growth (1.8% per year), except for past three years – high oil prices;
- Government budgets – irregular deficits/debt
- Defense, debt service and education
- Unemployment → 13+%
- Low inflation
- Huge Trade surpluses
- Current account deficits (until 2000): large surpluses since.

Saudi Arabia: Gross Domestic Product

Percent Share of GDP



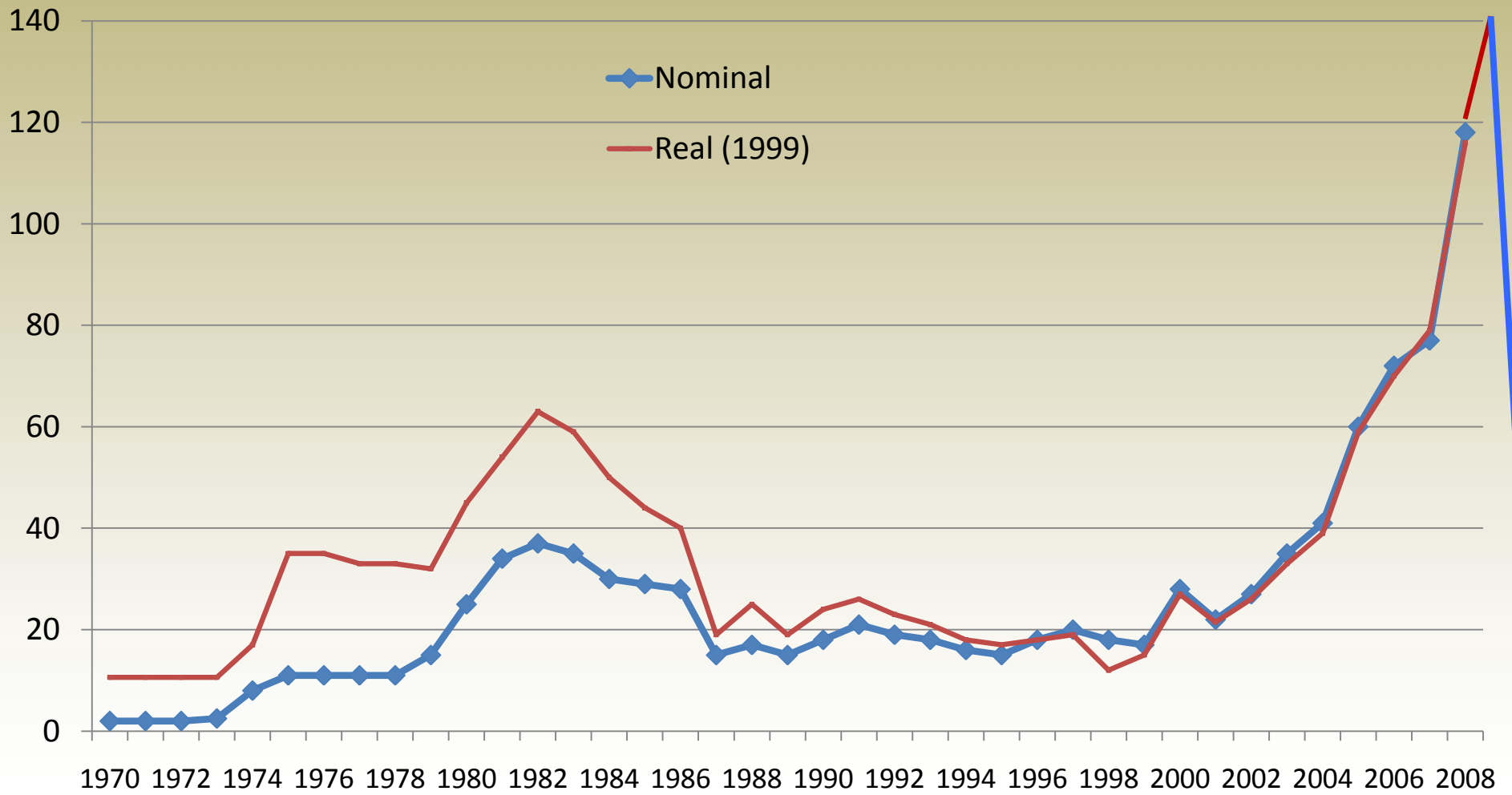


Saudi Development Strategy

- Reduce fiscal deficits
- Open up foreign investment
 - FDI law, gas initiative
- Build infrastructure
- Finance domestically
- Privatization
- Fund education
- Maintain low inflation
- Saudization
- Reduce production of oil by 1,500,000 mmbd;
- Expand production capacity to 11.5 mmbd)
- Abdullah Plan – Middle East Peace



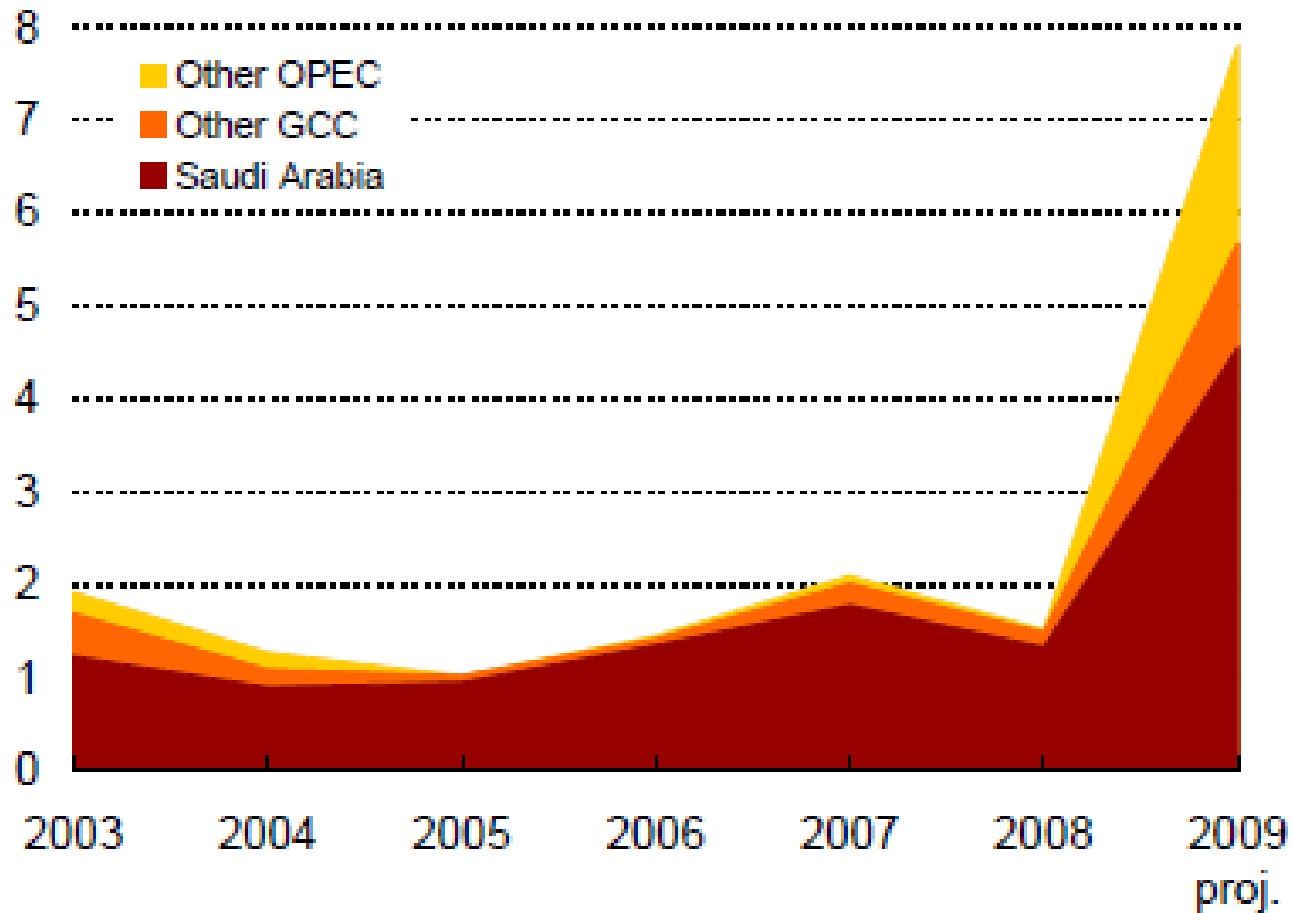
Real and Nominal Crude Oil Prices, 1970-2009





OPEC Spare Production Capacity

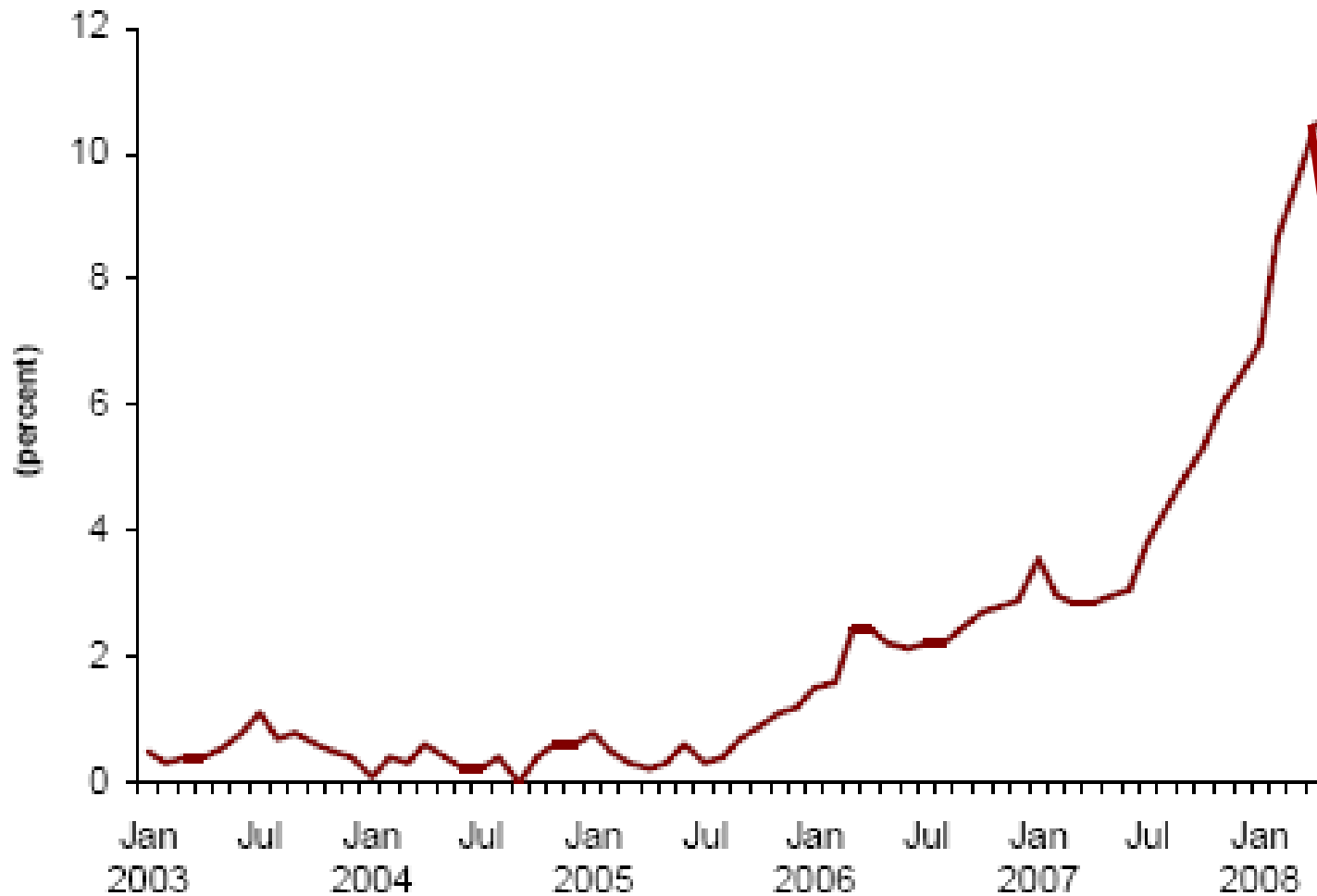
(Millions of barrels per day)



Source: Energy Information Administration.

Oil fueled

Inflation into double digits





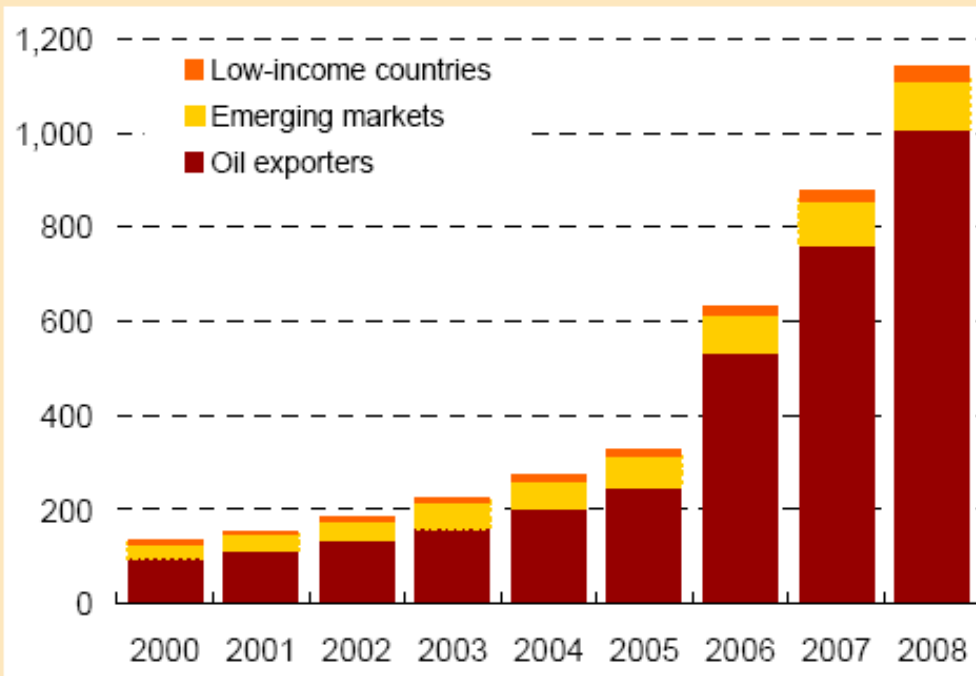
Saudi Arabia since 2005

- Rapid economic growth (up to 6.4% per year) – now back to 0.8%
- Huge Government surpluses, debt down to 24%/GDP
- Defense, education and infrastructure, including four new cities
- Unemployment → 7-8%
- Inflation up to 9%; back down to 4%
- Huge Trade surpluses
- Current account surplus - \$450 billion in Sovereign Wealth Reserves

Build-up in Reserves; Draw-down in Crisis

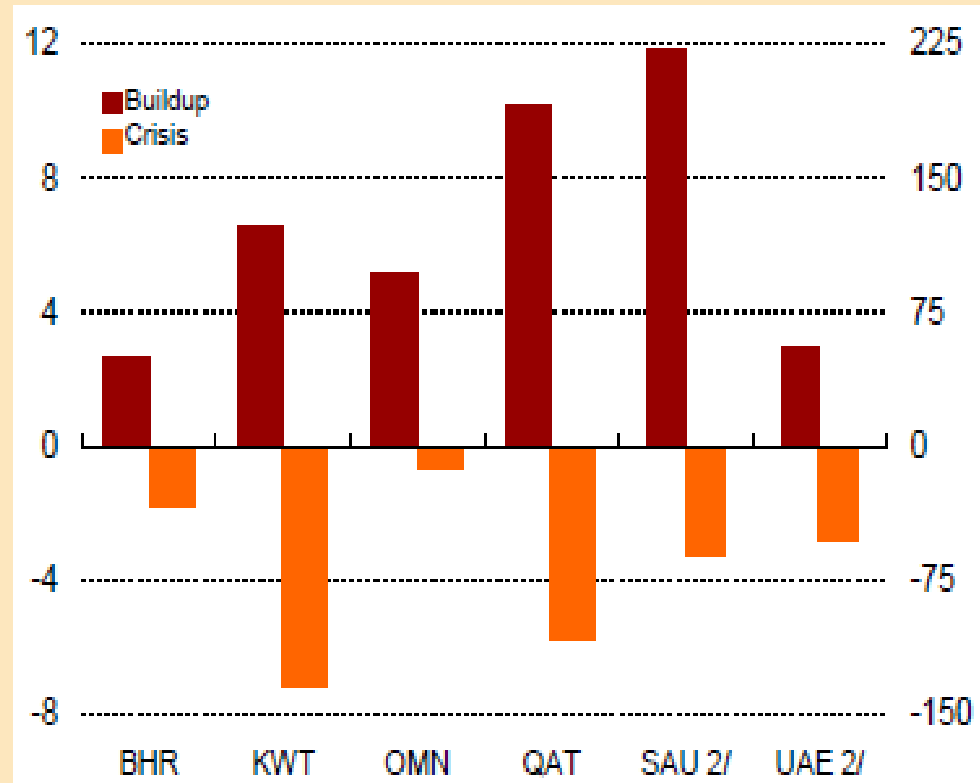


(In billions of U.S. dollars)



Sources: Data provided by country authorities; and IMF staff estimates and projections.

(GCC: billions of U.S. dollars)





Africa Recovery

	<u>1995 GDP(bil\$)</u>	<u>GDP Growth 90-95</u>	<u>GDP Growth 2006</u>
Kenya	9.1	1.4	6.0
Tanzania	3.6	3.2	5.9
Congo	14.4	1.8	5.1
Zambia	4.0	-0.2	6.0
Zimbabwe	6.5	1.0	-5.1
Malawi	1.5	0.7	8.4
Uganda	5.6	6.6	5.4
Angola	0.5	-4.5	15.3
Botswana	0.2	4.2	4.2
Mozambique	0.4	7.1	7.9
Namibia	0.4	3.8	4.5
South Africa	136.0	0.6	5.0
Lesotho	1.0	7.5	1.6





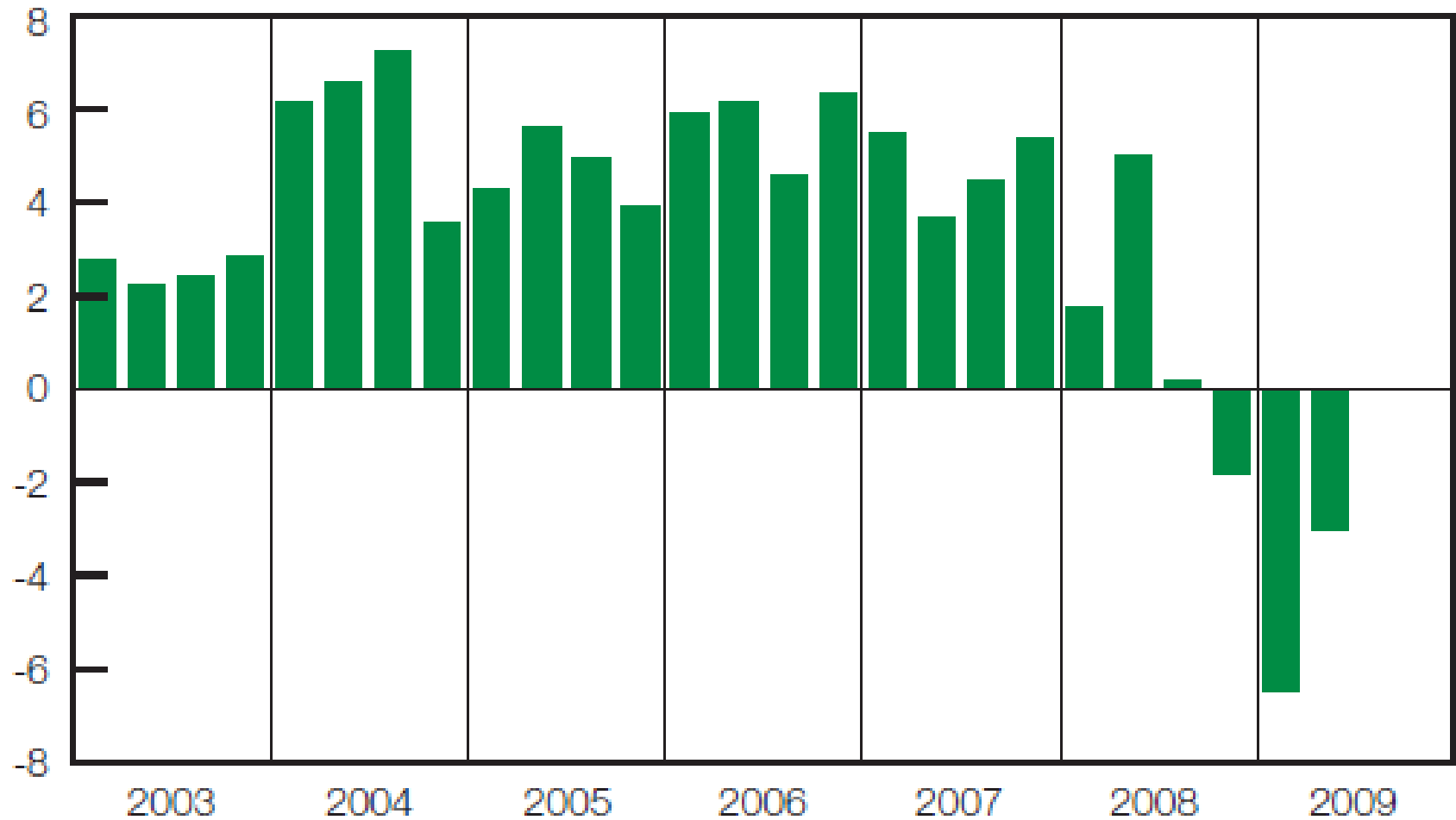
GEAR – Growth, Equality and Redistribution

- Fiscal policy (deficit reduction)
- Monetary policy (constant real exchange rate)
- Privatization – now stopped
- Two-pronged industrial policy
- Lower tariffs - WTO
- Two-tier wage policy - failed
- Now Black Empowerment

South Africa

Real gross domestic product

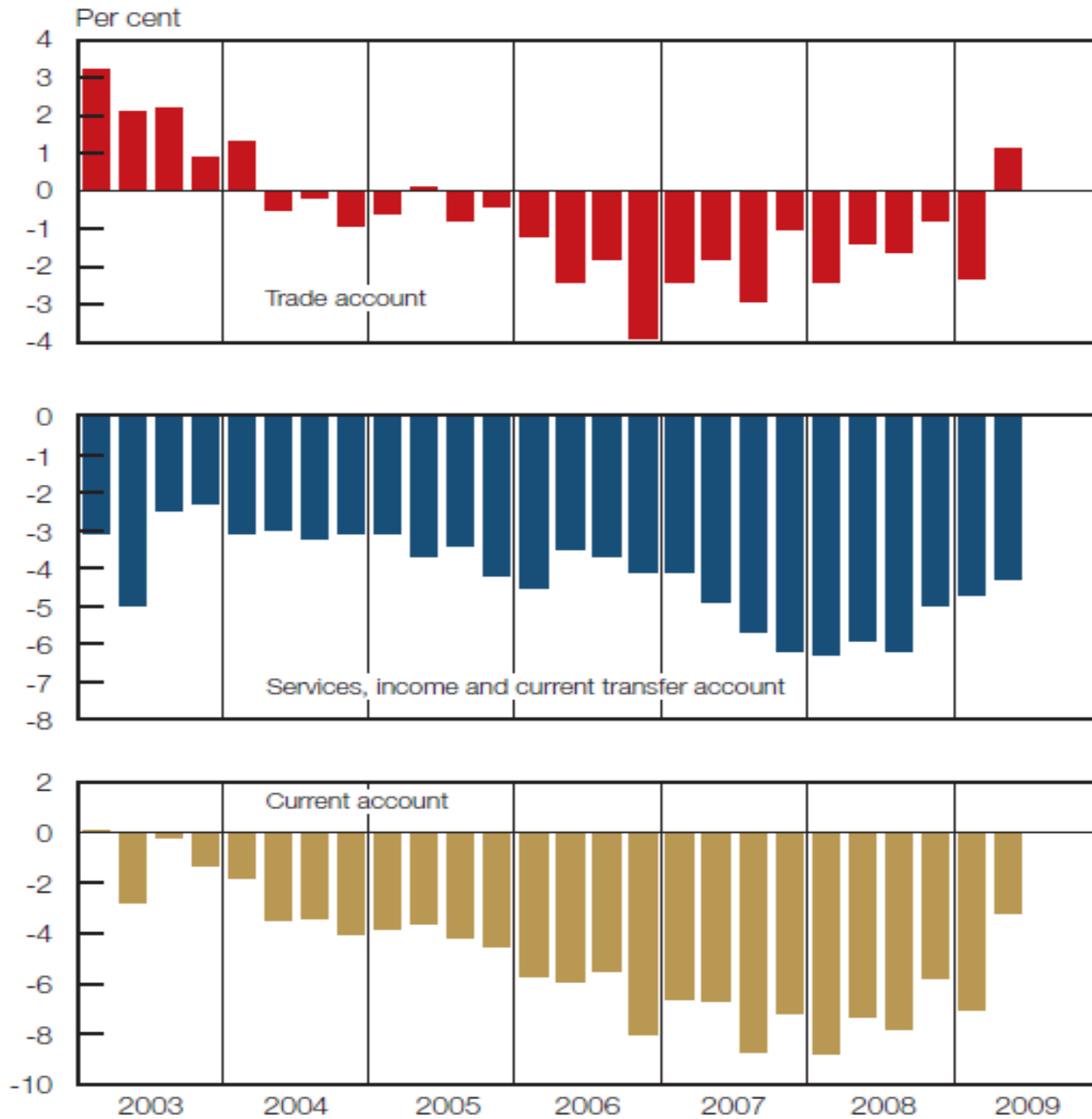
Percentage change from quarter to quarter



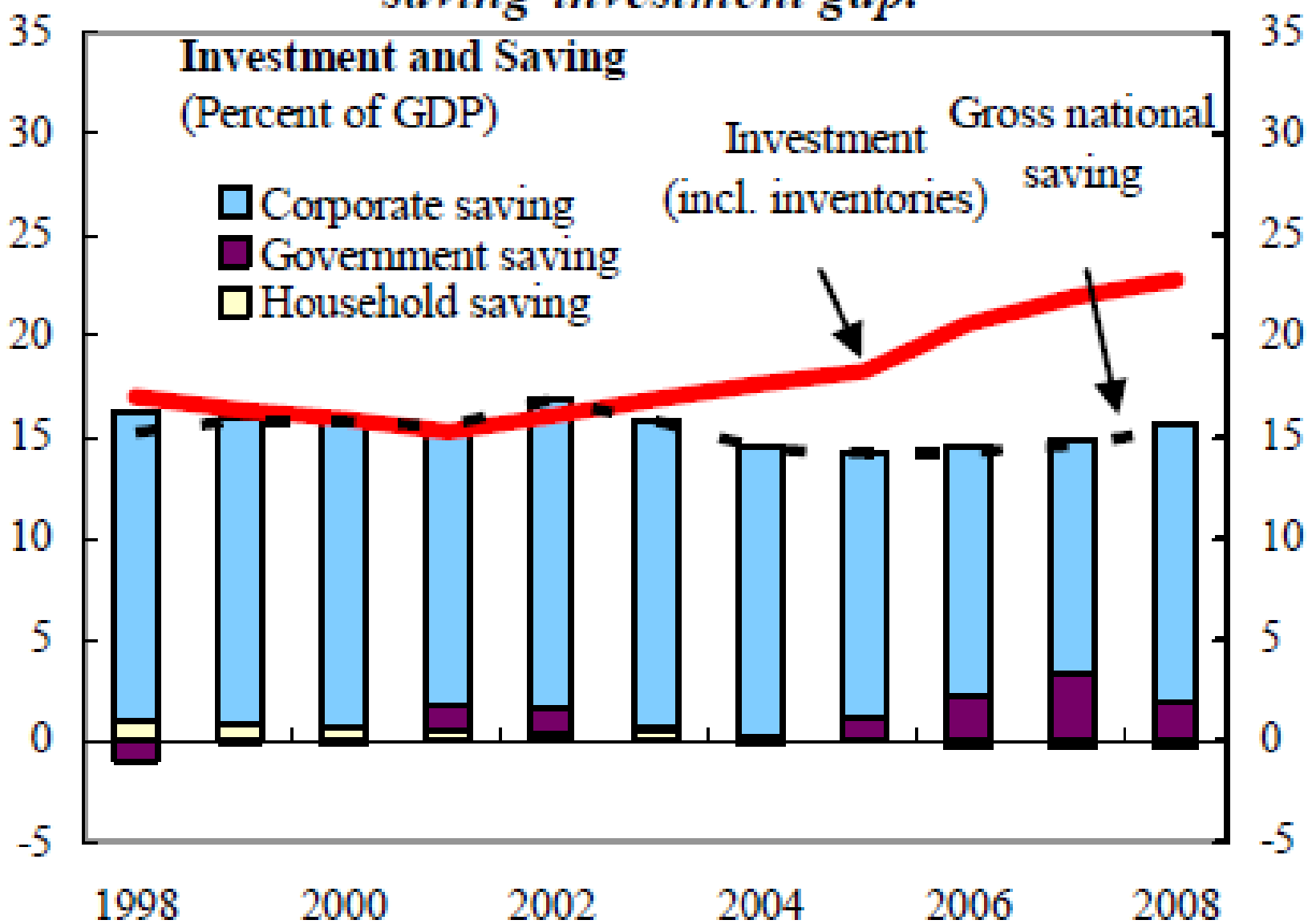
Seasonally adjusted annualised rates



Current account as a ratio of gross domestic product



Strong domestic demand opened a persistent saving-investment gap.





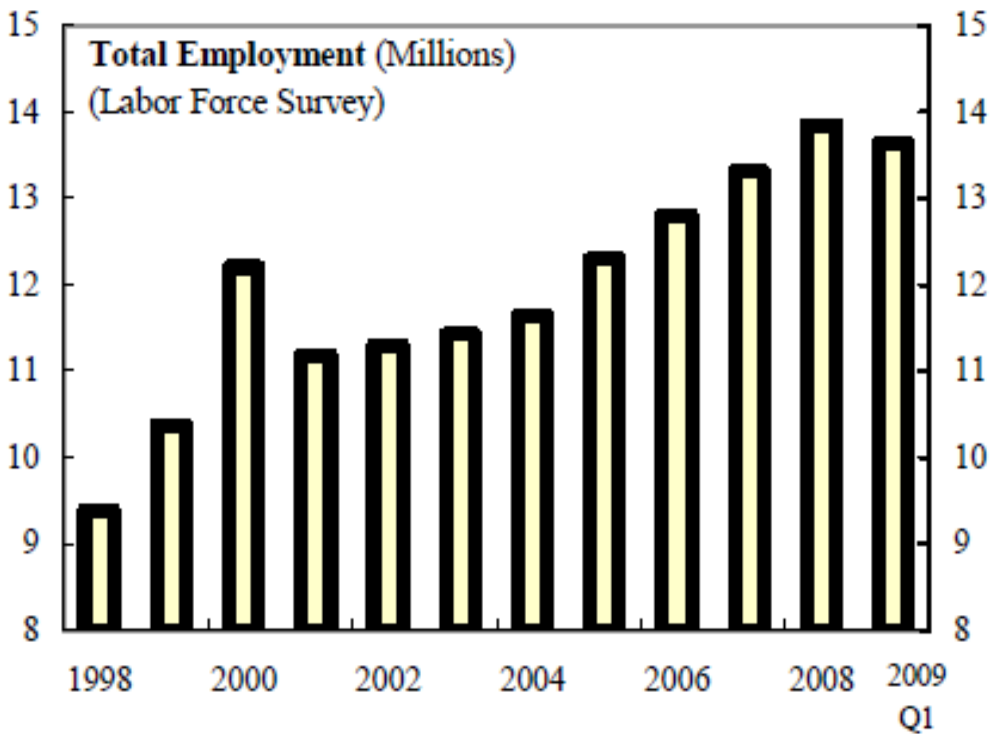
South African Social Issues:

- Unemployment: 23.2%
- Infrastructure: electricity, plumbing, telephone, housing;
- Education: 32% illiterate
- Crime: 26,000 homicides; 1 felony/21 people
- AIDS: 19% - 24% of adult population

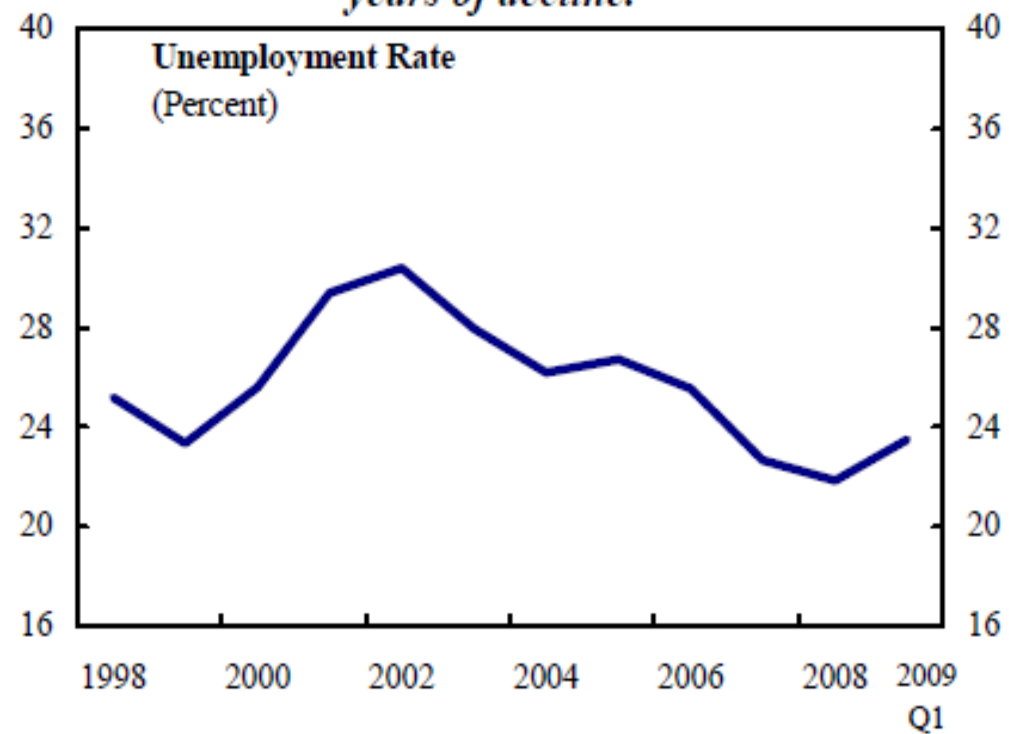


South Africa

Employment has been growing until lately...



...and unemployment rose in early 2009 after years of decline.





Black Economic Empowerment Act 2003

- Address slow pace of change in economic equity (gap in income inequality among blacks growing (GINI up from .59 to .63))
- BEE: hiring, training, promotion, ownership & control;
- Charters – voluntary commitments – in mining, finance, information technology so far;
- **FINANCIAL CHARTER**
 - 25% senior mgt, 50% middle mgt. by 2008
 - 50% black-owned procurement;
 - Financial services for 80% of population;
 - 25% black ownership by 2010;
 - 33% of the board should be black



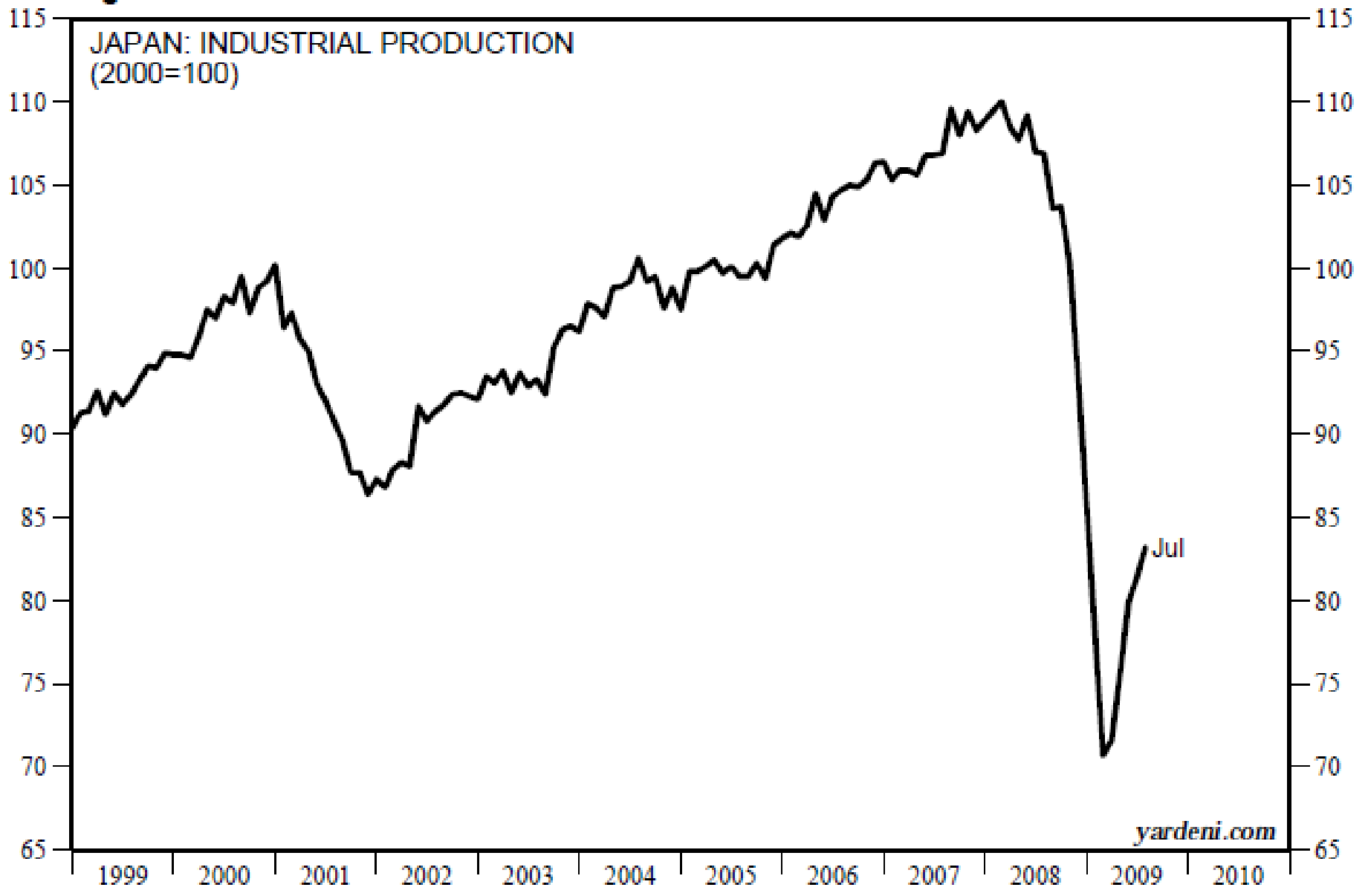
***Brazil, Argentina, Chile, Mexico,
South Africa, Malaysia and Turkey- if not***

- > low cost
- > differentiation
- > focus

“Stuck in the Middle”?

Japan – Deficits, Debt and Deflation

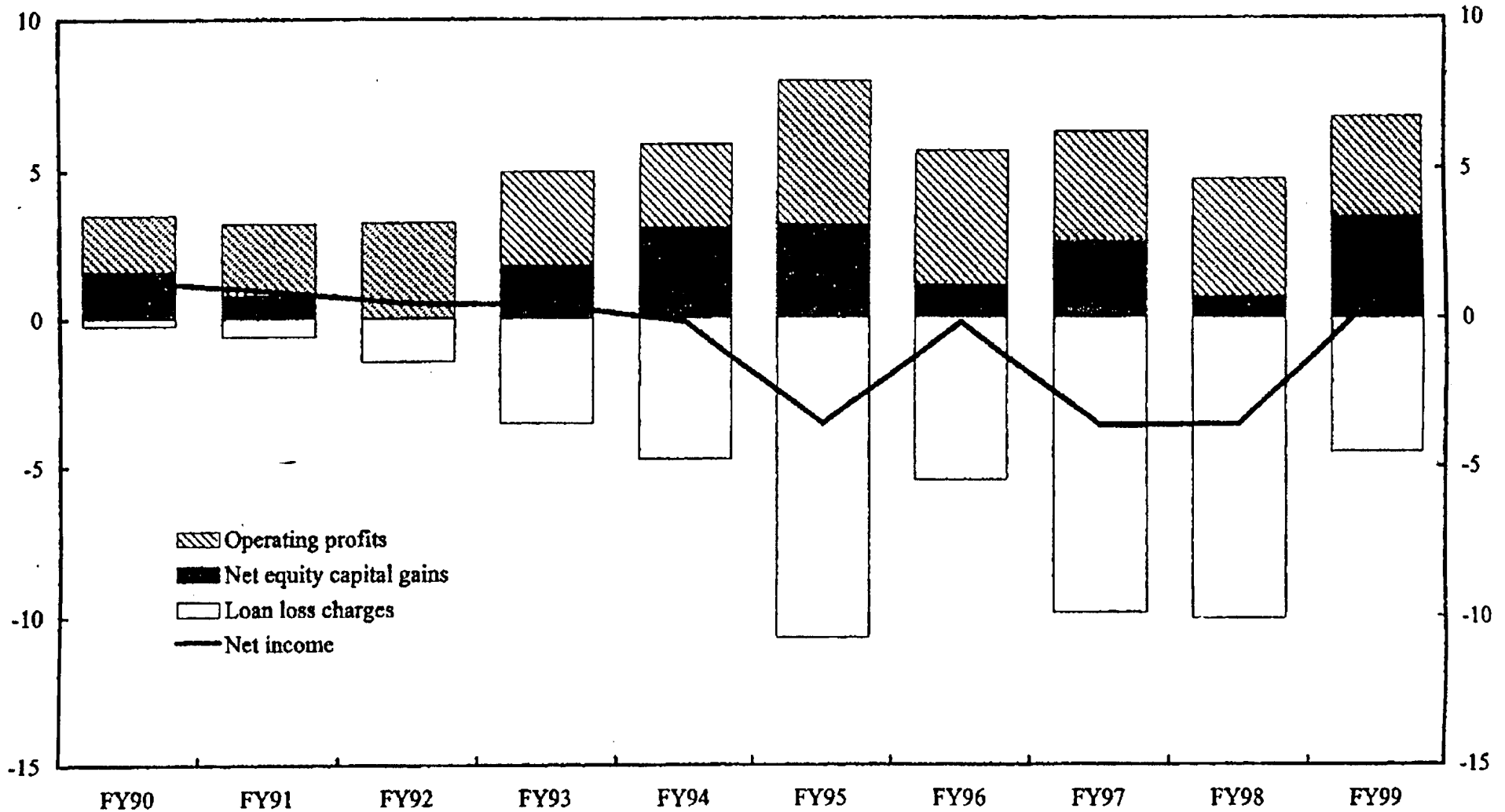
Performance Factors	<u>1979-85</u>	<u>1985-91</u>	<u>1991- >09</u>
Real GDP Growth	3.9%	5.1%	1.2 -> -6.2%
of which consumption	60.7	57.8	56.8
government	10.0	9.9	17.9
investment	29.6	34.0	19.4
exports	12.1	14.2	16.0
Unemployment	2.8	2.1	4.1
Savings (household)	17.0	14.9	5.1
Productivity Growth	4.1	2.9	2.7
Budget Deficit (%/GDP)	6.1-> 4.2 - - - >	1.1 ->	8.3 -> 3.8
Balance of trade (bil \$\$)	7 - - > 56 - - - >	77 - - - >	105 -> 167
Current account (bil \$\$)	1 - - > 49 - - - >	57 - - - >	248



Source: Haver Analytics.

Japan: Major Bank Profits, FY 90-99

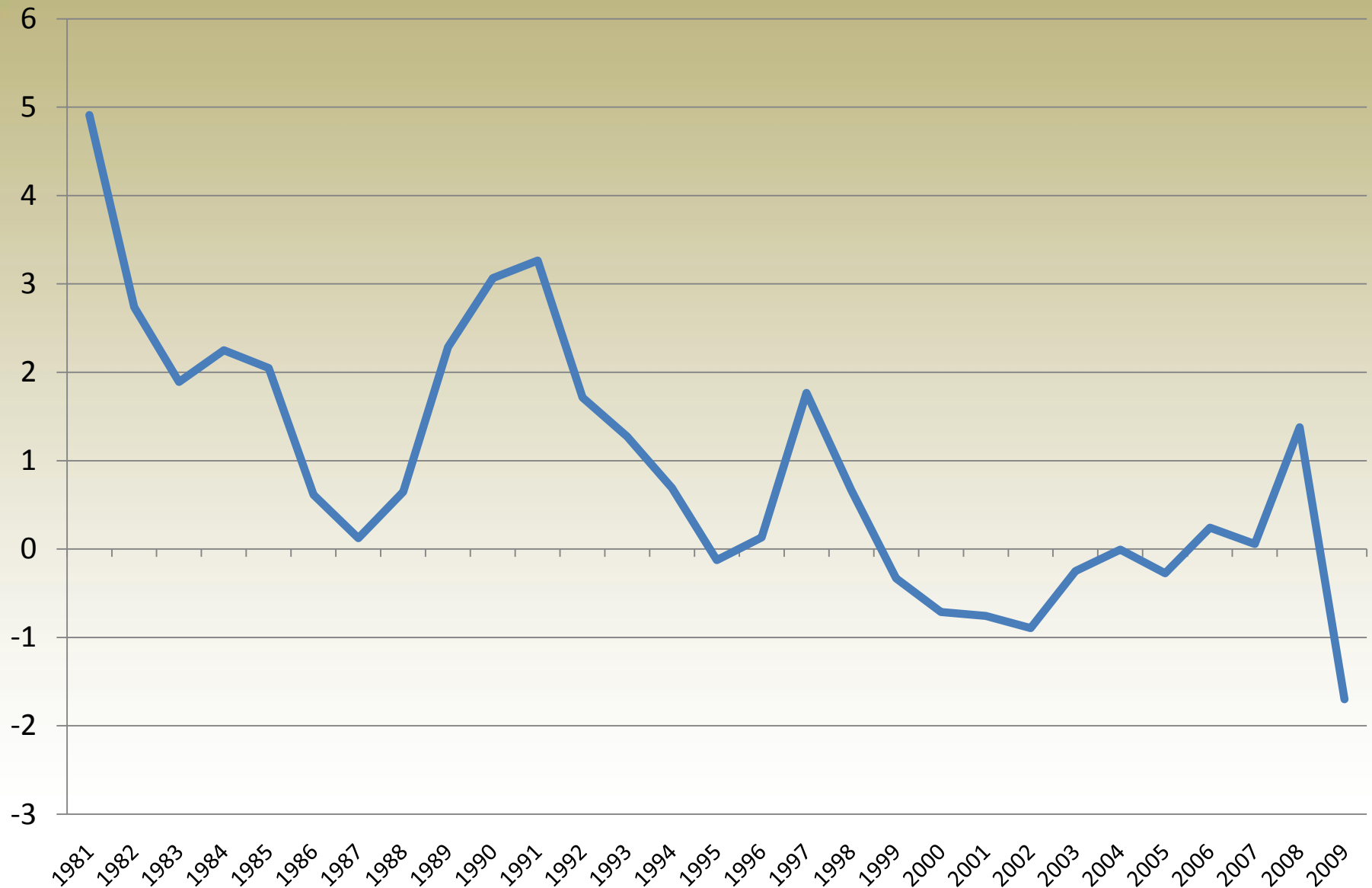
(in trillions of yen)





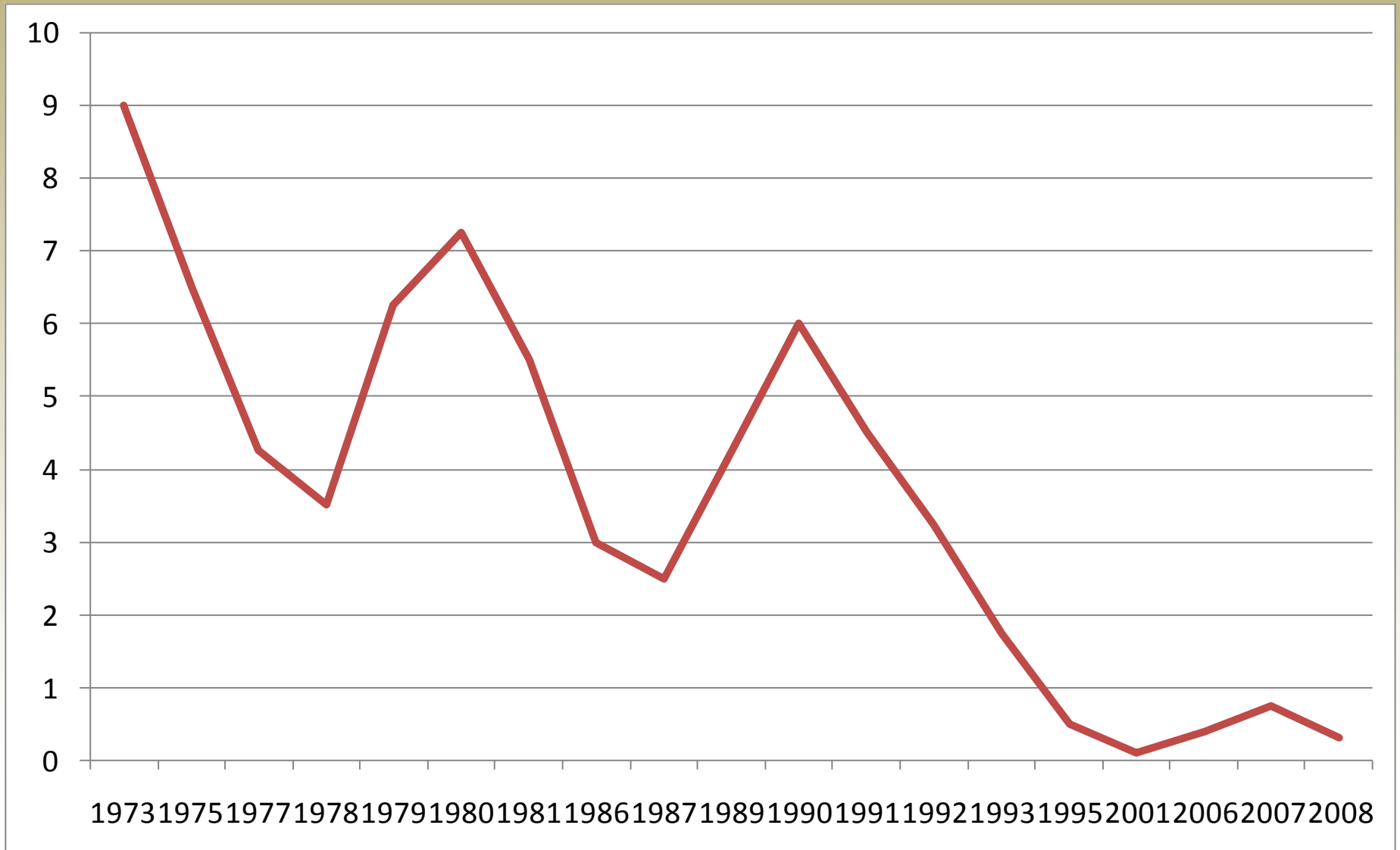
Japan's Inflation

(percent change per year)



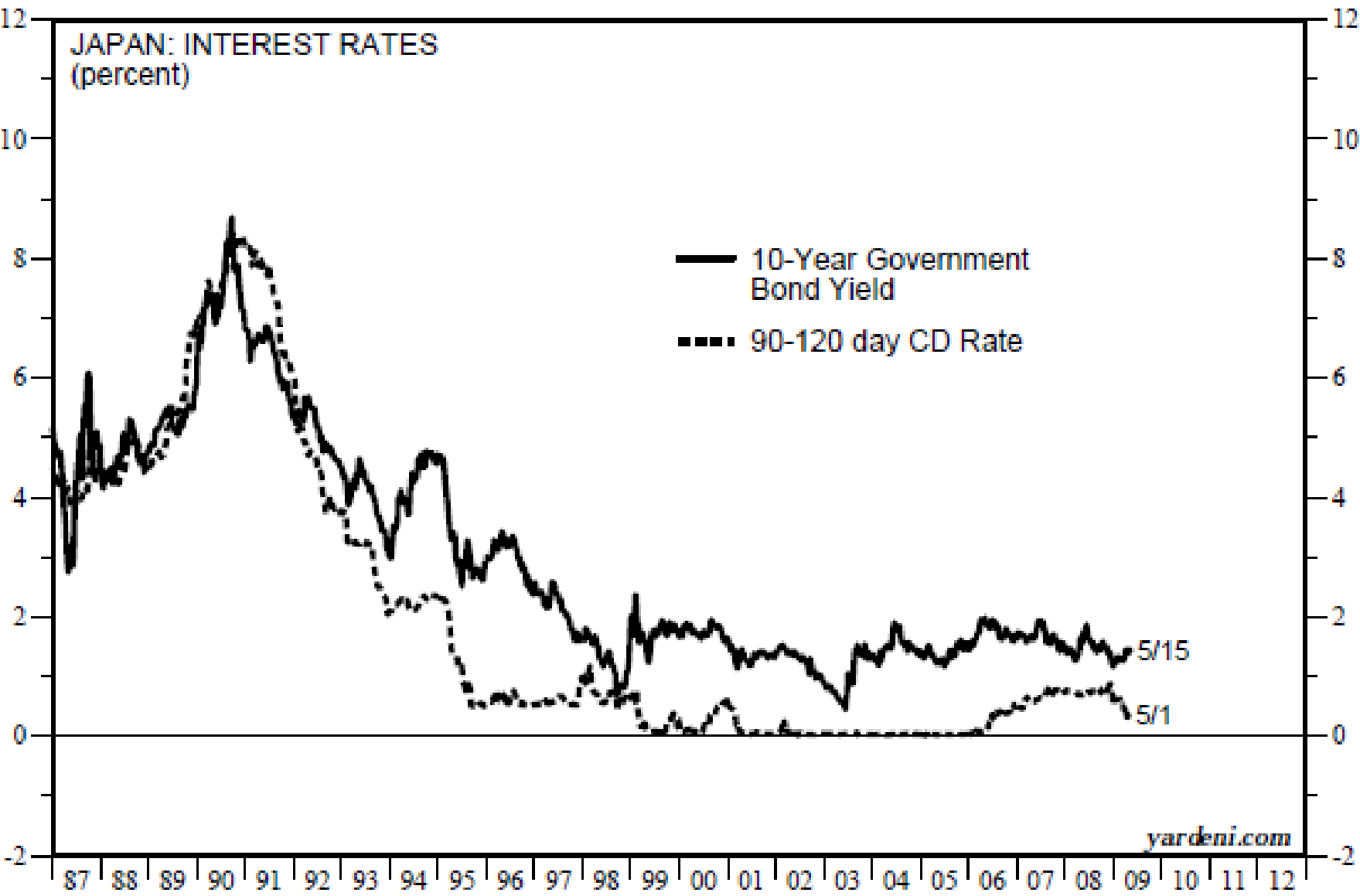
Source: Compiled with data from the *Economist Intelligence Unit*.

Discount Rate



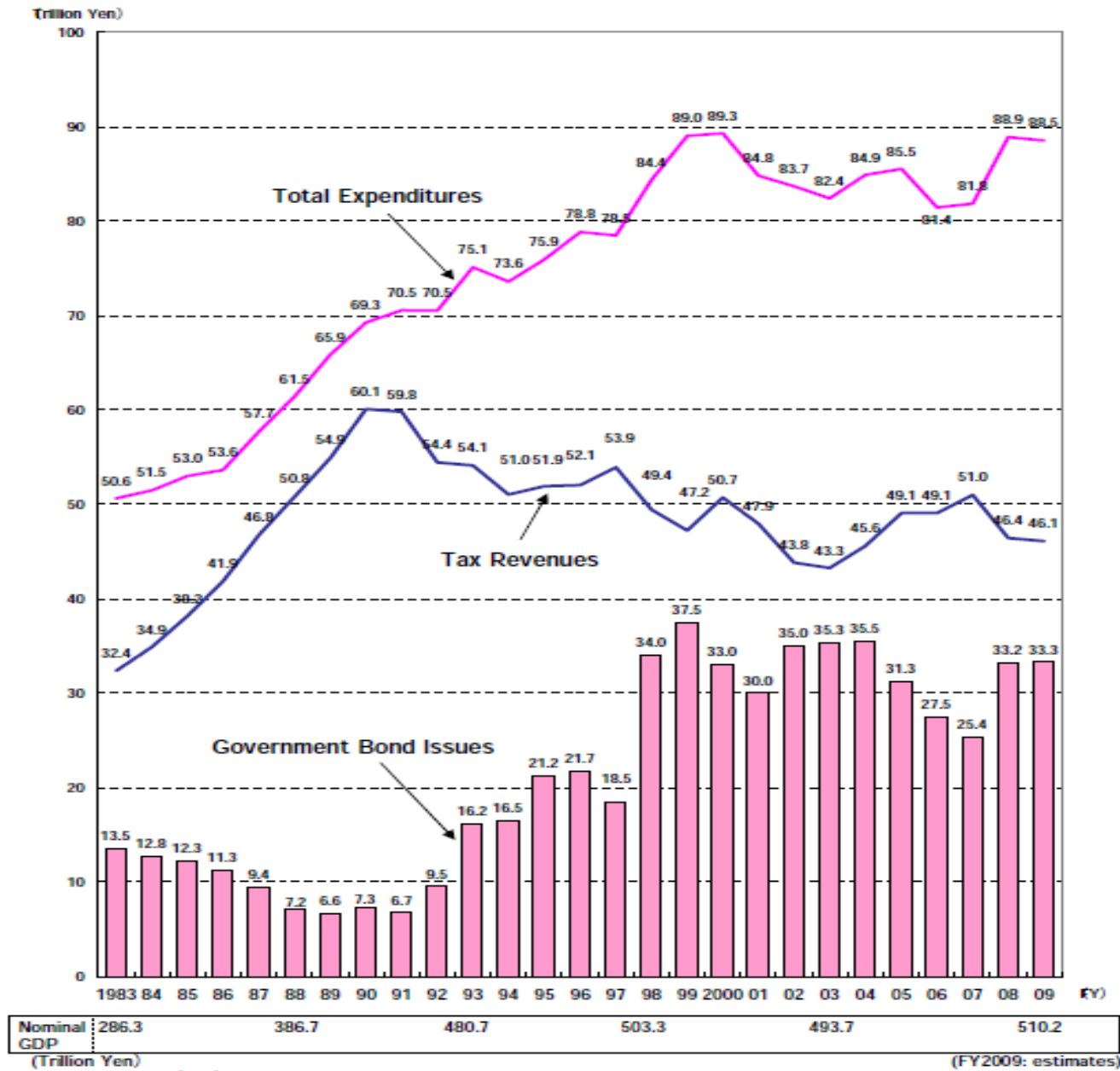
Source: Compiled with data from the *Economist Intelligence Unit*.

Japan's market interest rates



Japan's Fiscal Deficits

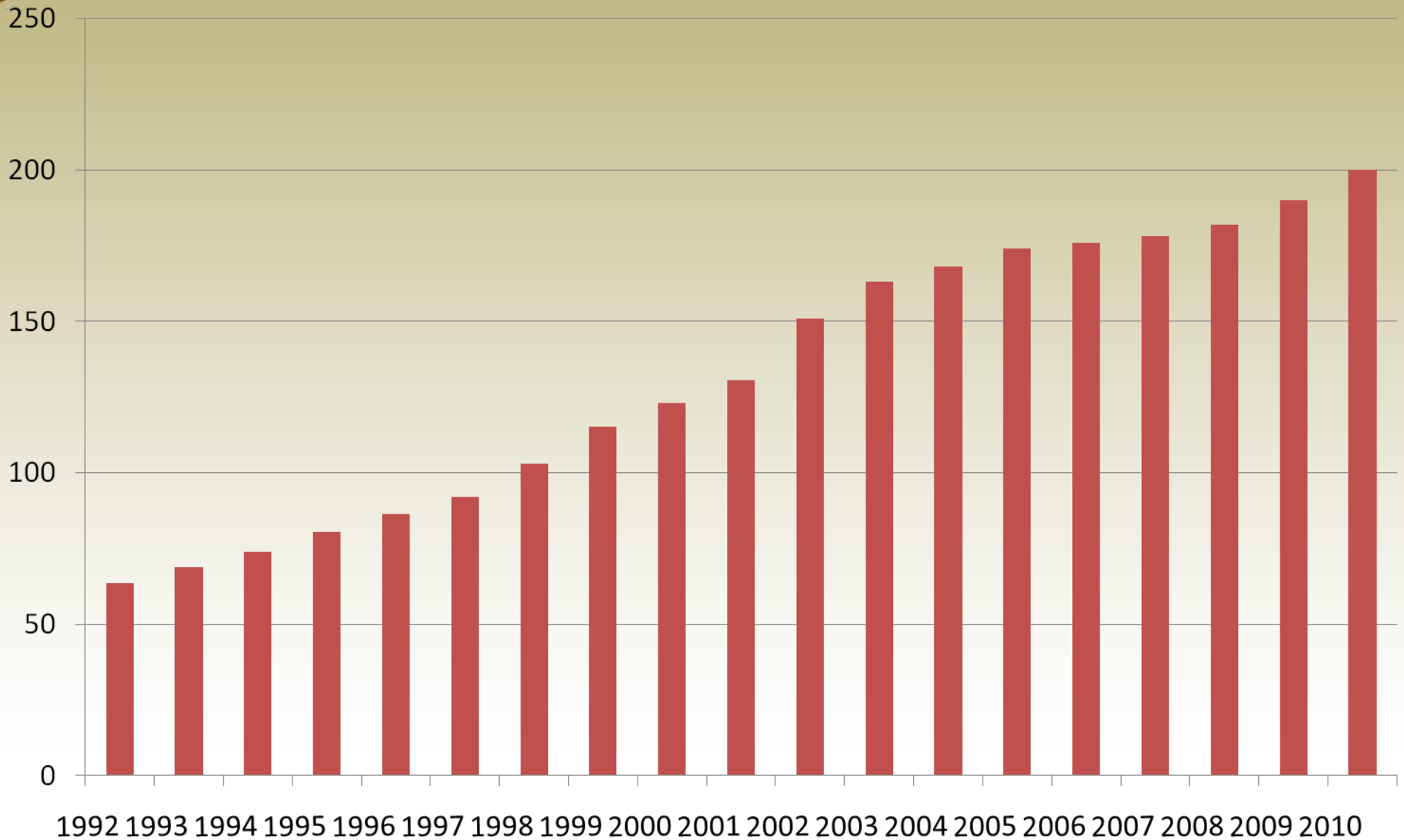
Trends of General Account Tax Revenues, Total Expenditures, and Government Bond Issues





Public Debt of Japan

(as percent of GDP)



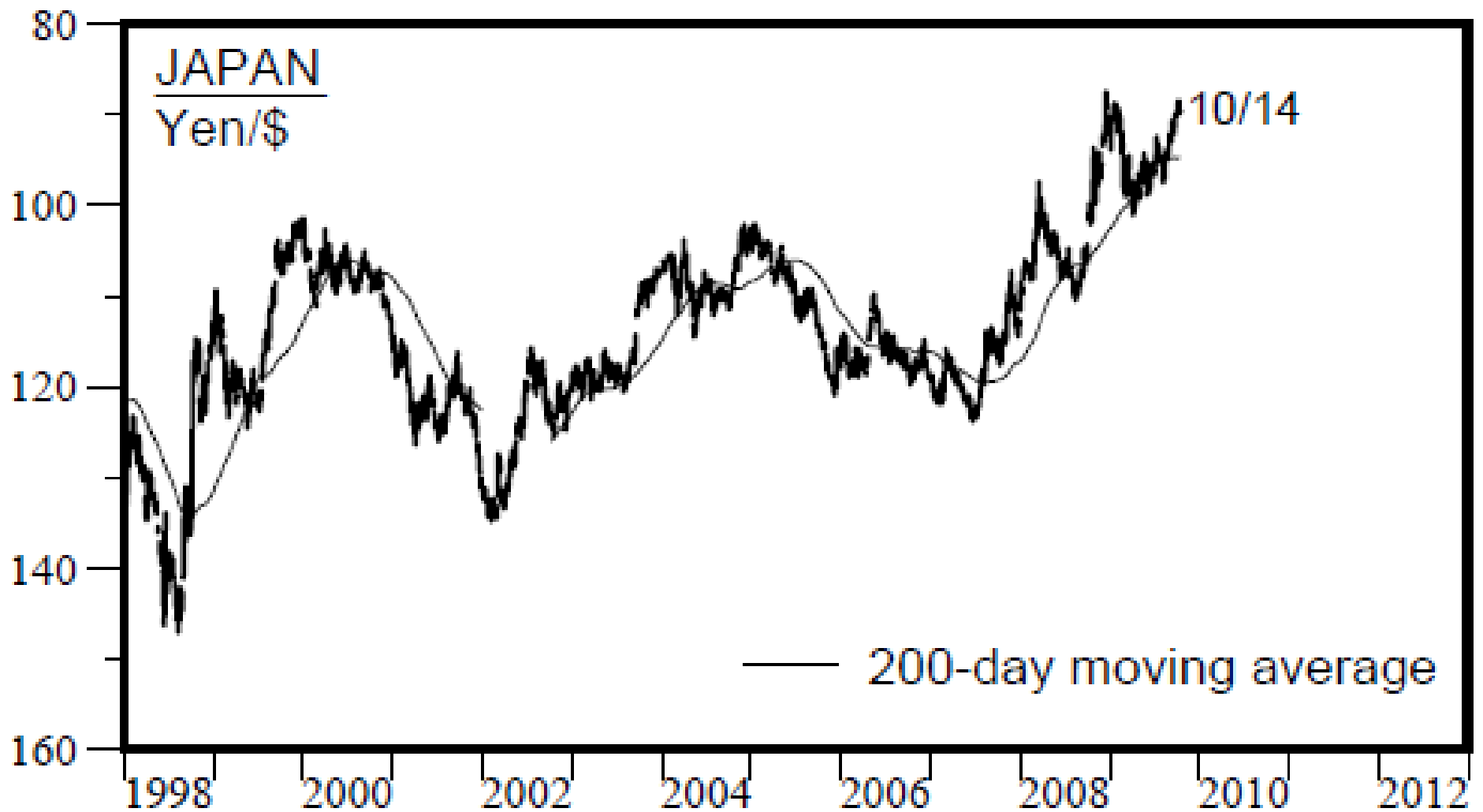
Source: Compiled with data from the *Economist Intelligence Unit*.



Japan Unable to Change Strategies

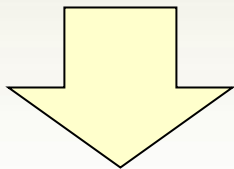
- Monetary policy won't work – liquidity trap
- Fiscal policy won't work – deficits & debt
- Institutions need modernization
- Political gridlock – new party?
- Totally dependent on exports
- Debt/GDP → 200% and rising?
- Collapse pending? Or Restructuring?
- Yen?

Japanese Yen/U.S. Dollar (inverted scale)



Iceland's Strategy – leveraging globalization

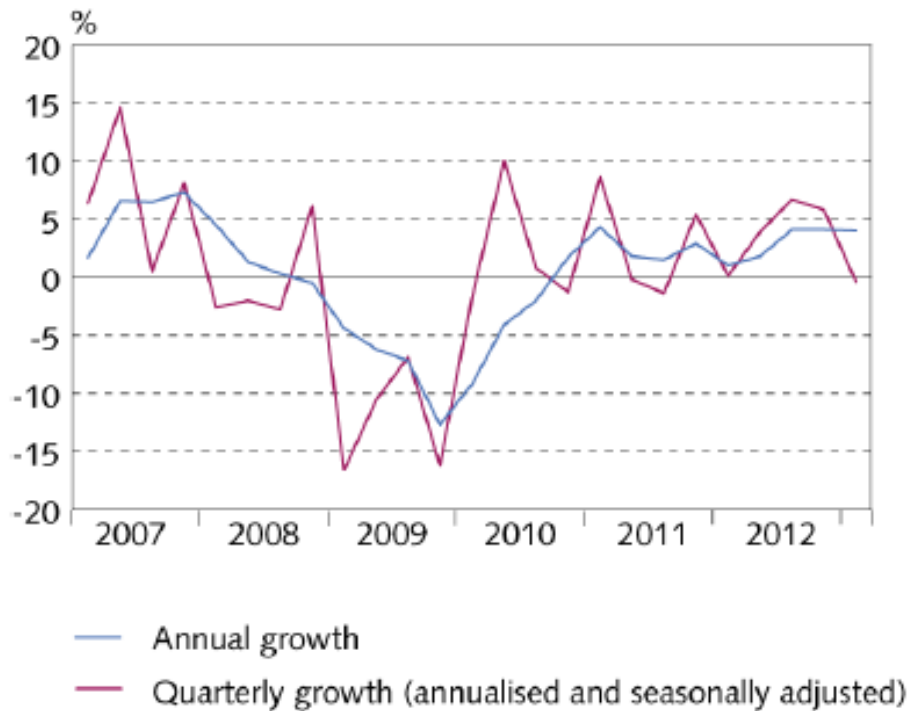
- Welfare State
- Housing Finance Fund
- Deregulation of Market Economy
- Inflation targeting -> high i%
- Aluminium FDI
- Carry trade – leveraged financial growth
- Foreign debt up; Unit Labor Costs up



- Global Financial Crisis

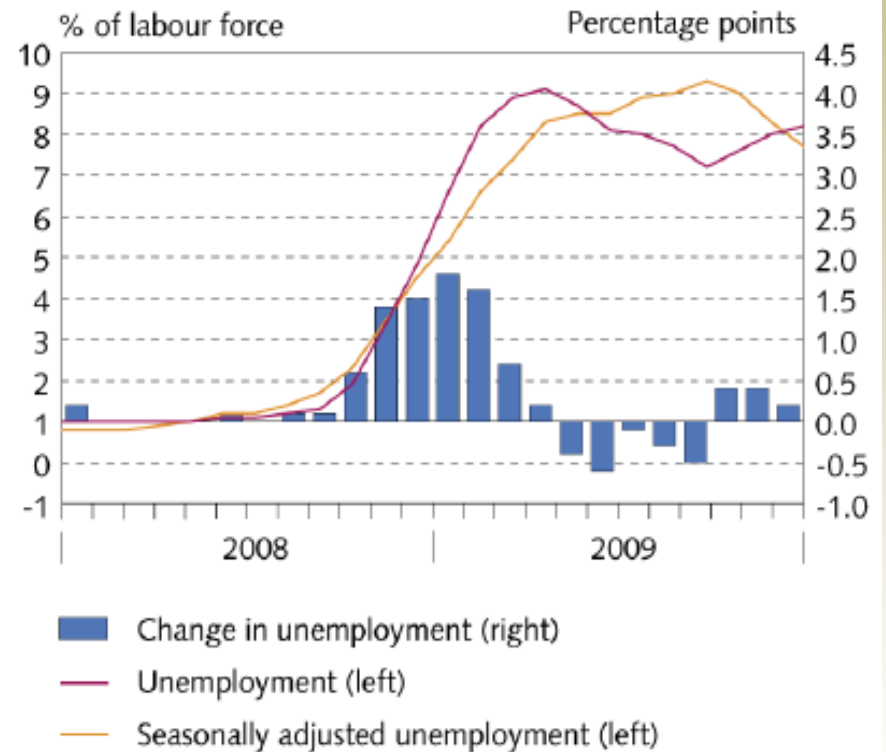
Iceland Today

Economic growth¹



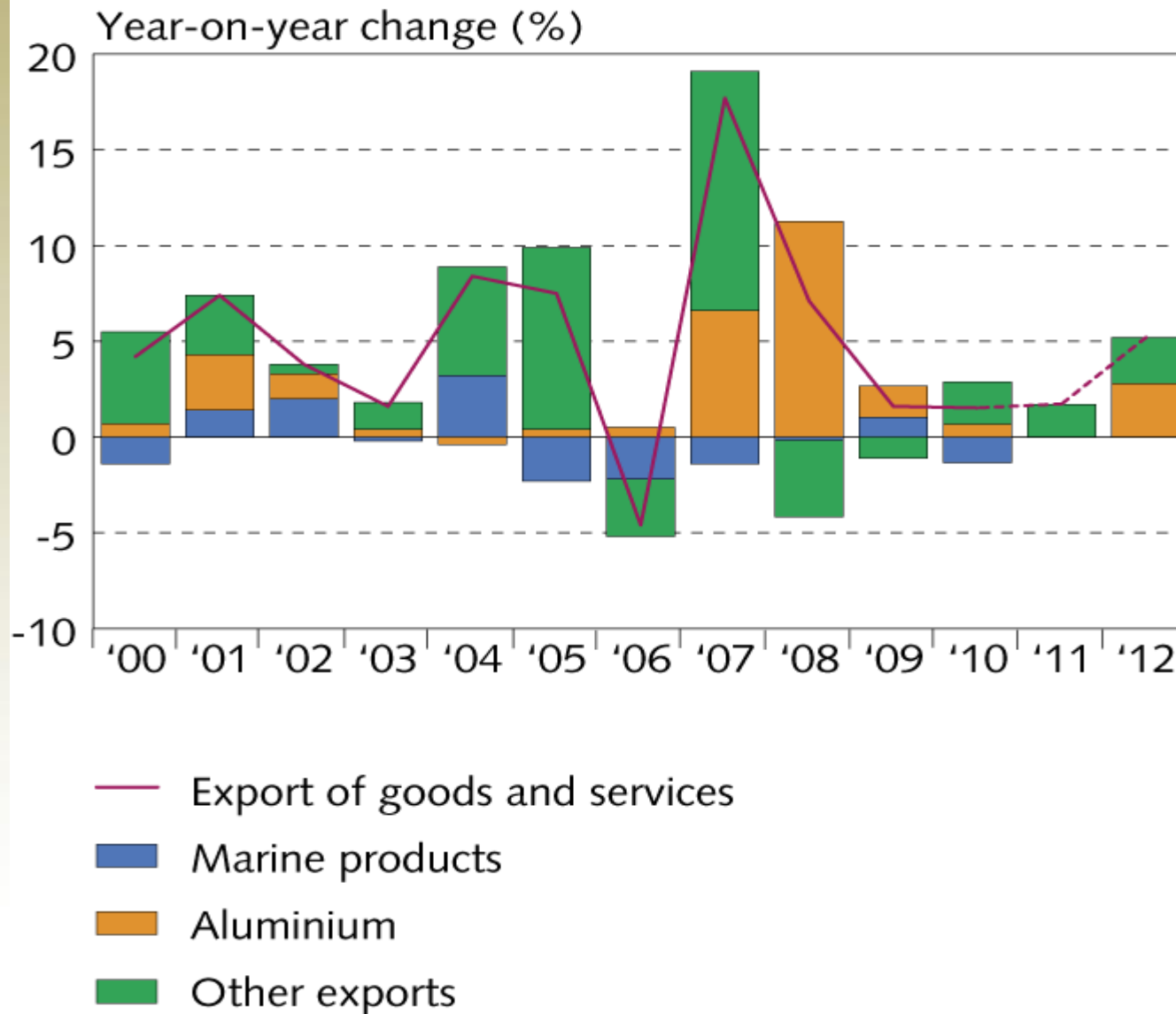
1. Central Bank baseline forecast Q4/2009 - Q1/2013.
Sources: Statistics Iceland, Central Bank of Iceland.

Unemployment

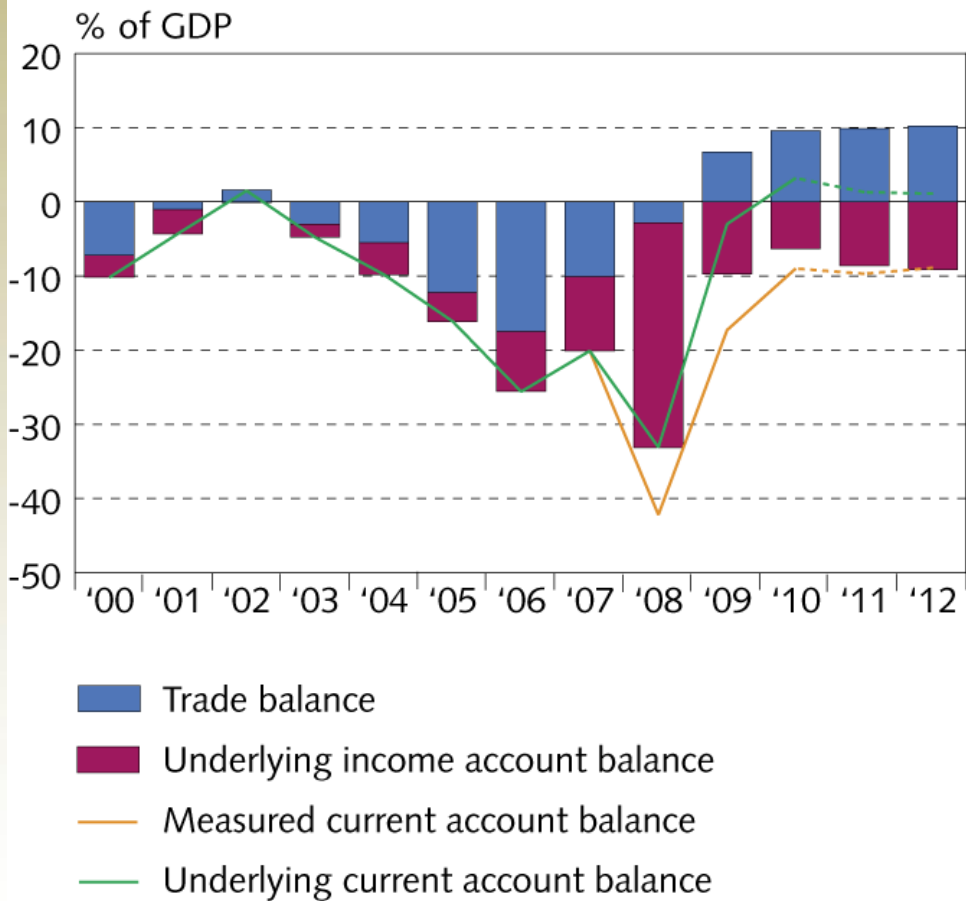


Sources: Directorate of Labour, Central Bank of Iceland.

Export development and its main components 2000-2012¹

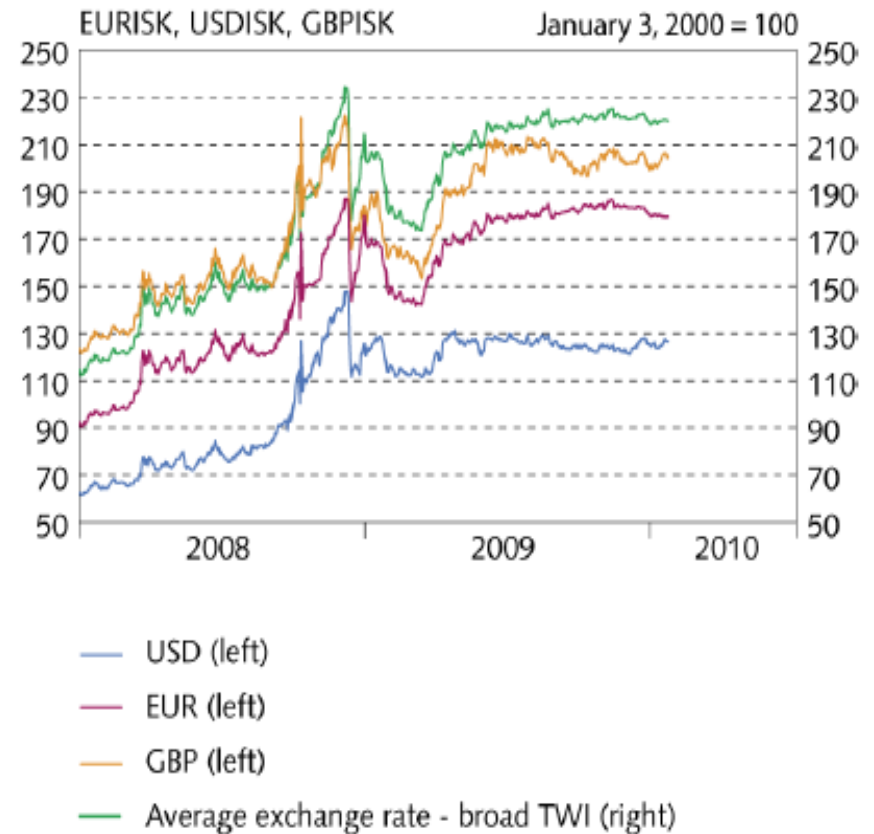


Current account balance 2000-2012¹



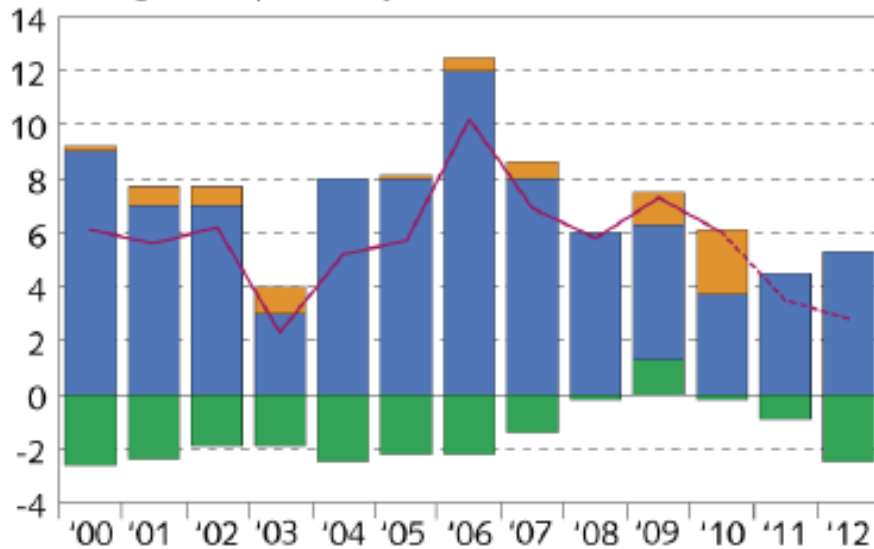
Exchange rate of the króna

Daily data January 3, 2008 - January 22, 2010



Unit labour costs and contributions of underlying components 2000-2012¹

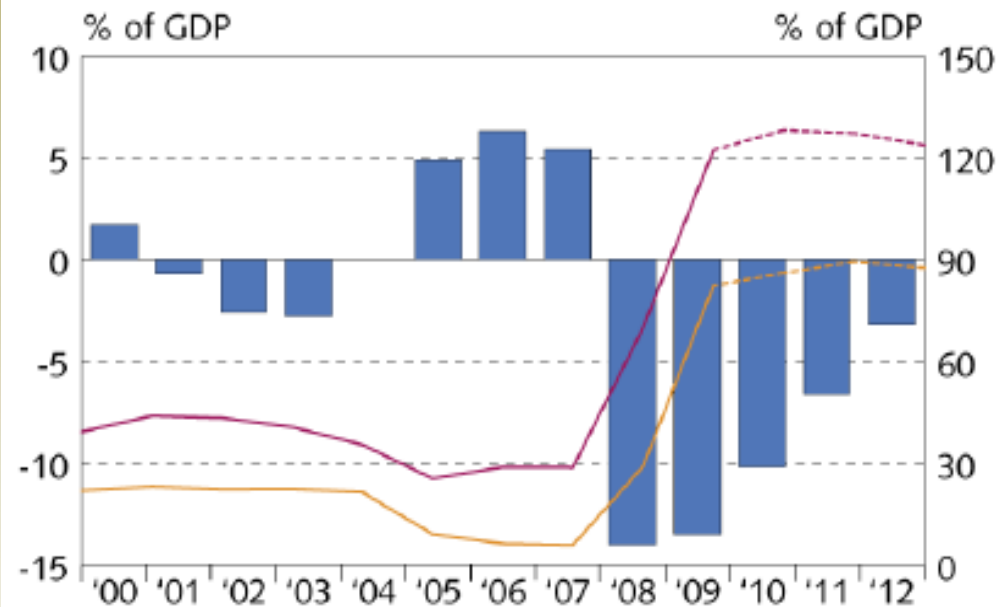
Change from previous year (%)



- Nominal wages
- Labour costs other than wages
- Trend labour productivity
- Unit labour costs

1. Central Bank baseline forecast 2009-2012.
Sources: Statistics Iceland, Central Bank of Iceland.

Public sector finances 2000-2012¹



- Fiscal balance (left)
- Gross debt (right)
- Net debt (right)

1. Central Bank baseline forecast 2009-2012.
Sources: Ministry of Finance, Statistics Iceland, Central Bank of Iceland.

Iceland

Baseline macroeconomic and inflation forecast 2010/1

Table 1 Macroeconomic forecast¹

	B.kr	Volume change on previous year (%) unless otherwise stated				
		2008	Forecast			
	2008	2008	2009	2010	2011	2012
<i>GDP and its main components</i>						
Private consumption	789.5	-7.8 (-7.8)	-16.0 (-16.2)	-1.2 (-4.0)	2.7 (1.9)	4.2 (4.4)
Public consumption	367.3	4.6 (4.6)	-0.4 (-1.2)	-3.2 (-3.8)	-3.8 (-2.9)	-3.2 (-2.4)
Gross capital formation	357.3	-20.4 (-20.4)	-48.3 (-48.0)	-5.7 (4.4)	12.6 (3.6)	4.9 (1.8)
Business investment	211.0	-25.1 (-25.1)	-53.6 (-52.3)	12.6 (26.1)	20.7 (6.6)	2.3 (-1.9)
Residential investment	80.9	-21.8 (-21.8)	-50.6 (-44.3)	-18.7 (-13.4)	9.5 (6.1)	16.3 (14.1)
Public investment	65.5	0.8 (0.8)	-28.6 (-38.2)	-34.3 (-32.3)	-14.9 (-14.6)	4.4 (3.3)
National expenditure	1,517.5	-8.6 (-8.6)	-19.4 (-19.7)	-2.8 (-3.0)	2.3 (0.9)	2.5 (2.2)
Exports of goods and services	657.8	7.1 (7.1)	1.6 (1.3)	1.5 (1.4)	1.7 (3.9)	5.2 (5.9)
Imports of goods and services	698.8	-18.3 (-18.3)	-25.4 (-25.7)	0.0 (-2.3)	0.6 (0.9)	5.3 (3.6)
Gross domestic product	1,476.5	1.3 (1.3)	-7.7 (-8.5)	-3.4 (-2.4)	2.6 (2.2)	2.8 (3.4)
<i>Other key aggregates</i>						
Trade account balance (% of GDP)		-2.8 (-2.8)	6.7 (6.7)	9.6 (10.6)	9.9 (12.0)	10.2 (13.1)
Current account balance (% of GDP)		-42.2 (-42.2)	-17.3 (-14.0)	-9.0 (-10.2)	-9.7 (-8.3)	-8.9 (-5.6)
Underlying current account balance (% of GDP)		-33.1	-3.0 (-1.0)	3.2 (2.1)	1.3 (3.0)	1.1 (4.6)
Output gap (% of potential output) ²		2.0 (1.9)	-3.9 (-4.2)	-4.3 (-3.5)	-1.0 (-0.7)	-0.2 (0.9)
Unit labour cost (change in average year-on-year)		5.8 (5.9)	7.3 (7.6)	6.0 (2.8)	3.5 (3.2)	2.8 (3.0)
Real disposable income (change in average year-on-year)		0.5 (0.6)	-17.6 (-19.2)	-9.7 (-15.8)	-1.6 (0.0)	2.6 (2.6)
Unemployment (% of labour force)		1.6 (1.6)	8.0 (8.2)	9.5 (9.8)	9.0 (8.9)	6.8 (6.6)
EURISK exchange rate		127.0 (127.0)	172.0 (171.7)	179.1 (175.6)	174.4 (170.4)	173.2 (168.9)

1. Figures in parentheses are from the forecast in *Monetary Bulletin* 2009/4.

2. Current account without accrued interests due to deposit institutions' undergoing winding-up proceedings and domestic subsidiary.



USA 1980 – Inefficient Markets

- GDP growth -0.3%
- Unemployment 7.5% and rising
- Inflation 10% (cpi 12.6%)
- Trade deficit \$28 billion and rising
- Productivity -0.6%
- Unit labor costs up 10.3%
- Regulated sectors inefficient
- Interest rates 19%
- Fiscal deficit 2.4% GDP
- \$\$ depreciating (against Y and DM)



Decontrol

- Tighten monetary policy
- Cut taxes (25% marginal income tax plus accelerated depreciation and itc)
- Deregulate transportation, energy telecommunications and banking
- Let dollar rise 63%



Phase One

- Deep recession (1982-83)
- Dollar appreciates
- Massive trade and current account deficits
- Huge defense expenditures
- Oil prices weaken
- US economy grows 3.4% annually
- Inflation drops to 2.3%
- Real interest rates eventually fall
- Massive fiscal deficits (1989-92)
- Gulf War



Phase Two

- Deficit Reduction Act (1993)
 - Maximum marginal tax rates hiked (41.5%)
 - Expenditures cut (\$112 bil./yr)
- Free trade (Uruguay Round & NAFTA)
- Investment boom
- Productivity grows 2.1%/year – mfg 4.1%
- GDP growth 4.1% per year
- Budget balanced
- Unit labor costs negative
- Dollar strengthens ('95-01)
- Savings falls to 1%, current account to -\$410 bn



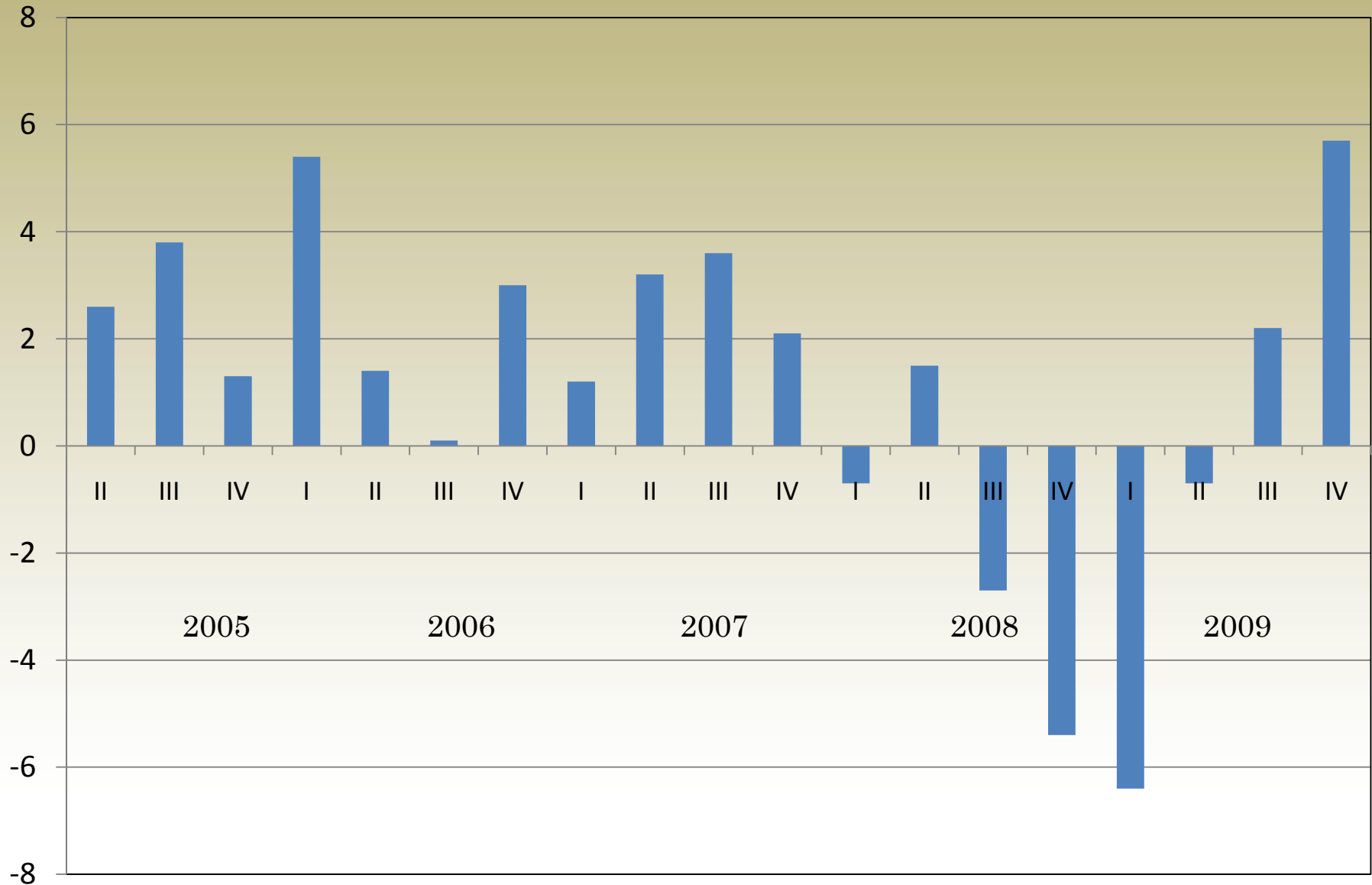
Phase Three – Deficits & Terrorism

- September 11th
- Afghanistan
- Homeland Security
- Iraq
- Four tax cuts - \$1.3 tril, \$100 bil, \$360 bil, \$156 bil.
- Fiscal surplus (\$236 bn) to deficit (\$455 bn)
- Savings to -0.1%
- Debt from \$5.6 to \$12.0 trillion (back to 80%/GDP)
- Current account deficit to \$811 billion (now \$683)
- Net foreign debt to \$3.4 trillion
- \$\$ collapsing...



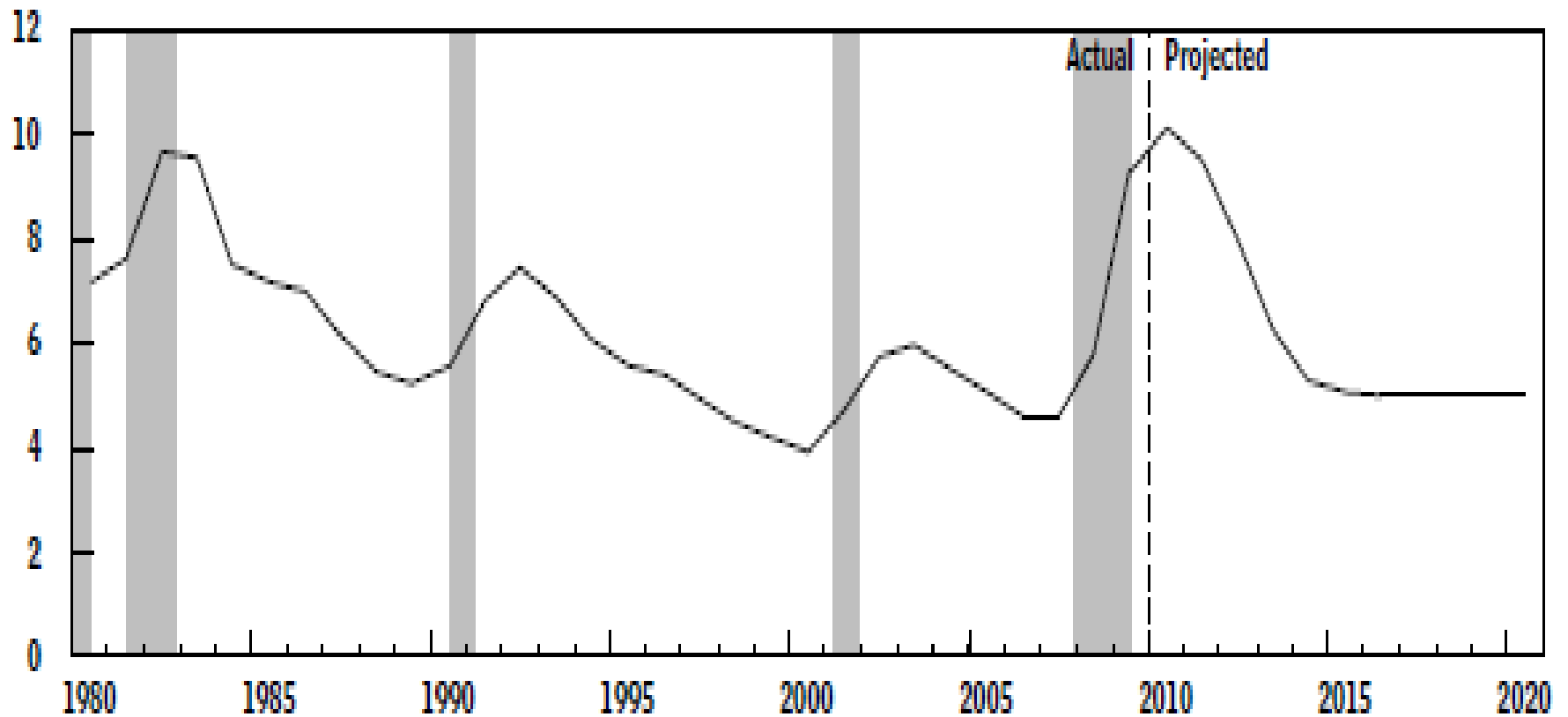
United States Real GDP, 2005-2009

(quarterly, billions of chained 2000 dollars)



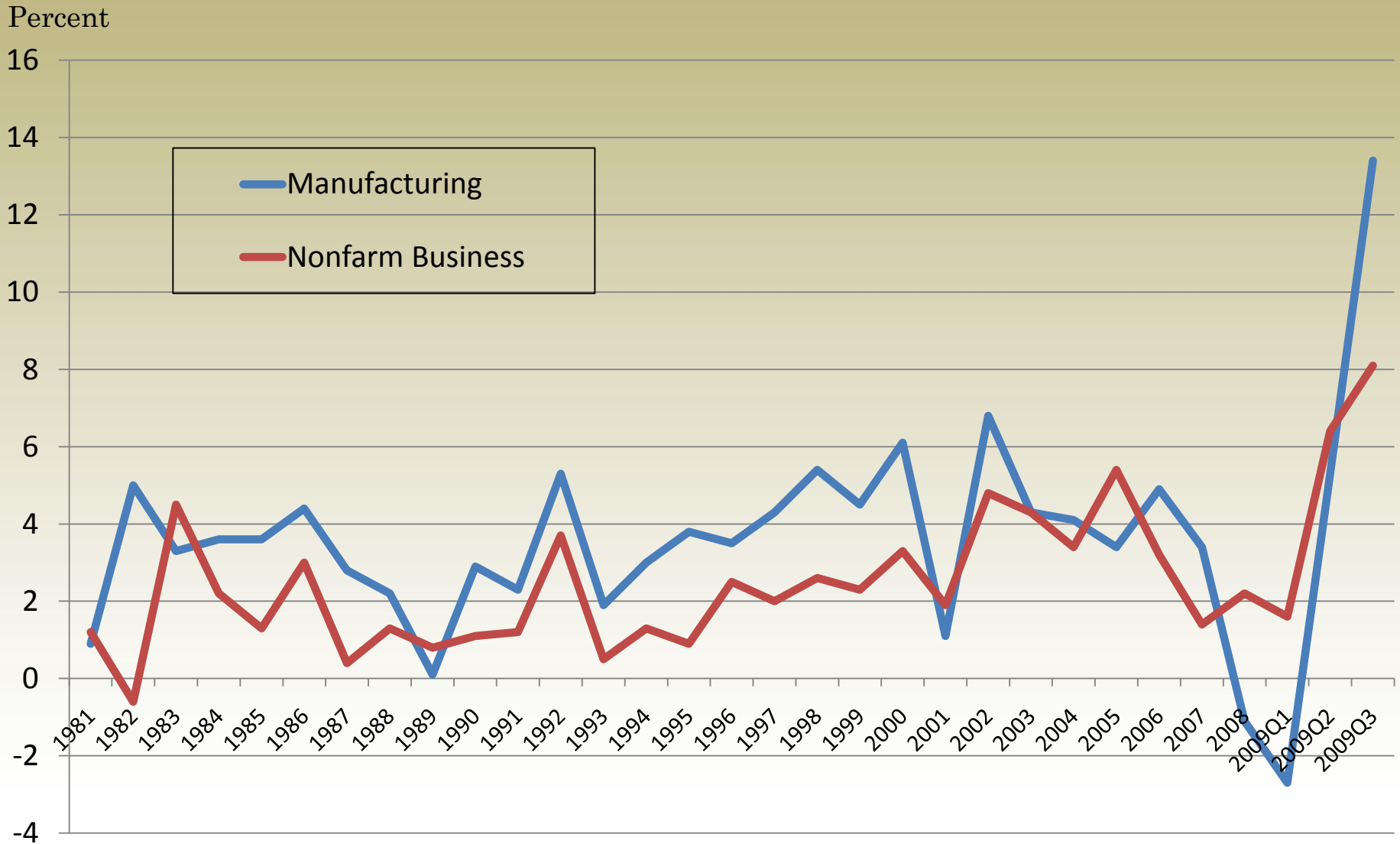
Unemployment Rate

(Percent)



Source: Congressional Budget Office.

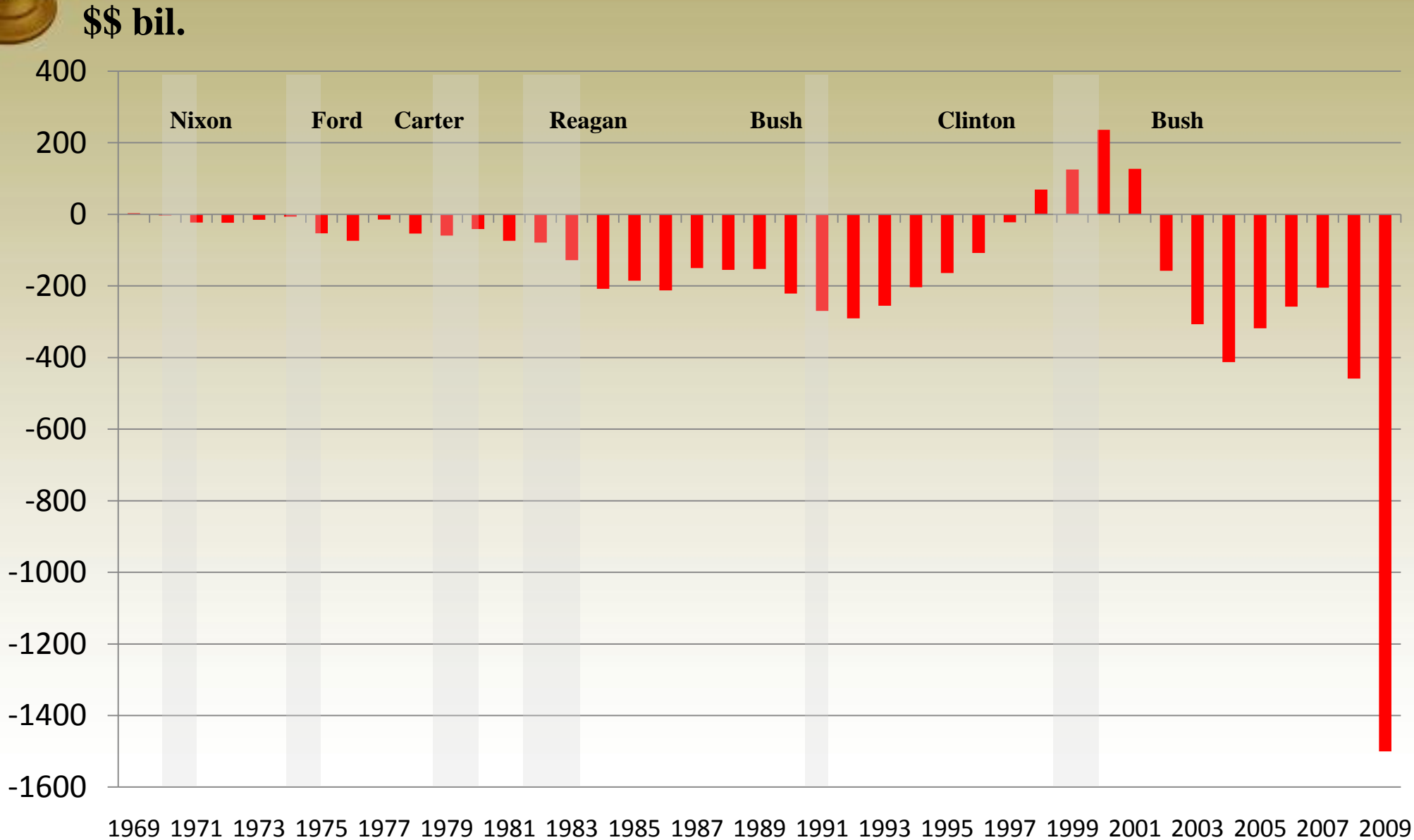
Good News - US Productivity: 1981-2009



Source: Bureau of Labor Statistics, January 2010.

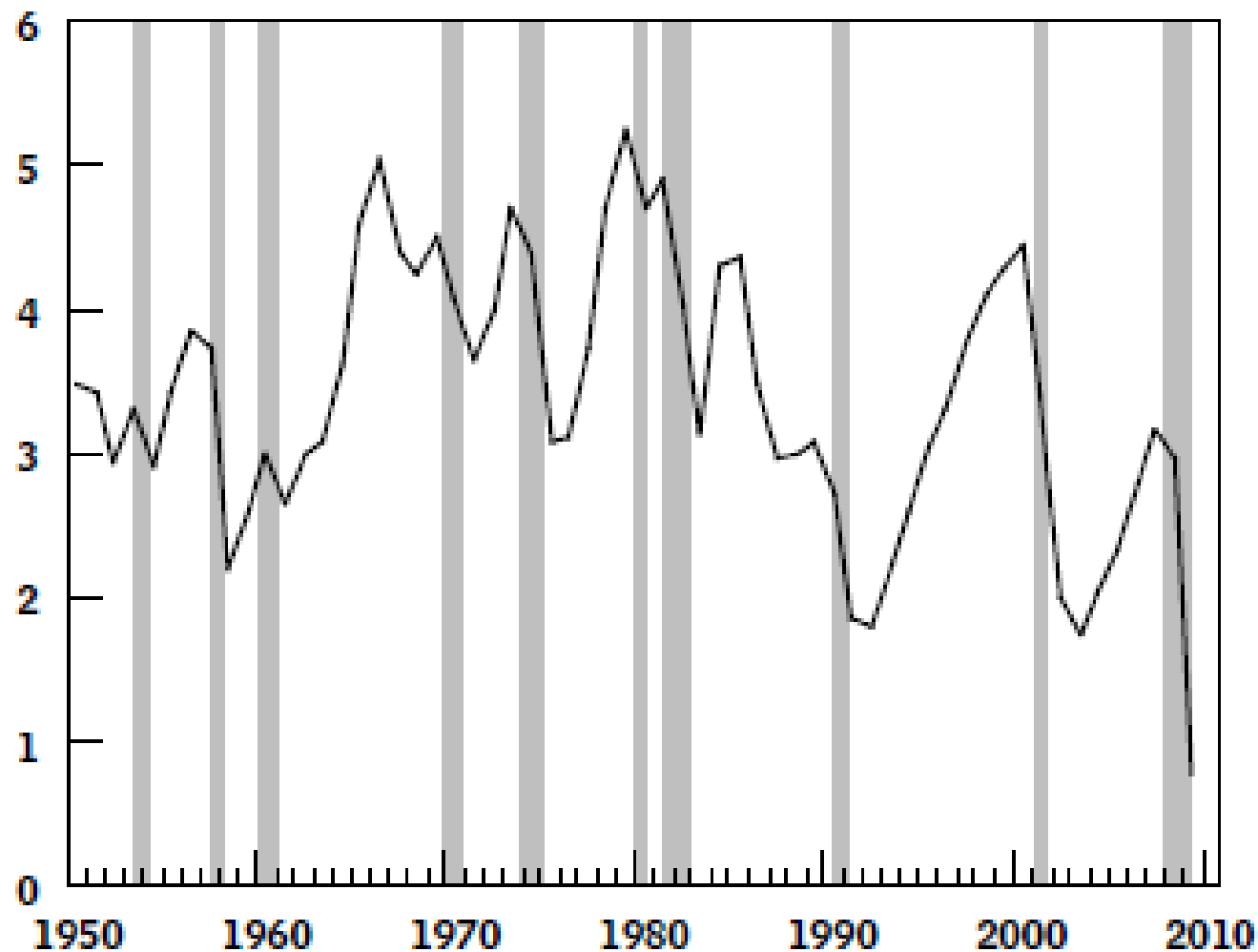


Bad News – Budget Deficits



Net Business Fixed Investment

(Percentage of gross domestic product)



Sources: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis.

Table S-4. Proposed Budget by Category
(In billions of dollars)

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Totals	
													2011-2015	2011-2020
Outlays:														
Appropriated ("discretionary") programs:														
Security	782	855	895	827	811	825	845	862	885	907	931	955	4,203	8,743
Non-security	437	553	520	475	456	457	465	475	486	497	511	529	2,373	4,871
Subtotal, appropriated programs	1,219	1,408	1,415	1,301	1,267	1,283	1,310	1,337	1,371	1,405	1,442	1,484	6,576	13,614
Mandatory programs:														
Social Security	678	715	730	762	801	845	893	945	1,002	1,064	1,130	1,201	4,030	9,373
Medicare	425	451	491	501	556	623	652	724	757	791	881	953	2,822	6,927
Medicaid	251	275	297	274	292	313	336	362	389	419	451	487	1,512	3,619
Troubled Asset Relief Program (TARP) ¹	151	-73	11	10	7	6	3	1	*	*	.....	.....	37	39
Allowance for jobs initiatives .....	.....	12	25	8	3	2	.....	.....	.....	.....	.....	.....	38	38
Allowance for health reform ² .....	.....	6	-7	-17	2	30	72	101	100	100	104	106	80	590
Other mandatory programs	607	737	619	570	547	546	544	563	567	568	616	637	2,826	5,775
Subtotal, mandatory programs	2,112	2,123	2,165	2,107	2,208	2,364	2,500	2,696	2,815	2,942	3,182	3,384	11,344	26,363
Net interest	187	188	251	343	436	510	571	627	681	733	786	840	2,110	5,777
Disaster costs ³ .....	.....	1	3	4	4	4	5	5	5	5	5	5	21	46
Total outlays	3,518	3,721	3,834	3,755	3,915	4,161	4,386	4,665	4,872	5,084	5,415	5,713	20,051	45,800
Receipts:														
Individual income taxes	915	936	1,121	1,326	1,468	1,604	1,733	1,856	1,980	2,102	2,223	2,338	7,253	17,752
Corporation income taxes	138	157	297	366	393	445	411	449	463	473	486	502	1,913	4,285
Social insurance and retirement receipts:														
Social Security payroll taxes	654	635	674	720	766	809	856	911	954	1,000	1,044	1,084	3,825	8,819
Medicare payroll taxes	191	180	192	208	223	237	251	267	280	293	307	318	1,112	2,578
Unemployment insurance	38	51	60	67	73	77	79	79	78	77	76	77	357	743
Other retirement	8	9	8	9	9	9	9	9	9	9	9	10	43	89
Excise taxes	62	73	74	81	85	87	88	89	90	90	91	92	415	867
Estate and gift taxes	23	17	25	23	24	26	28	30	32	35	37	40	124	298
Customs duties	22	24	27	32	35	37	39	42	44	47	49	52	170	404
Deposits of earnings, Federal Reserve System	34	77	79	67	59	52	48	50	52	55	57	59	305	578
Allowance for jobs initiatives .....	.....	-12	-25	-8	-3	-2	.....	.....	.....	.....	.....	.....	-38	-38
Allowance for health reform ² .....	.....	.....	16	18	39	58	74	86	93	101	110	119	204	712
Other miscellaneous receipts	18	18	17	17	17	18	18	18	18	19	19	19	87	180
Total receipts	2,105	2,165	2,567	2,926	3,188	3,455	3,634	3,887	4,094	4,299	4,507	4,710	15,771	37,268
Deficit	1,413	1,556	1,267	828	727	706	752	778	778	785	908	1,003	4,280	8,532

Table 2-1. ECONOMIC ASSUMPTIONS¹

(Calendar years; dollar amounts in billions)

	2008 Actual	Projections											
		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Gross Domestic Product (GDP):													
Levels, dollar amounts in billions:													
Current dollars	14,441	14,252	14,768	15,514	16,444	17,433	18,446	19,433	20,408	21,373	22,329	23,312	24,323
Real, chained (2005) dollars	13,312	12,973	13,317	13,823	14,416	15,027	15,633	16,194	16,714	17,190	17,643	18,091	18,543
Chained price index (2005 = 100), annual average	108.5	109.8	110.8	112.2	114.0	116.0	117.9	120.0	122.0	124.3	126.5	128.8	131.1
Percent change, fourth quarter over fourth quarter:													
Current dollars	0.1	0.4	4.0	5.7	6.1	6.0	5.7	5.2	5.0	4.5	4.5	4.4	4.3
Real, chained (2005) dollars	-1.9	-0.5	3.0	4.3	4.3	4.2	3.9	3.4	3.1	2.7	2.6	2.5	2.5
Chained price index (2005 = 100)	1.9	0.9	1.0	1.4	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.8
Percent change, year over year:													
Current dollars	2.6	-1.3	3.8	5.1	6.0	6.0	5.8	5.3	5.0	4.7	4.5	4.4	4.3
Real, chained (2005) dollars	0.4	-2.5	2.7	3.8	4.3	4.2	4.0	3.7	3.2	2.8	2.6	2.5	2.5
Chained price index (2005 = 100)	2.1	1.2	0.9	1.2	1.6	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.8
Incomes, billions of current dollars:													
Corporate profits before tax	1,463	1,418	1,816	1,933	1,918	1,915	1,924	1,998	2,031	2,058	2,076	2,087	2,150
Employee Compensation	8,037	7,762	8,040	8,499	9,041	9,626	10,247	10,855	11,447	12,024	12,612	13,197	13,792
Wages and salaries	6,546	6,259	6,468	6,825	7,293	7,776	8,288	8,783	9,263	9,733	10,198	10,667	11,134
Other taxable income ²	3,311	3,081	3,204	3,327	3,591	3,830	4,049	4,218	4,434	4,662	4,857	5,073	5,305
Consumer Price Index (all urban):³													
Level (1982-84 = 100), annual average	215.2	214.5	218.7	222.0	226.3	230.8	235.5	240.2	245.1	250.3	255.5	260.9	266.4
Percent change, fourth quarter over fourth quarter	1.5	1.4	1.3	1.7	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1
Percent change, year over year	3.8	-0.3	1.9	1.5	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1
Unemployment rate, civilian, percent:													
Fourth quarter level	6.9	10.3	9.8	8.9	7.9	7.0	6.2	5.7	5.4	5.3	5.2	5.2	5.2
Annual average	5.8	9.3	10.0	9.2	8.2	7.3	6.5	5.9	5.5	5.3	5.2	5.2	5.2
Federal pay raises, January, percent:													
Military ⁴	3.5	3.9	3.4	1.4	NA	NA	NA	NA	NA	NA	NA	NA	NA
Civilian ⁵	3.5	3.9	2.0	1.4	NA	NA	NA	NA	NA	NA	NA	NA	NA
Interest rates, percent:													
91-day Treasury bills ⁶	1.4	0.2	0.4	1.6	3.0	4.0	4.1	4.1	4.1	4.1	4.1	4.1	4.1
10-year Treasury notes	3.7	3.3	3.9	4.5	5.0	5.2	5.3	5.3	5.3	5.3	5.3	5.3	5.3

NA = Not Available

¹ Based on information available as of mid-November 2009.

² Rent, interest, dividend, and proprietors' income components of personal income.

³ Seasonally adjusted CPI for all urban consumers.

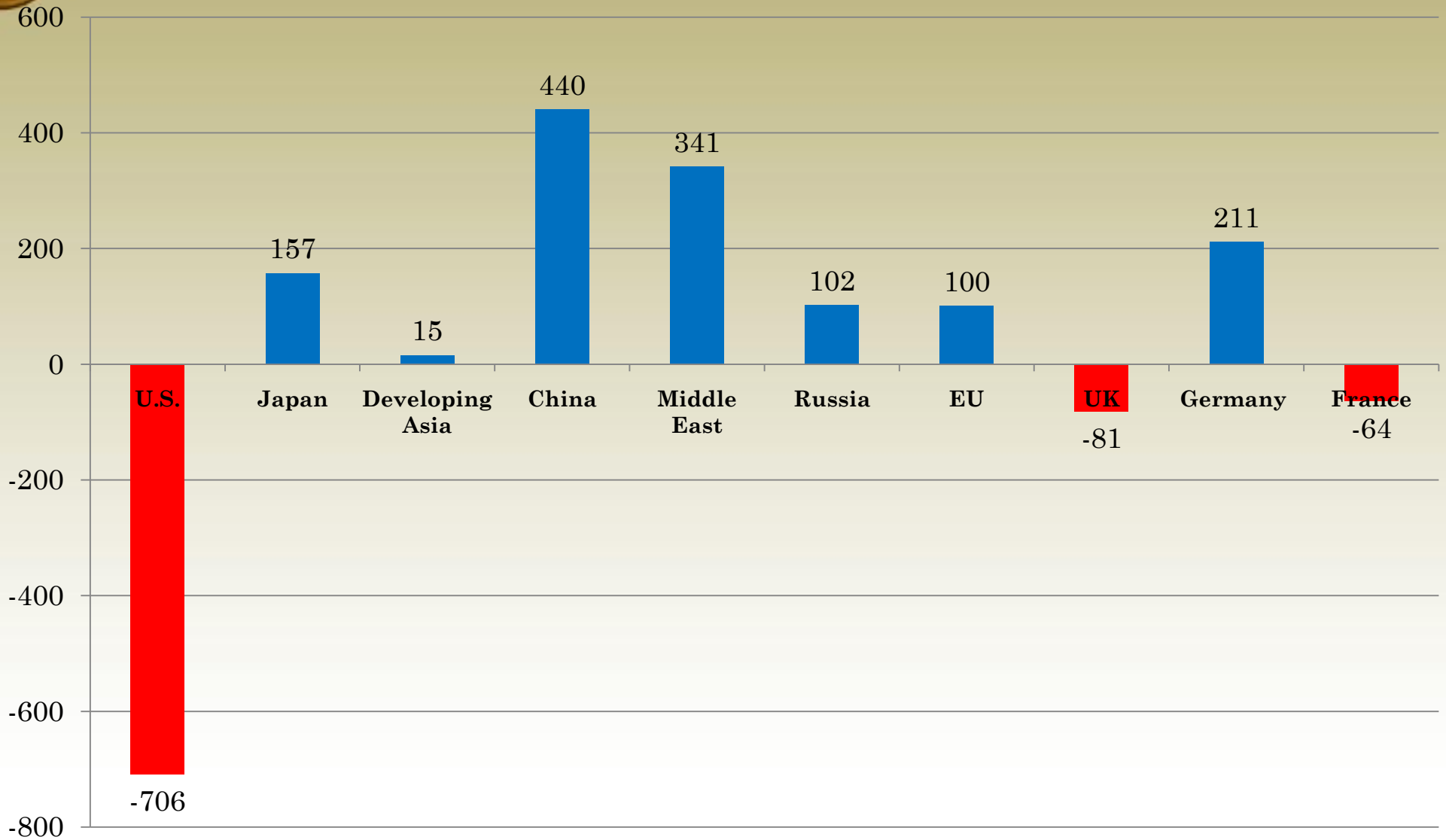
⁴ Percentages apply to basic pay only; percentages to be proposed for years after 2011 have not yet been determined.

⁵ Overall average increase, including locality pay adjustments. Percentages to be proposed for years after 2011 have not yet been determined.

⁶ Average rate, secondary market (bank discount basis).

Overall Global Current Account Imbalances in 2008

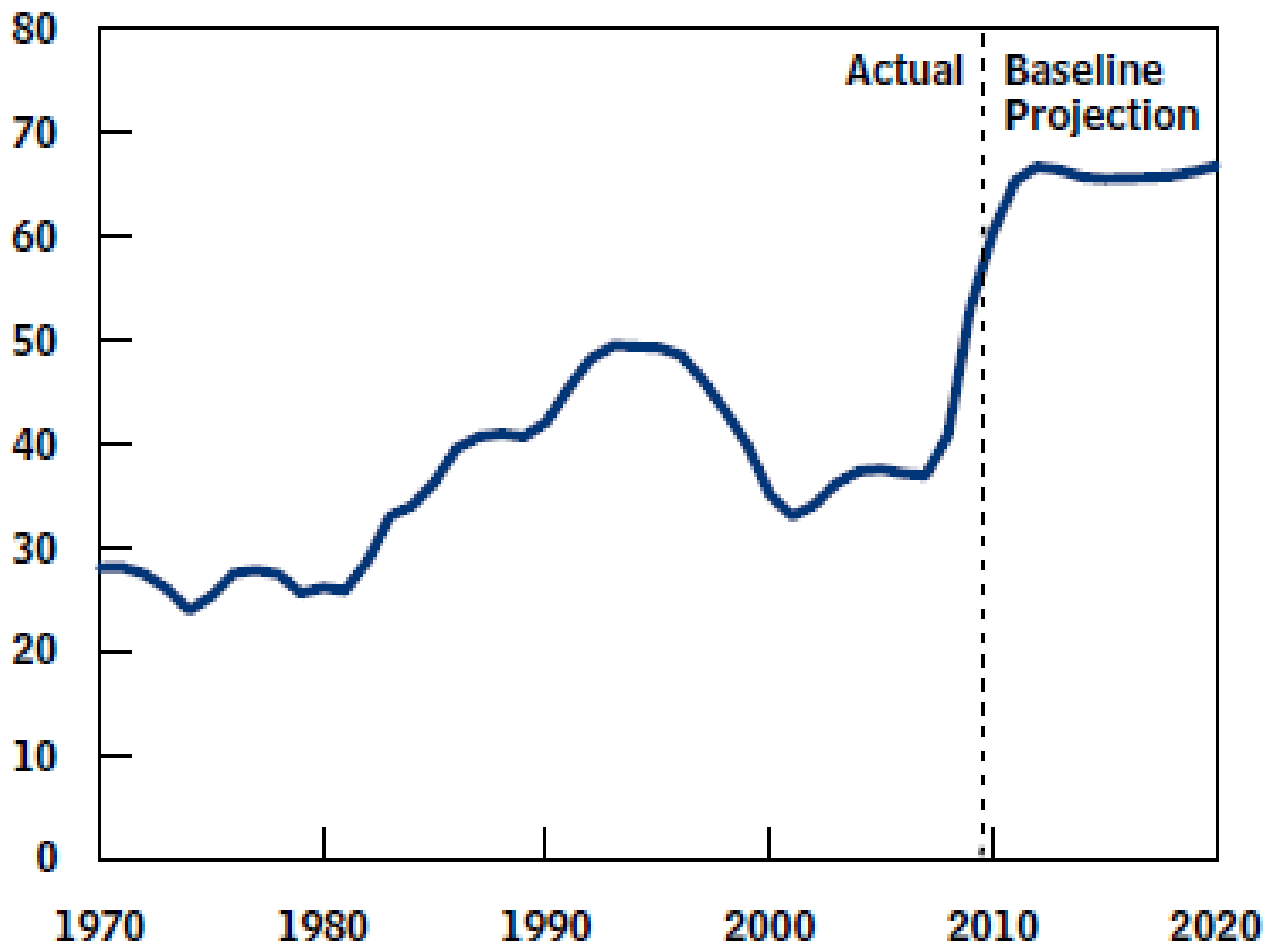
Billions \$\$



Source: IMF World Economic Outlook, April 2009

Federal Debt Held by the Public, 1970 to 2020

(Percentage of gross domestic product)

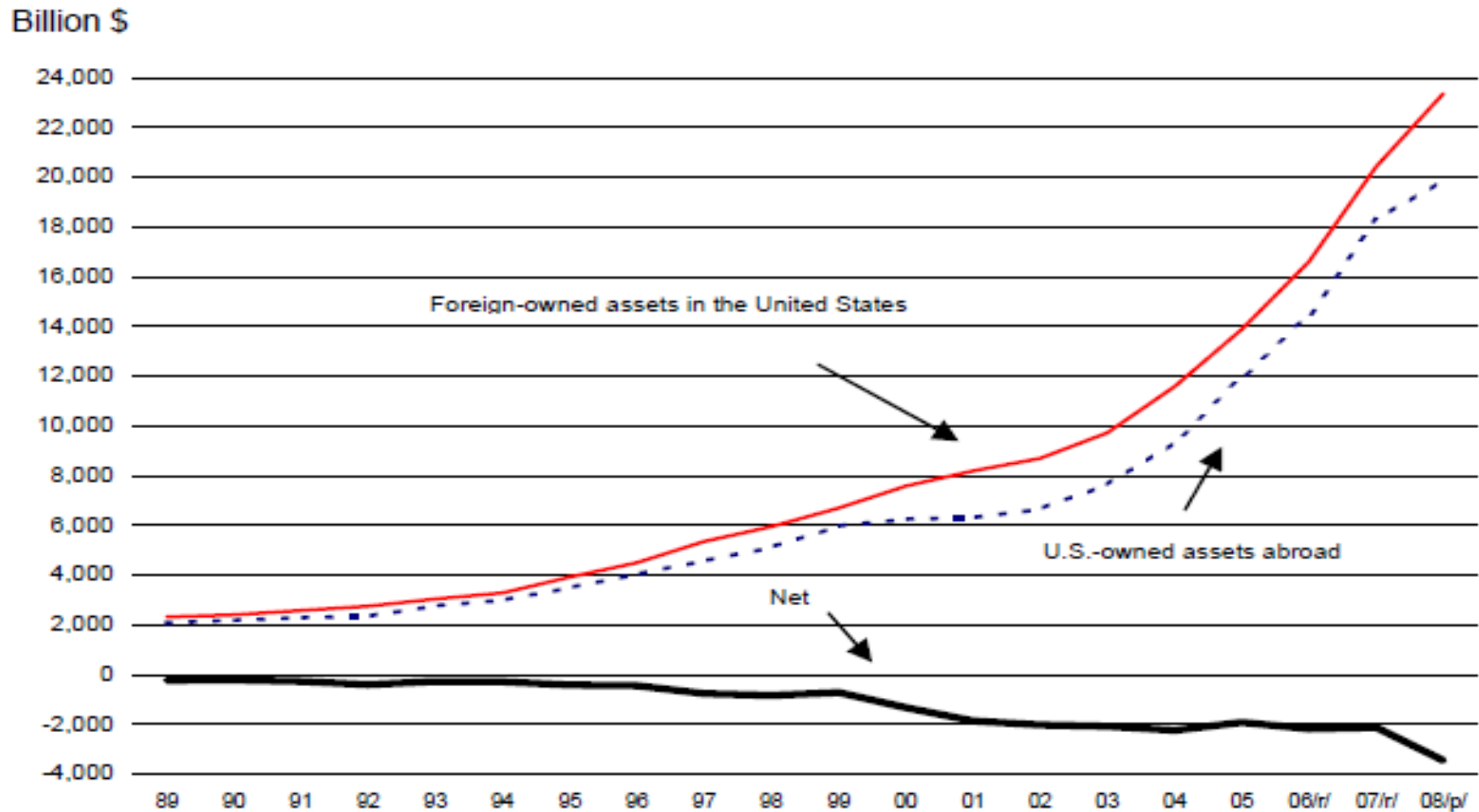


Source: Congressional Budget Office.

Note: Data are for debt held by the public at the end of the year.

Sad News for the Next Generation

Net International Investment Position of the United States at Yearend, 1989 - 2008



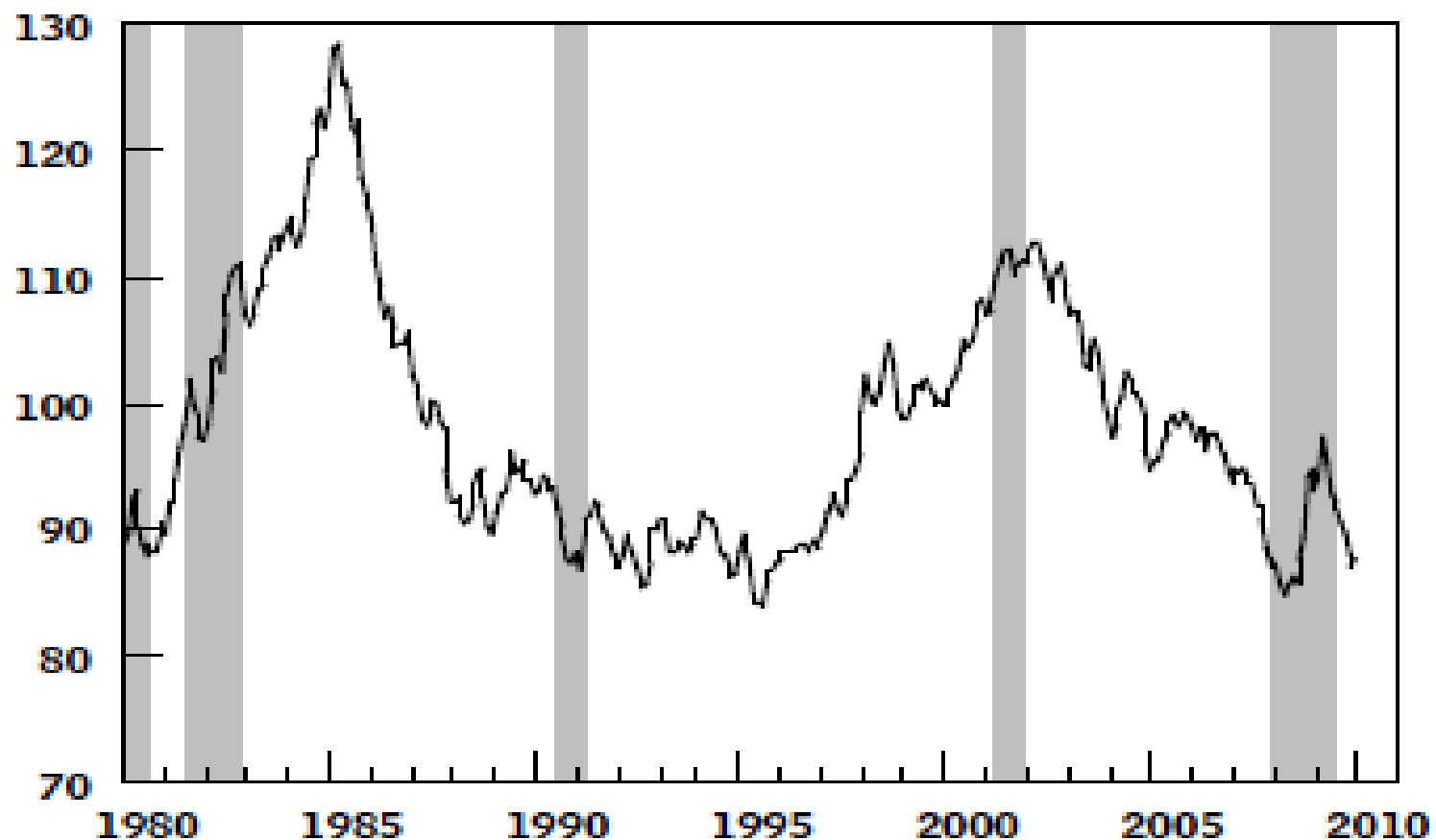
Central Bank Reserves

Rank	Country/Monetary Authority	Foreign exchange reserves (millions of USD)	Figures as of
—	World (sum of all countries)	7,178,805	--
1	People's Republic of China (includes Mainland China only)	1,946,000	Dec-08
2	Japan	1,009,354	Feb-09
-	Eurozone (EU member states which have adopted the euro, incl. ECB)	530,666	Feb-09
3	Russia	388,100	Mar-09
4	Republic of China	292,000	Mar-09
5	India	252,326	Mar-09
6	South Korea	206,340	Mar-09
7	Brazil	203,201	Mar-09
8	Hong Kong	186,200	Mar-09
9	Singapore	165,677	Nov-08
10	Algeria	145,363	Apr-09
11	Germany	143,518	Feb-09
12	Thailand	114,198	Mar-09
14	Italy	110,811	Feb-09
13	France	99,930	Feb-09
15	Malaysia	88,400	Mar-09
16	Mexico	82,100	Feb-09
17	Iran	81,000	May-08
18	Libya	79,000	Sep-07
19	United States	75,654	Apr-09
20	Switzerland	73,315	Feb-09
21	Turkey	68,600	Mar-09
22	United Kingdom	64,332	Mar-09
23	Poland	63,847	Oct-08
—	European Central Bank (ECB, not owned by any single EU member)	62,921	Feb-08
24	Nigeria	50,900	Jan-09
25	Indonesia	54,800	Mar-09

Good news – US Dollar has weakened, some

Trade-Weighted Exchange Value of the U.S. Dollar

(Index, March 1973 = 100)



Sources: Congressional Budget Office; Federal Reserve.



How Countries Compete

1. **Governments must guarantee basic property rights;**
2. **Governments must maintain sound macroeconomic policies:**
 - **Fiscal deficits cannot continue indefinitely,**
 - **Entitlements should be limited and securely funded;**
 - **Taxes should be somewhat redistributive and discourage excessive consumption;**
3. **Strong (not necessarily independent) central banks are necessary for non-inflationary growth;**
4. **Microeconomic liberalization (trade, foreign investment and privatization) by government is eventually necessary in a competitive global economy, but financial markets must be regulated...**
5. **Governments must maintain labor market flexibility to enhance productivity and facilitate competitiveness;**
6. **Government must manage resource endowments carefully;**
7. **Governments must control corruption;**
8. **Governments are responsible for insuring equitable income distribution;**
9. **Governments must stimulate savings and investment;**
10. **Governments can not allow unsustainable current account asymmetries.**

