On Global Macroeconomic Imbalances

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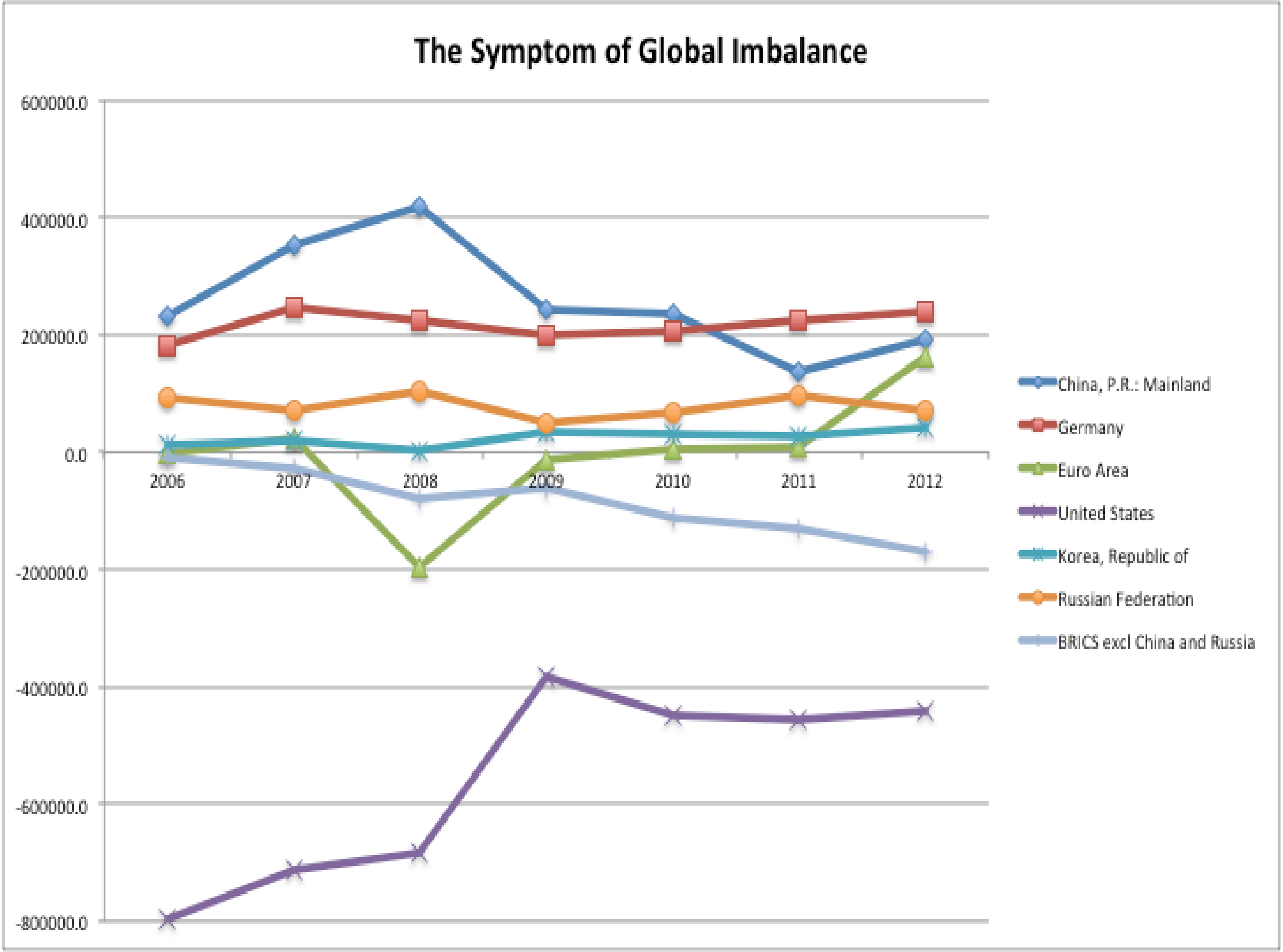
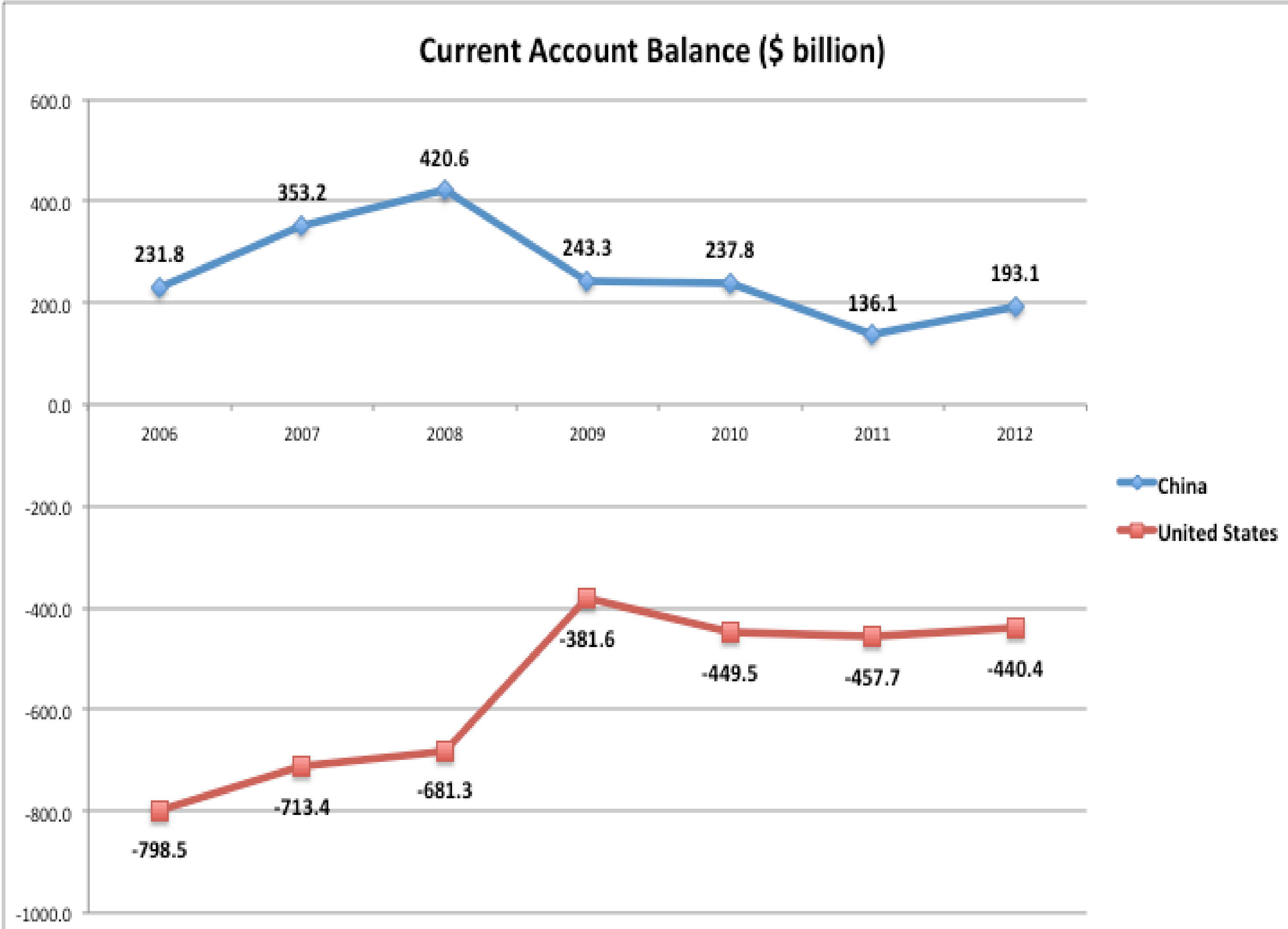
Global imbalance and the crisis

- Ever since the 2008 crisis broke, one strand of explanation traces it to the emergence of some kind of ‘global’ imbalance
- Capitalism is after all global, so this argument has an element of truth. But the real intention of some was to ‘export’ the cause of the crisis out of the centre to the periphery
- Not surprisingly the nature of the imbalance varies among those advocating this argument

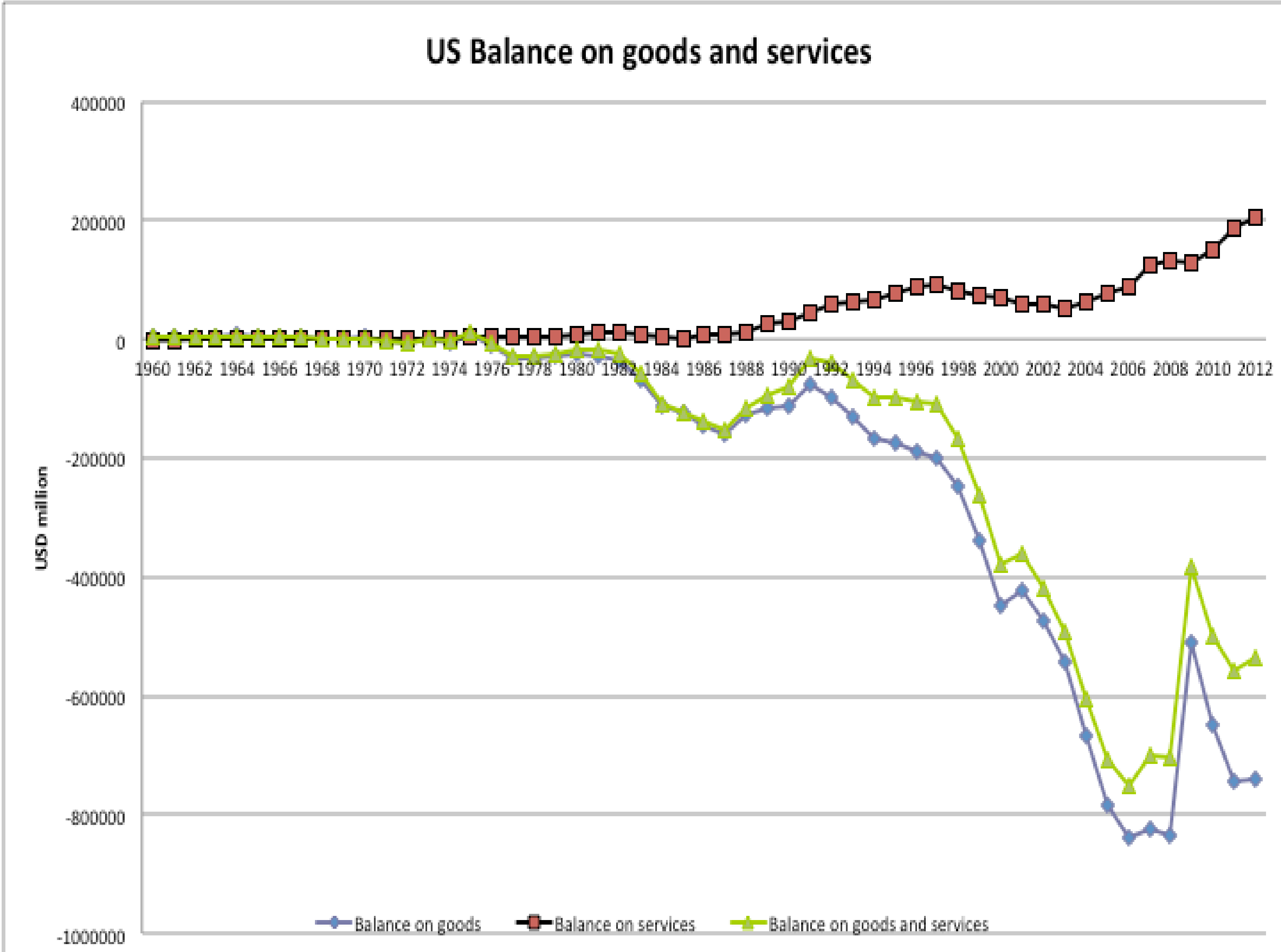
The obvious sign of imbalance

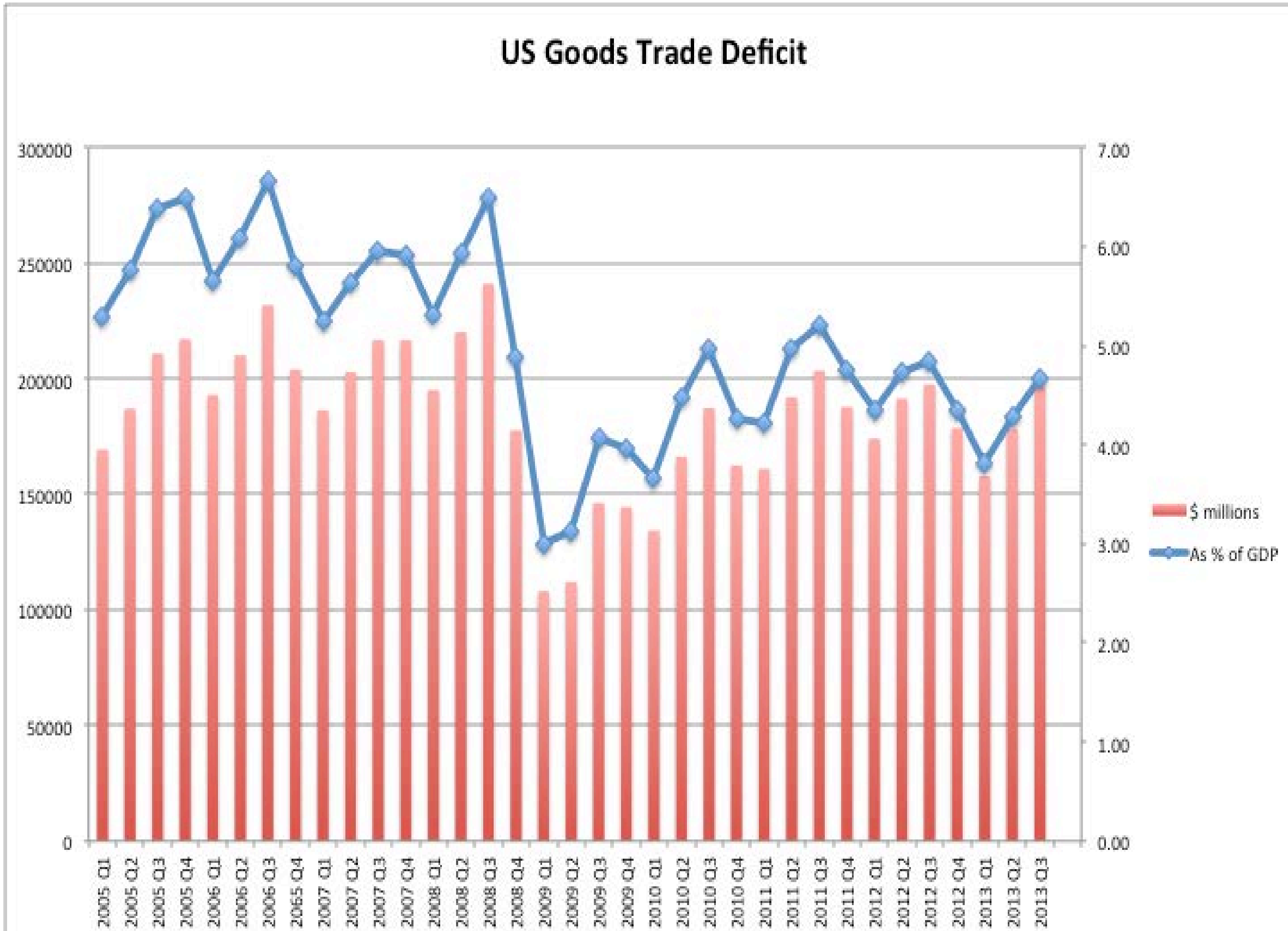
- The deficit on the current account of the US balance of payments
- But that has been falling
  - $110 billion in the third quarter of 2013 down from 230 billion in the corresponding quarter of 2006.
  - Attributed to corrections that are occurring in the US and in the rest of the world.


The Symptom of Global Imbalance
600000.0
400000.0
200000.0
0.0
-200000.0
-400000.0
-600000.0
-800000.0
2006
2007
2008
2009
2010
2011
2012
China, P.R.: Mainland
Germany
Euro Area
United States
Korea, Republic of
Russian Federation
BRICS excl China and Russia



Current Account Balance ($ billion)
600.0
400.0
200.0
0.0
-200.0
-400.0
-600.0
-800.0
-1000.0
2006
2007
2008
2009
2010
2011
2012
231.8
353.2
420.6
243.3
237.8
136.1
193.1
-798.5
-713.4
-681.3
-381.6
-449.5
-457.7
-440.4
China
United States


US Balance on goods and services
400000
200000
0
-200000
-400000
-600000
-800000
-1000000
USD million
1960 1962 1964 1966 1968 1970 1972 1974 1976 1978 1980 1982 1984 1986 1988 1990 1992 1994 1996 1998 2000 2002 2004 2006 2008 2010 2012
Balance on goods
Balance on services
Balance on goods and services


US Goods Trade Deficit
300000
250000
200000
150000
100000
50000
0
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
2005 Q1
2005 Q2
2005 Q3
2005 Q4
2006 Q1
2006 Q2
2006 Q3
2065 Q4
2007 Q1
2007 Q2
2007 Q3
2007 Q4
2008 Q1
2008 Q2
2008 Q3
2008 Q4
2009 Q1
2009 Q2
2009 Q3
2009 Q4
2010 Q1
2010 Q2
2010 Q3
2010 Q4
2011 Q1
2011 Q2
2011 Q3
2011 Q4
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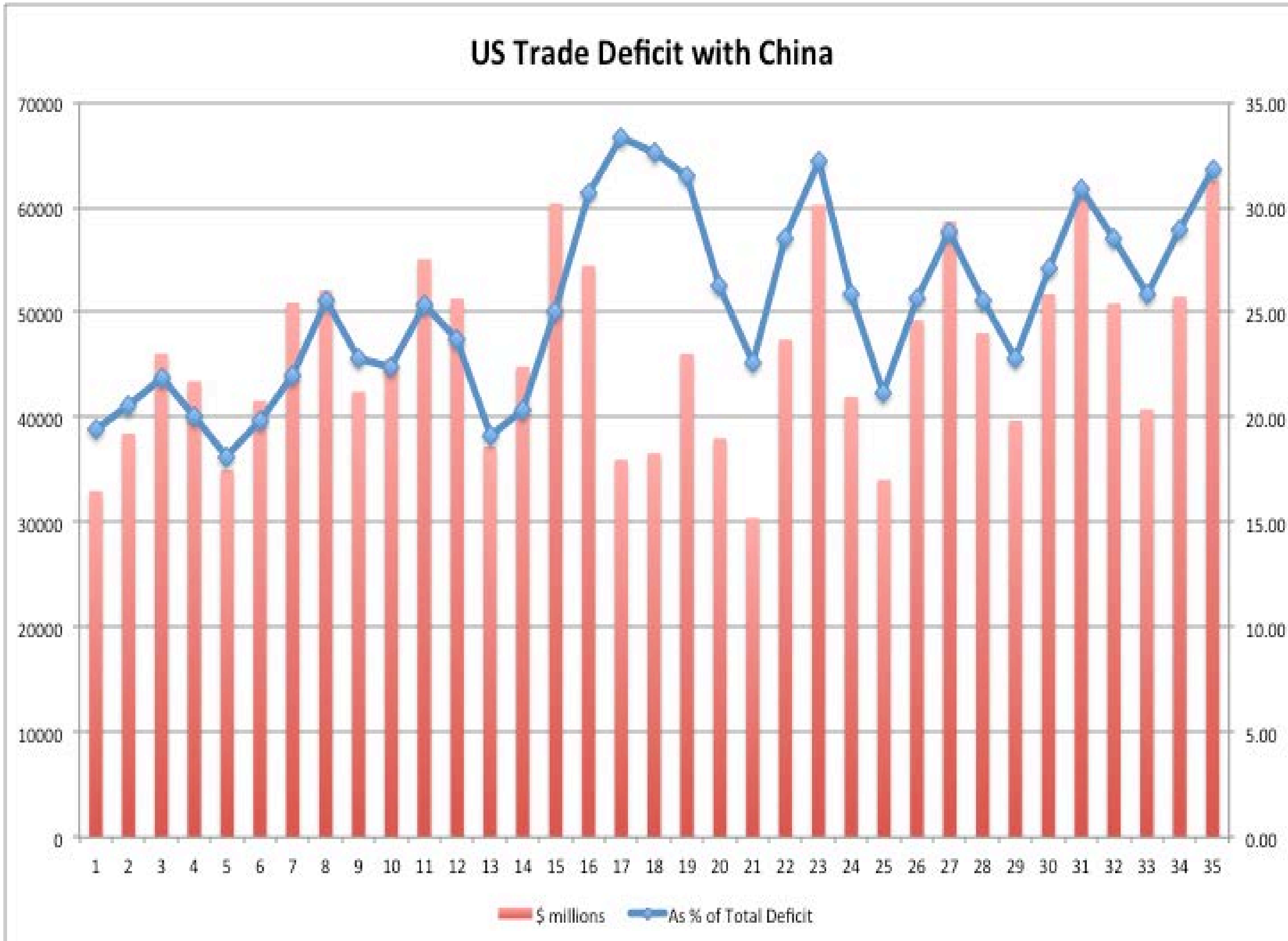
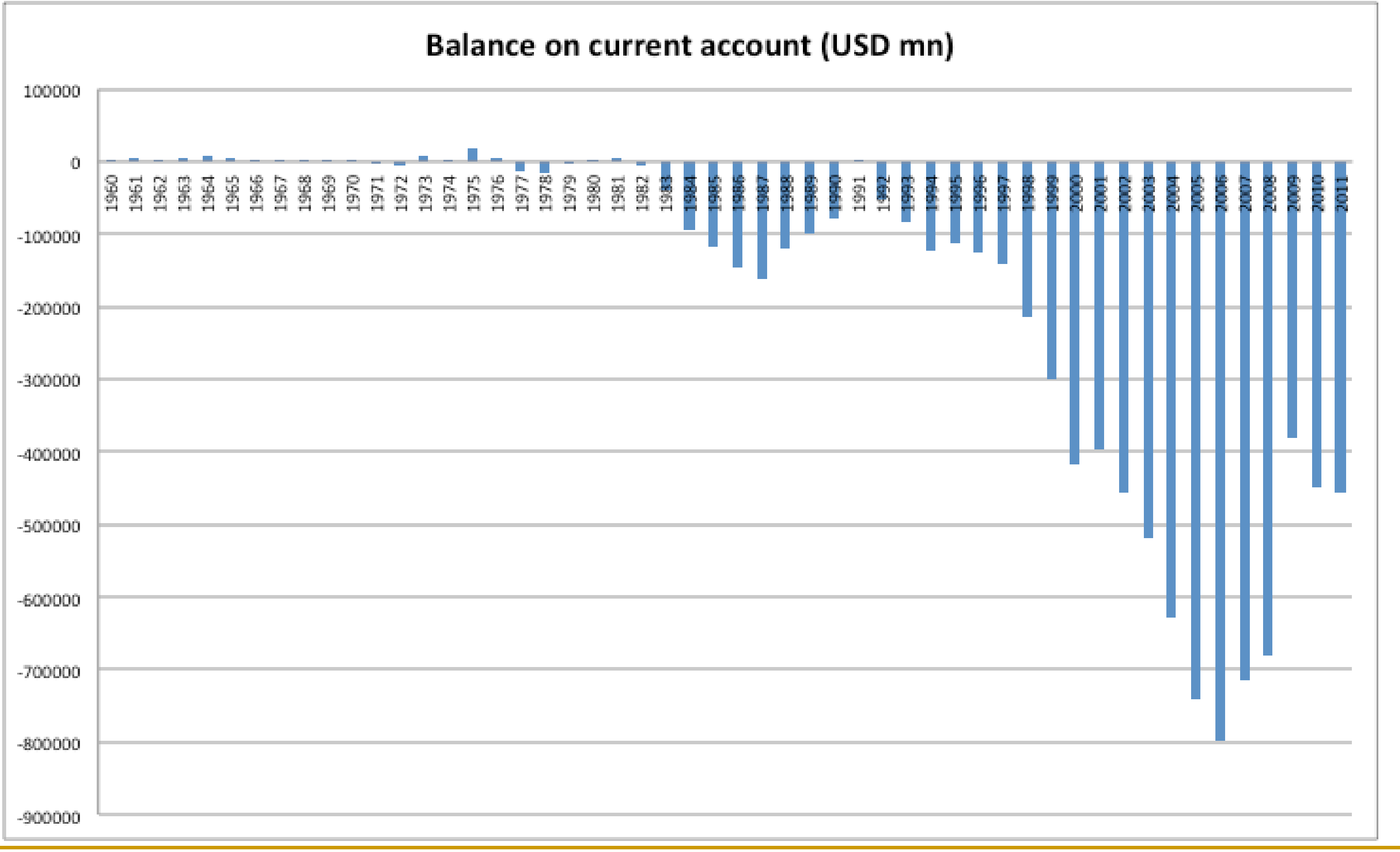
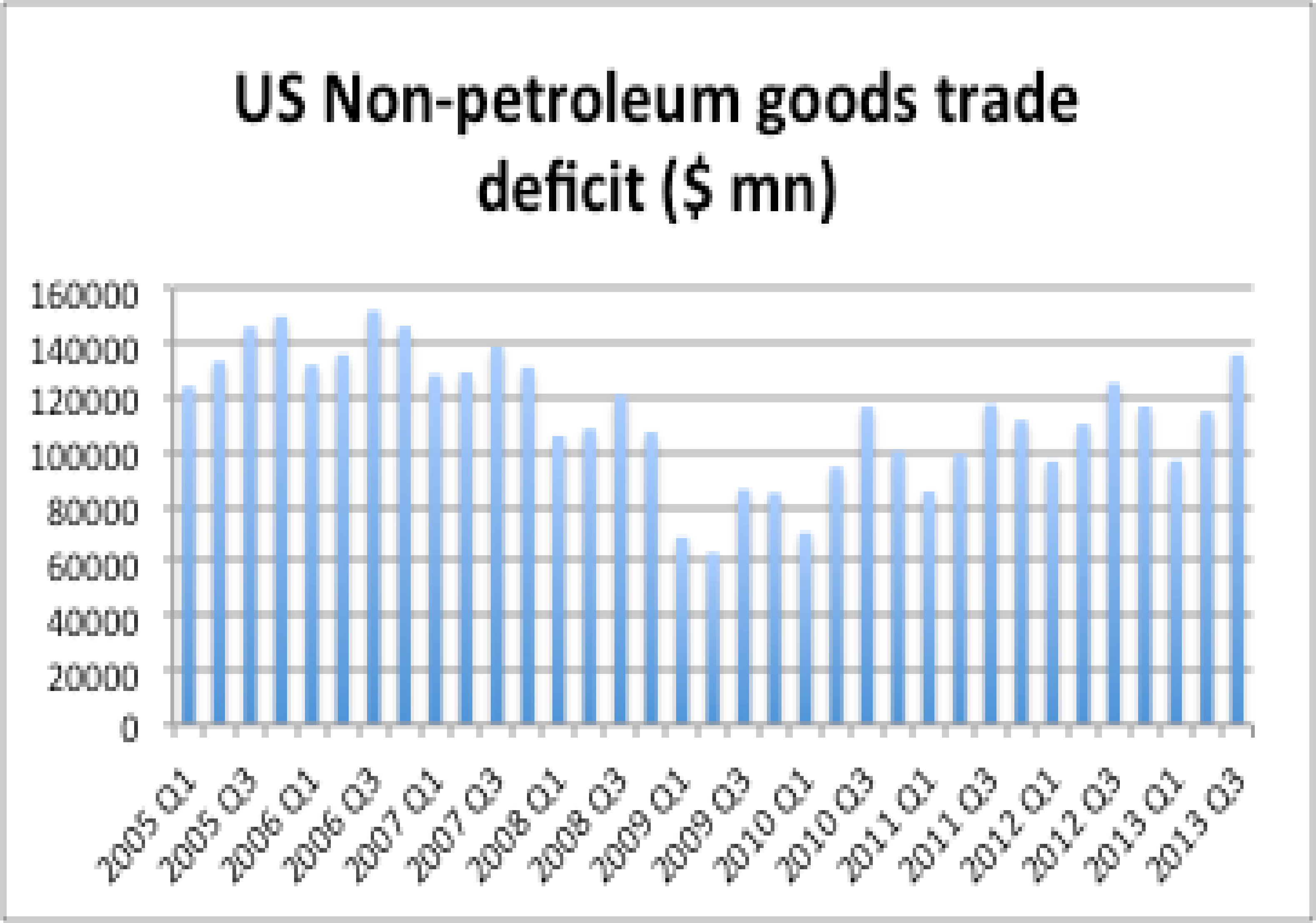
2012 Q2
2012 Q3
2012 Q4
2013 Q1
2013 Q2
2013 Q3
$ millions
As % of GDP

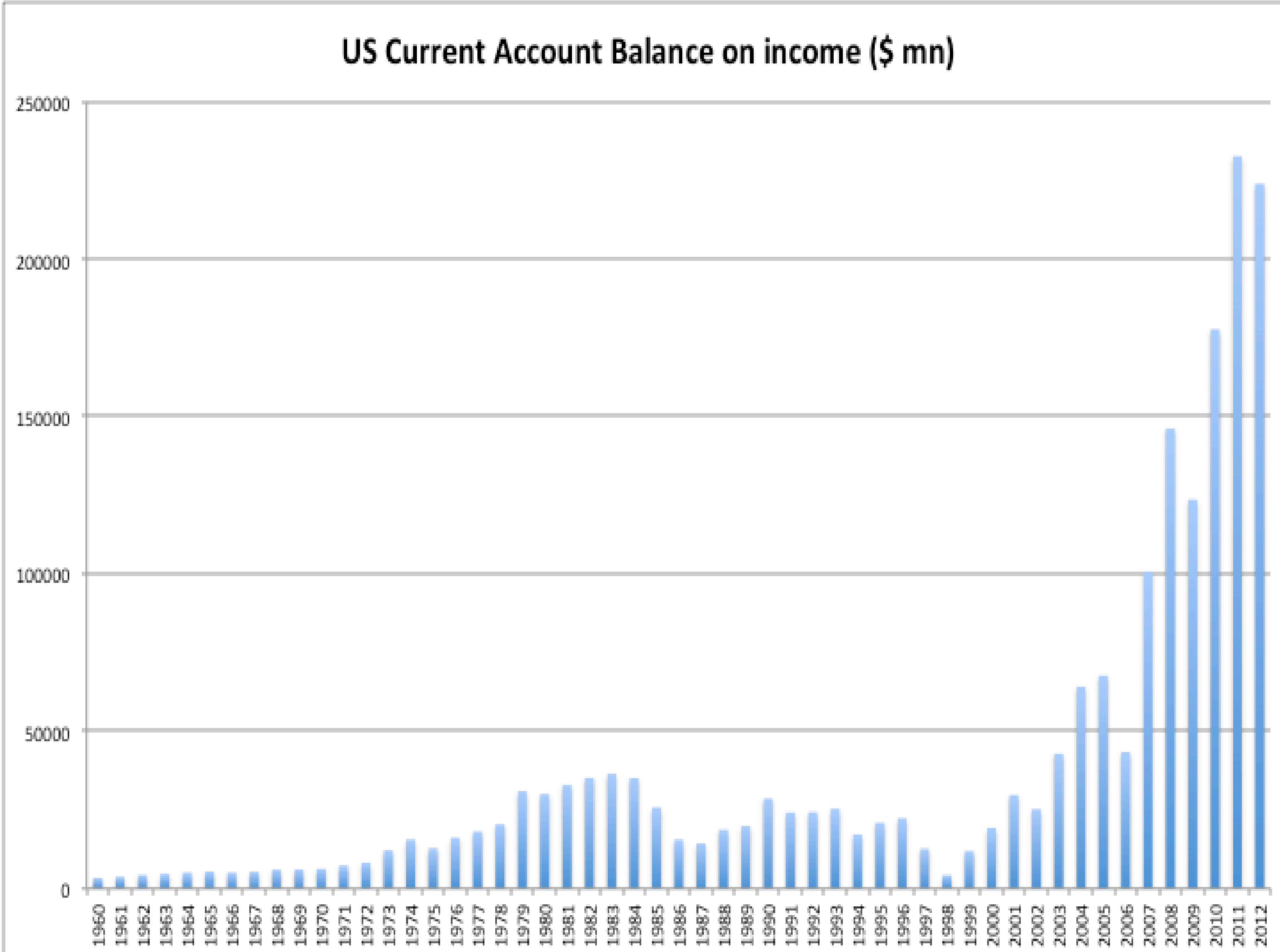


US Trade Deficit with China
70000
60000
50000
40000
30000
20000
10000
0
35.00
30.00
25.00
20.00
15.00
10.00
5.00
0.00
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35
$ millions
As % of Total Deficit

Long term trend




US Non-petroleum goods trade deficit ($ mn)
160000
140000
120000
100000
80000
60000
40000
20000
0
2005 Q1
2005 Q3
2006 Q1
2006 Q3
2007 Q1
2007 Q3
2008 Q1
2008 Q3
2009 Q1
2009 Q3
2010 Q1
2010 Q3
2011 Q1
2011 Q3
2012 Q1
2012 Q3
2013 Q1
2013 Q3


US Current Account Balance on income ($ mn)
250000
200000
150000
100000
50000
0
1960
1961
1962
1963
1964
1965
1966
1967
1968
1969
1970
1971
1972
1973
1974
1975
1976
1977
1978
1979
1980
1981
1982
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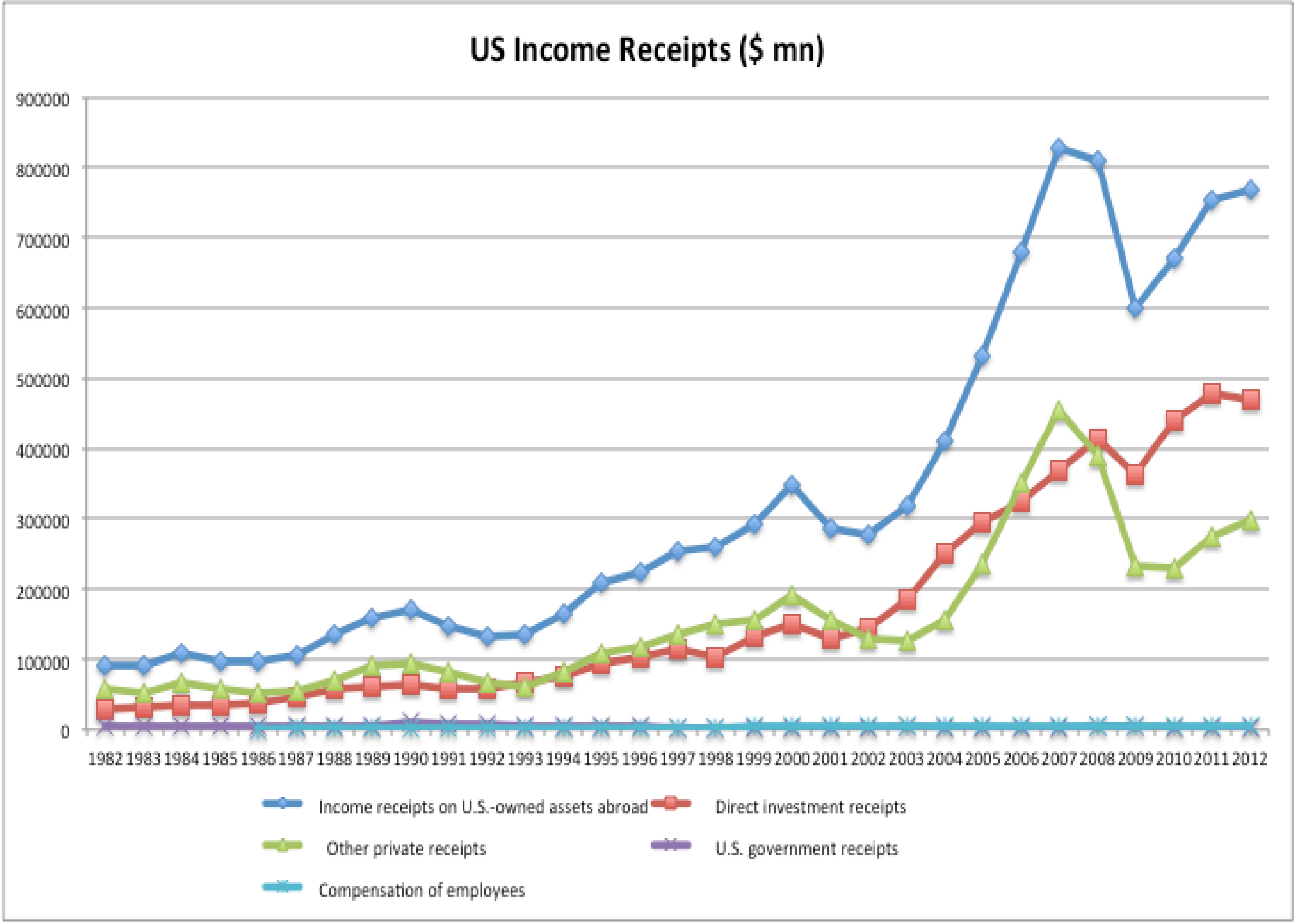
2007
2008
2009
2010
2011
2012


US Income Receipts ($ mn)
900000
800000
700000
600000
500000
400000
300000
200000
100000
0
1982 1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012
Income receipts on U.S.-owned assets abroad
Direct investment receipts
Other private receipts
U.S. government receipts
Compensation of employees

Large capital flows to developing economies

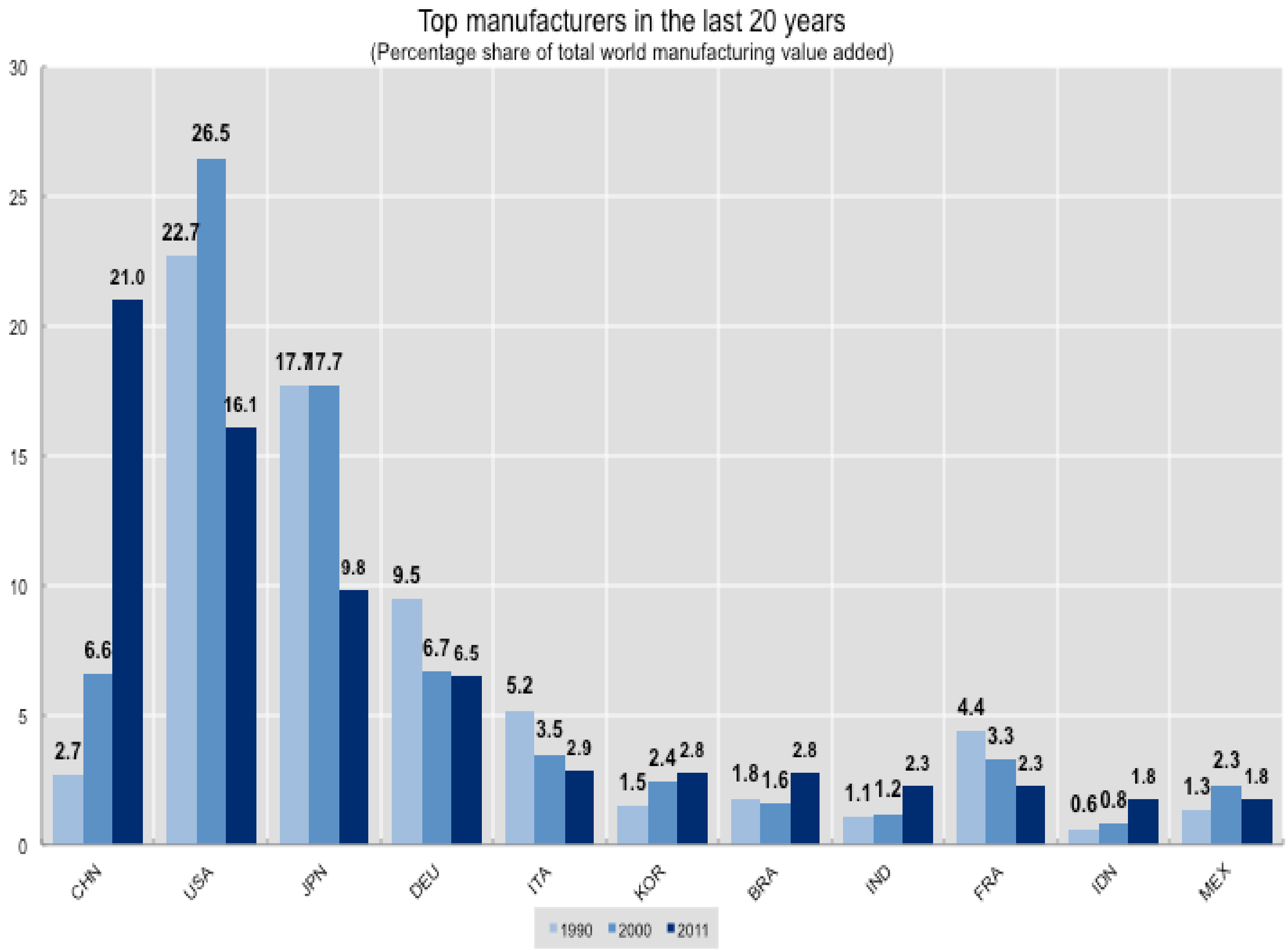
- Flows to equity markets
- Cross-border lending to emerging markets surged by $267bn to an estimated $3.4tn in the first quarter of 2013.
- Large companies in emerging markets have also been taking advantage of cheap dollars credit.
- Retrenchment since May. $25.1bn from emerging-market bond funds and $29.3bn from equity funds by September.

The other views of imbalance

- Attributed by some to a fundamental structural problem in involving the loss of trade competitiveness of the US and the growing competitiveness of China in particular.
- Attributed by others to the “global savings glut” precipitated by EMEs in general and China in particular.
- Importance of leverage.

Geography of industrial production

- In 1990 the five countries (United States, Japan, Germany, Italy and France in that order) that were on top of the league table of country-shares in global manufacturing valued added accounted for 57.8 per cent of the total.
- Within that group the spread in terms of individual shares was large, with the US notching up 22.7 per cent and France just 4.4 per cent. China accounted for a small 2.7 per cent.
- By 2000 the aggregate figure of global value added share of the top five had risen to 61 per cent with China (6.6 per cent as compared to 26.5 per cent for the US) now having joined the leaders at rank four and Italy now standing fifth. France had dropped out of the top five.



Top manufacturers in the last 20 years
(Percentage share of total world manufacturing value added)
30
25
20
15
10
5
0
2.7
6.6
21.0
22.7
26.5
16.1
17.7
17.7
9.8
9.5
6.7
6.5
5.2
3.5
2.9
1.5
2.4
2.8
1.8
1.6
2.8
1.1
1.2
2.3
4.4
3.3
2.3
0.6
0.8
1.8
1.3
2.3
1.8
CHN
USA
JPN
DEU
ITA
KOR
BRA
IND
FRA
IDN
MEX
1990
2000
2011

2000 to 2011

- The real change occurred between 2000 and 2011, though even in the latter year the aggregate share of the five countries was, at 56.3 per cent, close to its 1990 level.
- However, now China topped the league table, with a 21 per cent share. Between 1990 and 2011 the other four toppers had lost share with China being the gainer.
- Outside of the five, over this period, South Korea’s percentage share rose from 1.5 to just 2.8, Brazil’s from 1.8 to 2.8, India’s from 1.1 to 2.3, Indonesia’s from 0.6 to 1.8, Mexico’s from 1.3 to 18 and Thailand’s from 0.4 to 1.0.

Changing manufacturing landscape

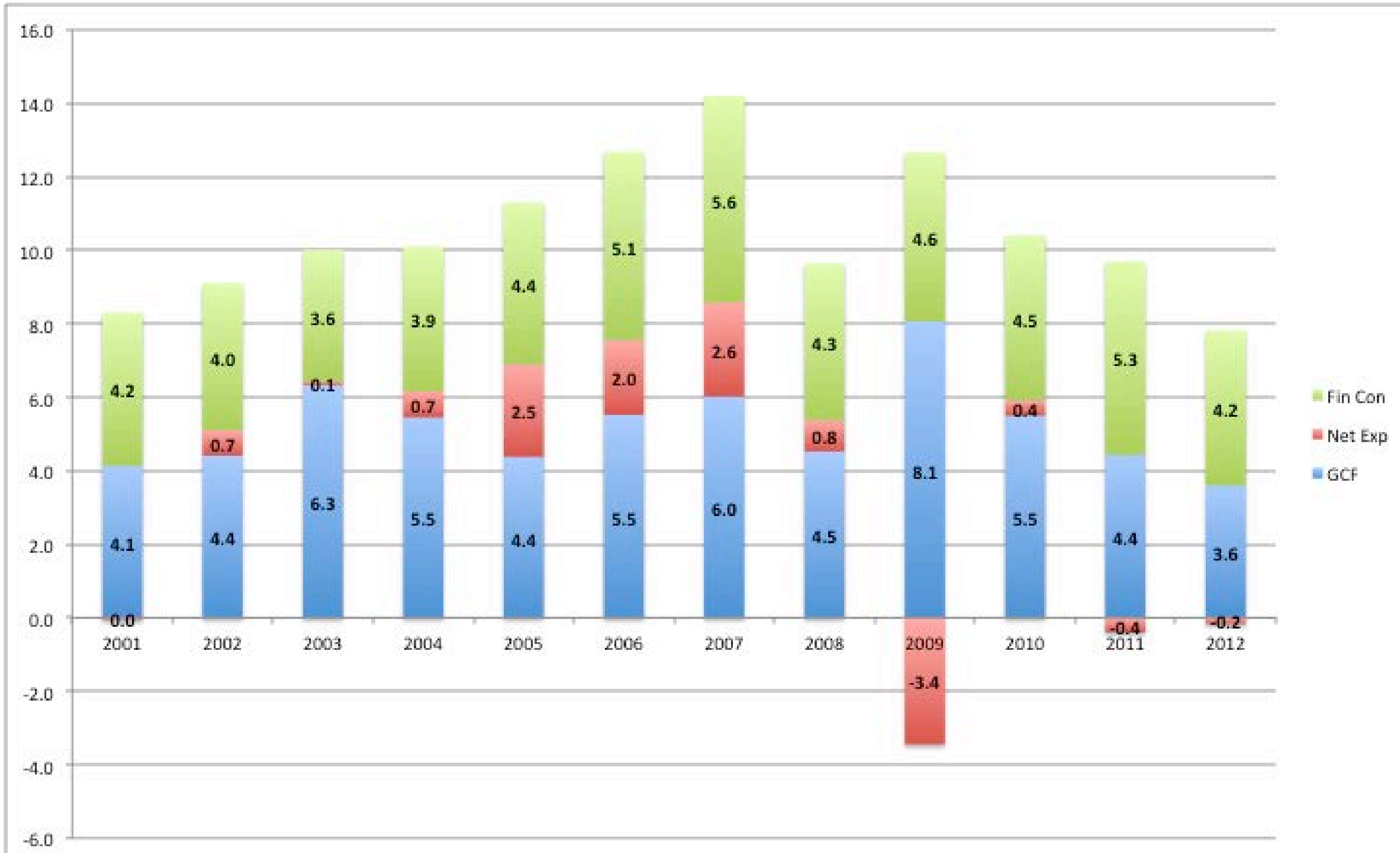
- Continued dominance of a few countries over global manufacturing, though with some change in the relative ranks held by them
- A noticeable reduction in the shares of leading OECD-member countries in global manufacturing value added between 1990 and 2011
- Corresponding dramatic increases in China's share, especially after 2000
- Small share increases in other so-called emerging markets, leading to wider geographical dispersion of global manufacturing

China as the other pole

- Thus, if seen in terms of national shares in global manufacturing value added, the factor contributing overwhelmingly to the emergence of a new international division of labour seems to be the remarkable surge of China as a manufacturing power rather than the transformation of developing countries as a group into manufacturing hubs.
- This possibly explains the fact that the threat to the North is not seen as a threat from the South, but a threat from China in particular, epitomised by the large trade deficit that the US runs with China.
- According to the Bureau of Economic Analysis of the US Ministry of Commerce, the United States exported $152 billion worth of goods and services to China, and imported $478 billion worth, to run a trade deficit of $326 billion. That difference has shaped the debate.

Explaining growth in China

China: Contribution to GDP Growth



Explaining the “divergence”

- Efforts to window dress this outcome.
- One is to argue that the reason why the US is unable to correct its “twin deficit” problem is the undervaluation of exchange rates in some developing countries that limits export from the US and increases imports into the US.
- That is the US trade and current account deficit is not the result of its own debt- and deficit-financed profligacy and lack of competitiveness, but the distorted exchange rate policies in developing countries.

The Chinese Yuan

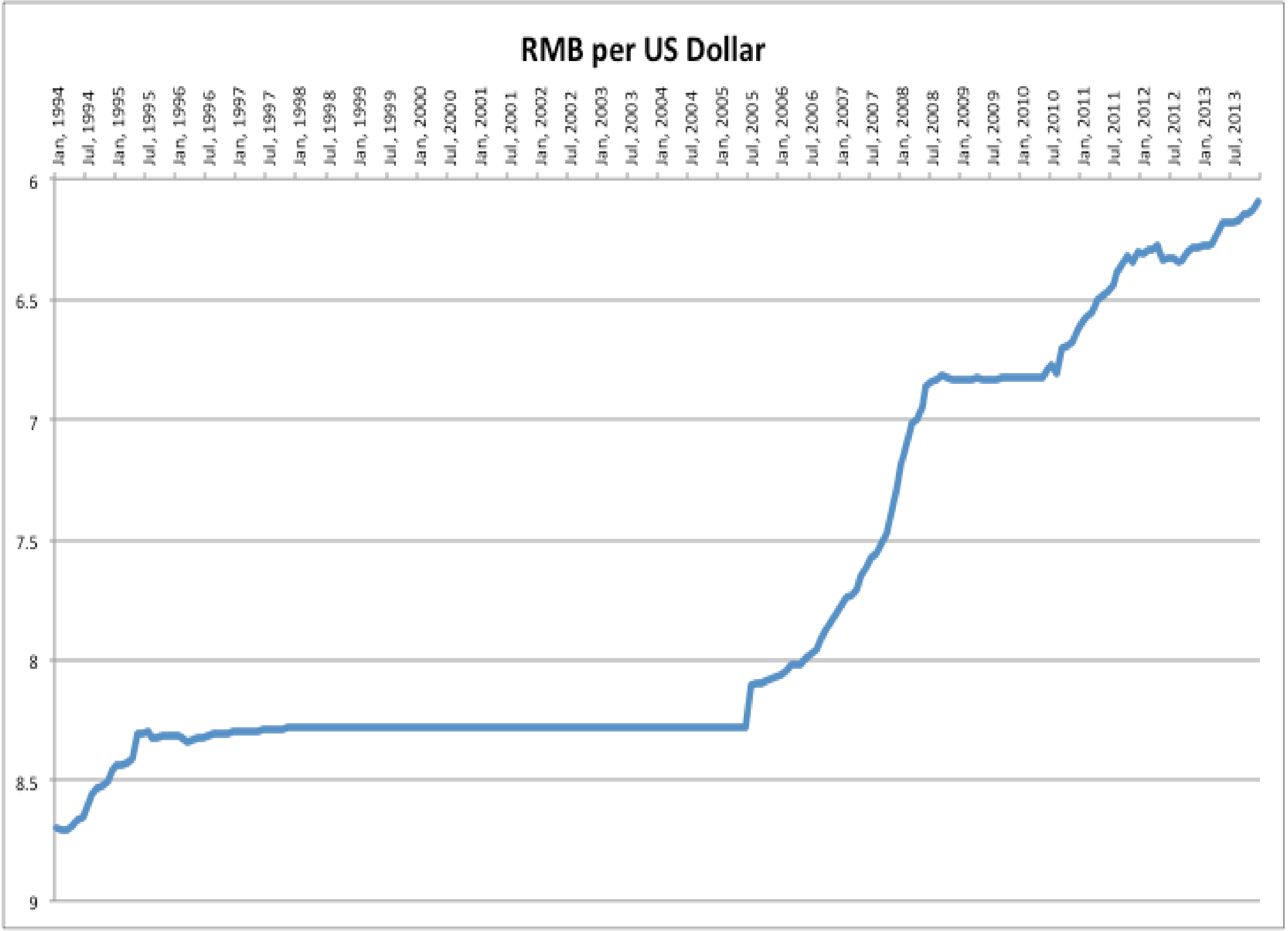
- As far back as mid-July 2003, Alan Greenspan, chairman of the US Federal Reserve, while deposing before a congressional committee, warned the Chinese authorities that they could not continue to peg the renminbi to the US dollar.
- Greenspan was merely echoing the sentiment expressed by a wide circle of conservative economists that the Chinese must float their currency, allow it to appreciate and, hopefully, help remove what is being seen as the principal bottleneck to the smooth adjustment of the unsustainable US balance of payments deficit.

China the "front"

- Around the same time that Greenspan was making his case before the congressional committee, *The Economist* published an article on the global economic strains being created by Asian governments clinging to the dollar either by pegging their currencies or intervening in markets to shore them up. That article reported the following: "UBS reckons that all Asian currencies, except Indonesia's are undervalued against the dollar … The most undervalued are the yuan, yen, the Indian rupee and the Taiwan and Singapore dollars; the least undervalued are the ringgit, the Hong Kong dollar and the South Korean won."

Change in argument

- Till just before that, many of these countries were being accused of pursuing inward looking policies, of being too interventionist in their trade, exchange rate and financial sector policies, and, therefore, of being characterized by “overvalued” exchange rates that concealed their balance of payments weaknesses.
- An “overvalued” rate, by setting the domestic currency equivalent of, say, a dollar at less than what would have been the case in an equilibrium with free trade, was seen as making imports cheaper and exports more expensive. In the medium term, such restrictions were seen as encouraging investments in areas that do not exploit the comparative advantages of the country concerned, leading to an inefficient and internationally uncompetitive economic structure.



RMB per US Dollar
Jan, 1994
Jul, 1994
Jan, 1995
Jul, 1995
Jan, 1996
Jul, 1996
Jan, 1997
Jul, 1997
Jan, 1998
Jul, 1998
Jan, 1999
Jul, 1999
Jan, 2000
Jul, 2000
Jan, 2001
Jul, 2001
Jan, 2002
Jul, 2002
Jan, 2003
Jul, 2003
Jan, 2004
Jul, 2004
Jan, 2005
Jul, 2005
Jan, 2006
Jul, 2006
Jan, 2007
Jul, 2007
Jan, 2008
Jul, 2008
Jan, 2009
Jul, 2009
Jan, 2010
Jul, 2010
Jan, 2011
Jul, 2011
Jan, 2012
Jul, 2012
Jan, 2013
Jul, 2013
6
6.5
7
7.5
8
8.5
9

Inventing a global saving glut

- Undervaluation of currencies in competing countries is not the only argument to absolve the US of the responsibility for global imbalances. Ben Bernanke took issue "with the common view that the recent deterioration in the U.S. current account primarily reflects economic policies and other economic developments within the United States itself."
- In his view, "over the past decade a combination of diverse forces has created a significant increase in the global supply of saving--a global saving glut--which helps to explain both the increase in the U.S. current account deficit and the relatively low level of long-term real interest rates in the world today."

Explaining the glut 1

- Rise in the desired savings rate in developed countries (other than the United States) at a time when investment opportunities are constrained by supply-side factors. Desired savings is seen to be high because of the expected dramatic increases in the ratio of retirees to workers in a number of major industrial economies. On the other hand prospective returns from investment are seen as low because of slowly growing or declining workforces, as well as high capital-labour ratios, in many of these countries.

Problem 1

- Empirical support weak for the idea that the mature industrial economies as a group "seek to run current account surpluses and thus to lend abroad".
- This potential source of excess saving cannot be the principal explanation of the saving glut, because in a number of these countries--Japan being one example--household saving has been declining.

Explaining the glut 2

- “A possibly more important source of the rise in the global supply of saving is the recent metamorphosis of the developing world from a net user to a net supplier of funds to international capital markets.”
- Result of developments in the developing countries themselves, especially the financial crises many of them faced since the mid-1990s.
- Crises occurred because net capital imports into the developing countries in the early and mid-1990s were not always productively used but absorbed for the wrong reasons. In some developing countries, governments borrowed to finance budgetary deficits and avoid necessary fiscal consolidation In other countries, these funds were not allocated to projects promising the highest returns because of “opaque and poorly governed banking systems”.

Explaining the glut 3

- Even countries that had escaped the worst effects of the crisis such as China and India are seen to have built up reserves to serve as "war chests". Further, reserve accumulation occurred because of resort to foreign exchange interventions intended to promote export-led growth by preventing exchange-rate appreciation. Countries typically pursue export-led growth because domestic demand is thought to be insufficient to employ fully domestic resources.

Bernanke's two step argument

- First, while there is a necessary correspondence between the excess of investment over saving and the current account deficit, the causation really runs from the latter to the former. That is because there is a global savings glut, the US can sustain an excess of investment over saving.
- Second, the excess of investment over savings arises because of the effect that the savings glut has on asset prices and exchange rates, although the pattern of asset-price changes was somewhat different before and after 2000.

US mediation 1

- The US was well placed to mediate these effects because of the development and adoption of new technologies that delivered increases in productivity, which together with low political risk, strong property rights, and a good regulatory environment, made the country exceptionally attractive to international investors during that period. As a result "excess savings" flowed into the US and ensured buoyant stock and foreign exchange values.

US mediation 2

- Global excess saving lowered interest rates, making it the principal cause of lower US saving. Low mortgage rates have supported record levels of home construction and strong gains in housing prices. The asset price effects of this housing boom has once again encouraged consumption spending as the increase in housing wealth not only reduces the desire to save but provides access to credit to finance consumption. Here again the speculative element in the housing bubble is ignored.

The "conclusion"

- "Specific trade-related factors cannot explain either the magnitude of the U.S. current account imbalance or its recent sharp rise. Rather, the U.S. trade balance is the tail of the dog; for the most part, it has been passively determined by foreign and domestic incomes, asset prices, interest rates, and exchange rates, which are themselves the products of more fundamental driving forces."

Problem 2

- There, of course, remains the question as to why the current-account effects of the increase in desired global saving were felt disproportionately in the United States relative to other industrial countries. Given his argument, Bernanke cannot but point to the technology boom in the US and the ostensible “depth and sophistication” of its financial markets as factors that make it an attractive investment destination.

Capital flows and liquidity

- When Bernanke first announced the possibility of a taper on June 19, bond investors panicked and interest rates spiked.
- What easy money in the core and liquidity injection does is that it increases liquidity in the developing countries

International liquidity

- At the time of the East Asian crisis (end of June 1997), 23 countries reporting to the BIS, reported that the international asset position of banks resident in those countries stood at $9.95 trillion, involving $8.6 trillion in external assets after adjusting for local assets in international currencies.
- By June 2007, when 40 countries were reporting, this had risen to $33.71 trillion, with external assets totaling $29.98 trillion (Bank of International Settlements, 2007). This expansion in international asset position was not only the result of the increase in the number of reporting countries.

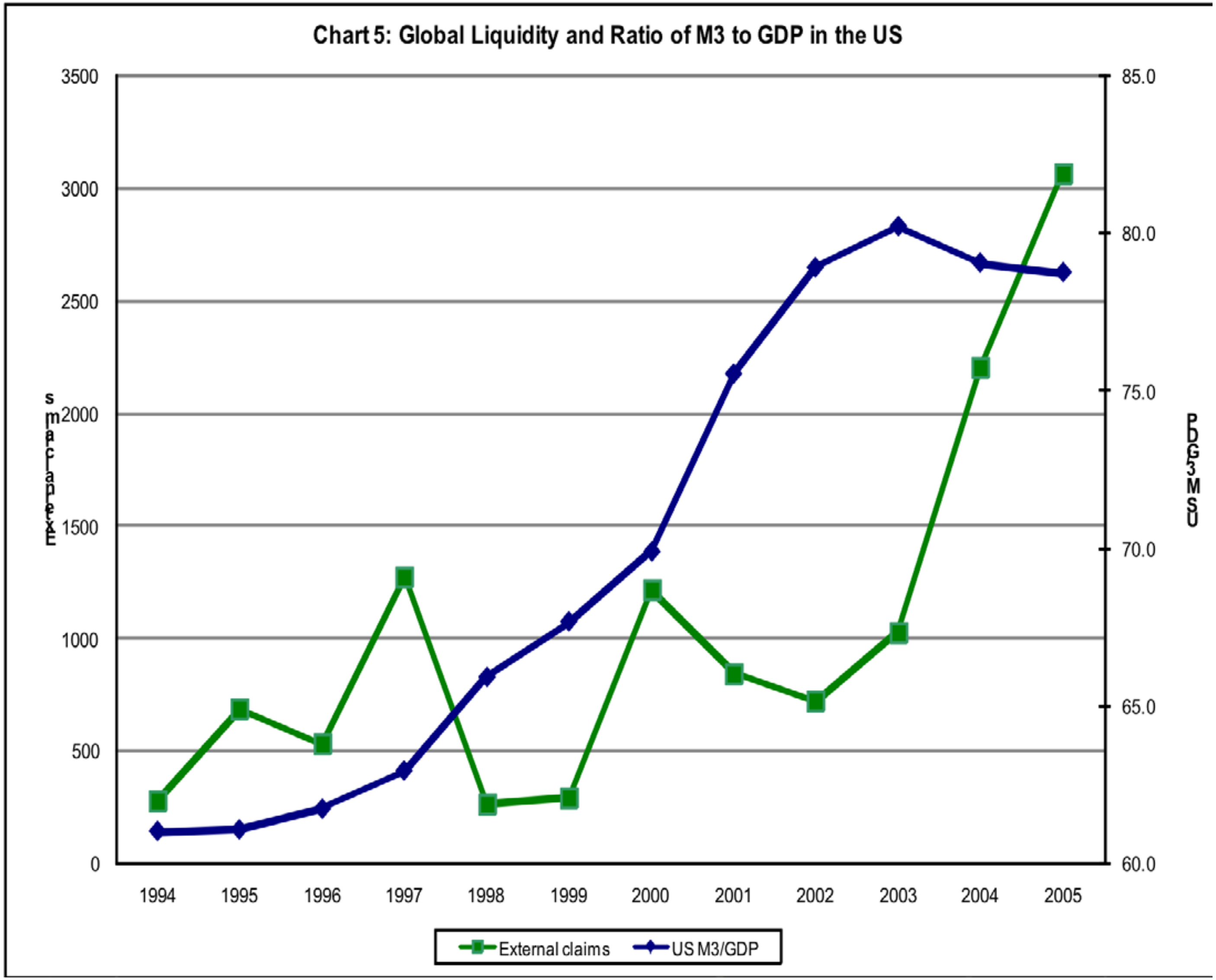


Chart 5: Global Liquidity and Ratio of M3 to GDP in the US
3500
3000
2500
2000
1500
1000
500
0
85.0
80.0
75.0
70.0
65.0
60.0
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
External claims
US M3/GDP

The credit fall out

- A less discussed consequence is credit expansion in the developing countries
- Occurs through the direct liquidity effects.
- Occurs also through financial liberalisation.

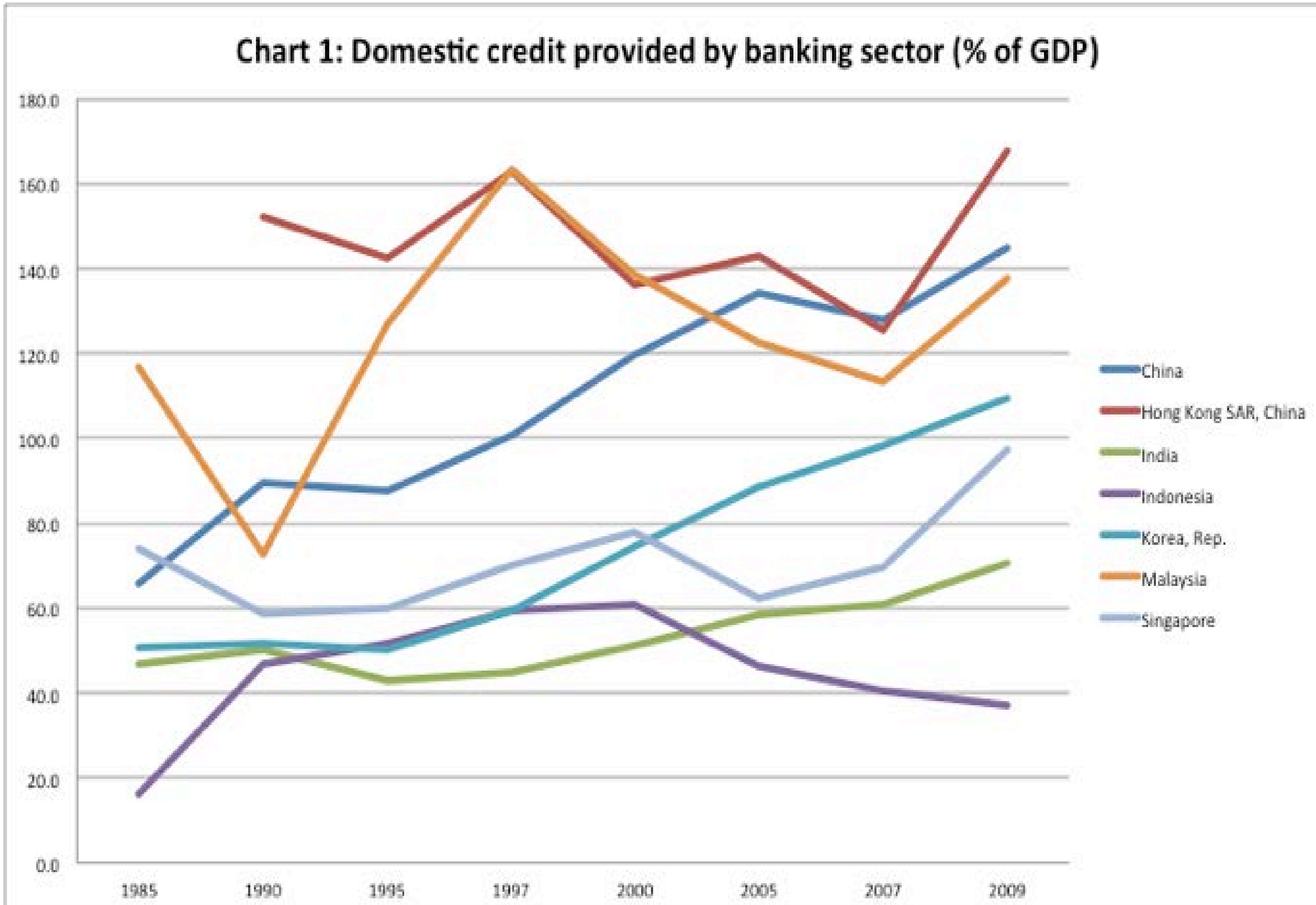


Chart 1: Domestic credit provided by banking sector (% of GDP)
180.0
160.0
140.0
120.0
100.0
80.0
60.0
40.0
20.0
0.0
1985
1990
1995
1997
2000
2005
2007
2009
China
Hong Kong SAR, China
India
Indonesia
Korea, Rep.
Malaysia
Singapore

Increase in retail lending

- Of the domestic credit that banks have extended to private borrowers, a growing share has gone to consumers. In 2004, consumer lending accounted for 53 per cent of total bank lending in Malaysia, 49 per cent in Korea, 30 per cent in Indonesia, 17 per cent in Thailand, 15 per cent in China, and 10 per cent in the Philippines
- Implications for growth process

South Korea

- According to a survey conducted by Statistics Korea and analysed by the Korea Development Institute, six out of ten households in Korea were in debt in 2011, and more than a third of them were unable to meet their annual expenses with their incomes.
- Debt also weighs heavy on current incomes. One in every 10 households spends more than 40 per cent of annual income on servicing that debt.

Long-term phenomenon

- Starting at around Korean Won (KRW) 210 trillion in 1997, the debt of households in Korea rose to more than KRW 450 trillion in 2002 and stood at KRW 922 trillion at the end of June in 2012.
- Household debt to net household disposable income from less than 100 per cent before the turn of the century, to the 3-digit mark in 2001, more than 140 per cent in 2006 and 160 per cent in 2011.
- Collapse of the household savings rate from more than 15 per cent before the 1997 crisis to around 10 per cent in 2000 and a low of 2-3 per cent recently.

Credit growth in china

- Since the post-crisis stimulus of 2008, total public and private debt in China has risen to more than 200 per cent of GDP. Credit to the private sector rose from 104 per cent of GDP in 2008 to 130 per cent in 2010, before declining marginally in 2011.
- Rapid growth of lending by the ‘shadow banking’ system, at the forefront of which are wealth management products (WMPs) offering high interest rates. Loans are then provided to borrowers such as real estate developers to whom lending by the banks is being restricted. As of now WMPs are placed at around 10 per cent of total deposits in Chinese banks, but the rate of growth is high.

India

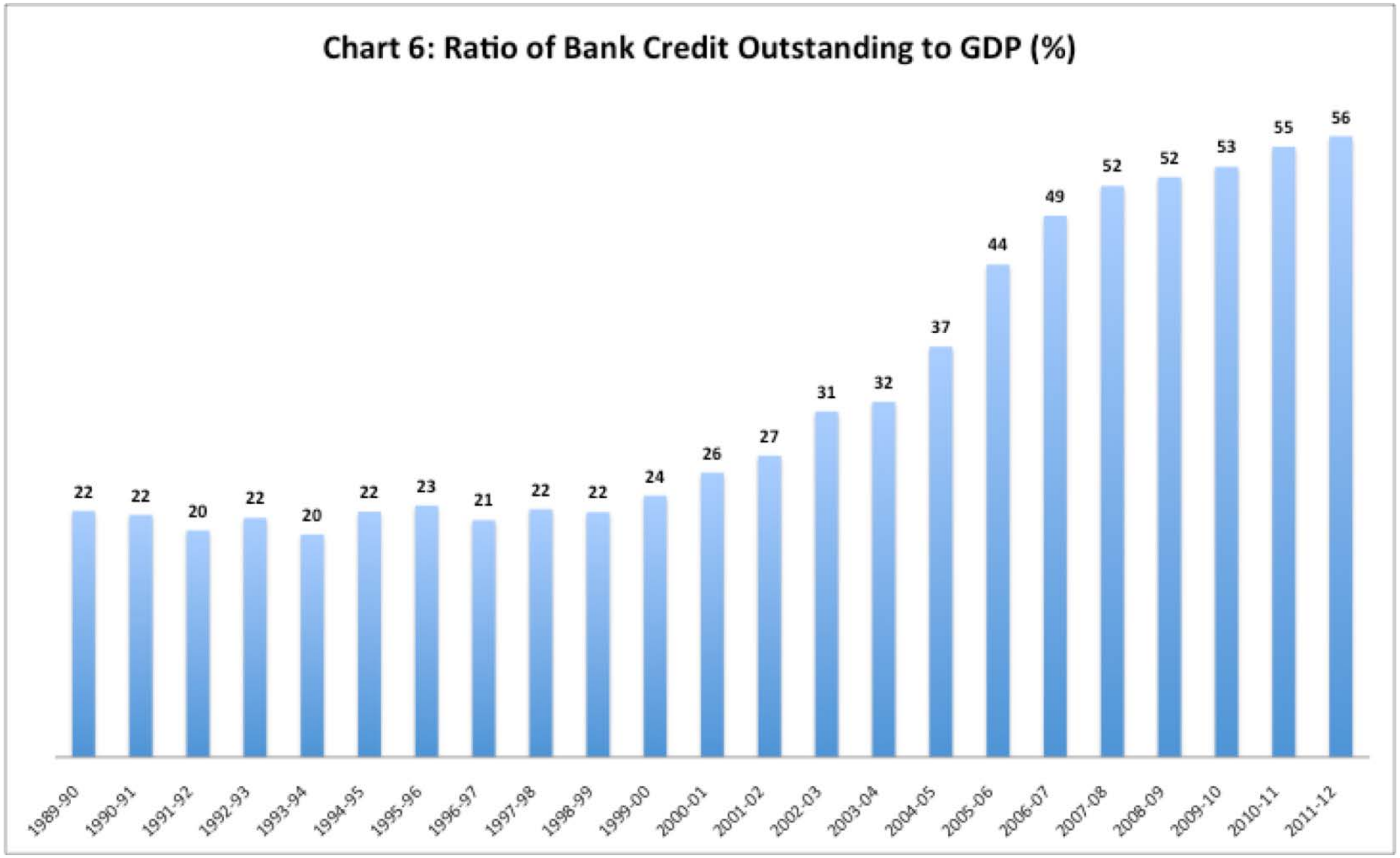


Chart 6: Ratio of Bank Credit Outstanding to GDP (%)
22
22
20
22
20
22
23
21
22
22
24
26
27
31
32
37
44
49
52
52
53
55
56
1989-90
1990-91
1991-92
1992-93
1993-94
1994-95
1995-96
1996-97
1997-98
1998-99
1999-00
2000-01
2001-02
2002-03
2003-04
2004-05
2005-06
2006-07
2007-08
2008-09
2009-10
2010-11
2011-12

Retail lending

Personal loans as per cent of total outstanding credit of commercial banks			
	1996	2000	2007
State Bank of India and associates	9.5	10.7	22.0
Other nationalised Banks	9.1	10.9	15.8
Foreign banks	8.8	17.1	24.8
Regional Rural Banks	10.5	18.8	20.5
Private sector banks	9.7	7.9	37.3
All Scheduled Commercial Banks	9.3	11.2	22.3

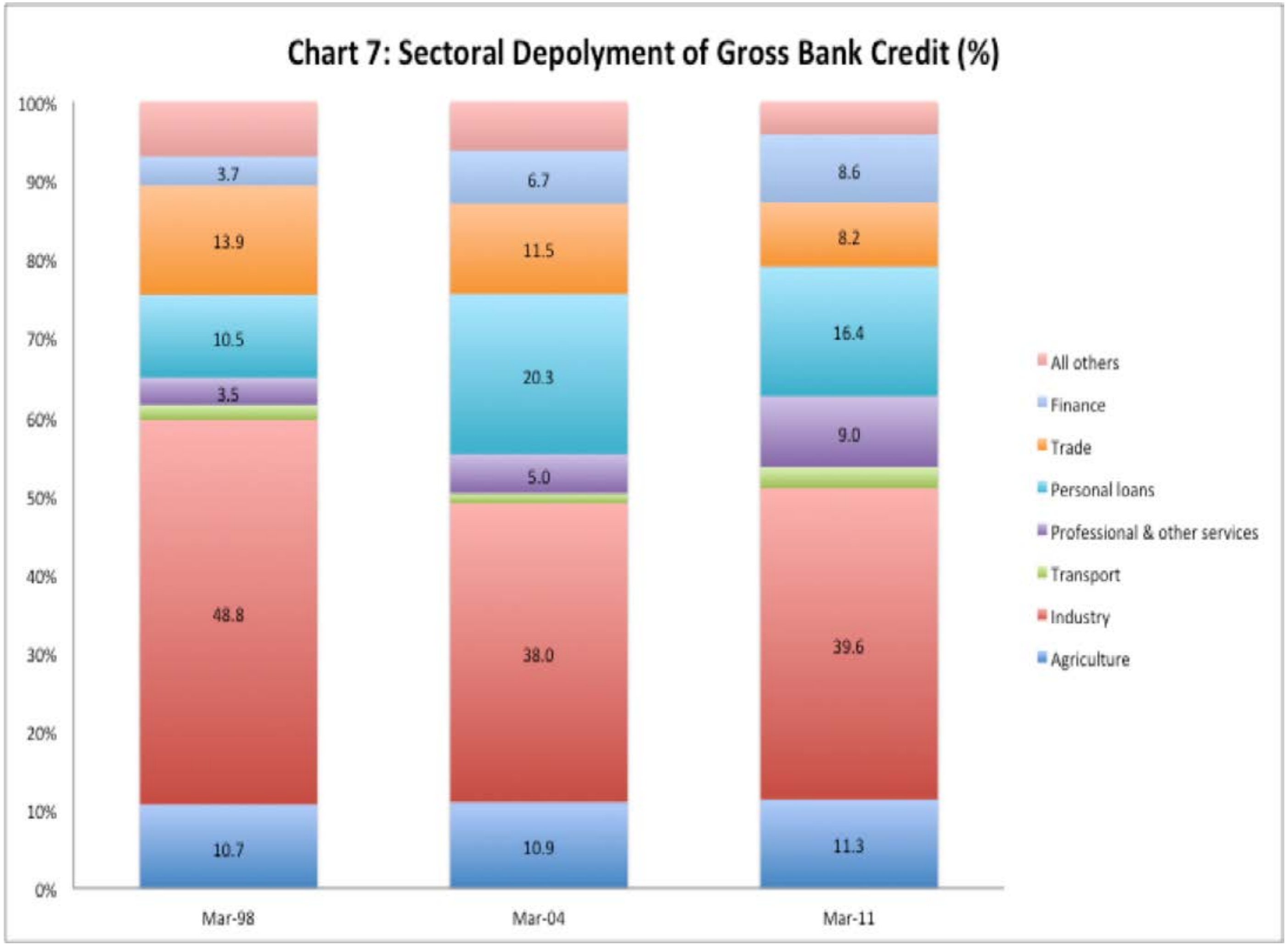


Chart 7: Sectoral Depolyment of Gross Bank Credit (%)
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
3.7
13.9
10.5
3.5
48.8
10.7
6.7
11.5
20.3
5.0
38.0
10.9
8.6
8.2
16.4
9.0
39.6
11.3
Mar-98
Mar-04
Mar-11
All others
Finance
Trade
Personal loans
Professional & other services
Transport
Industry
Agriculture

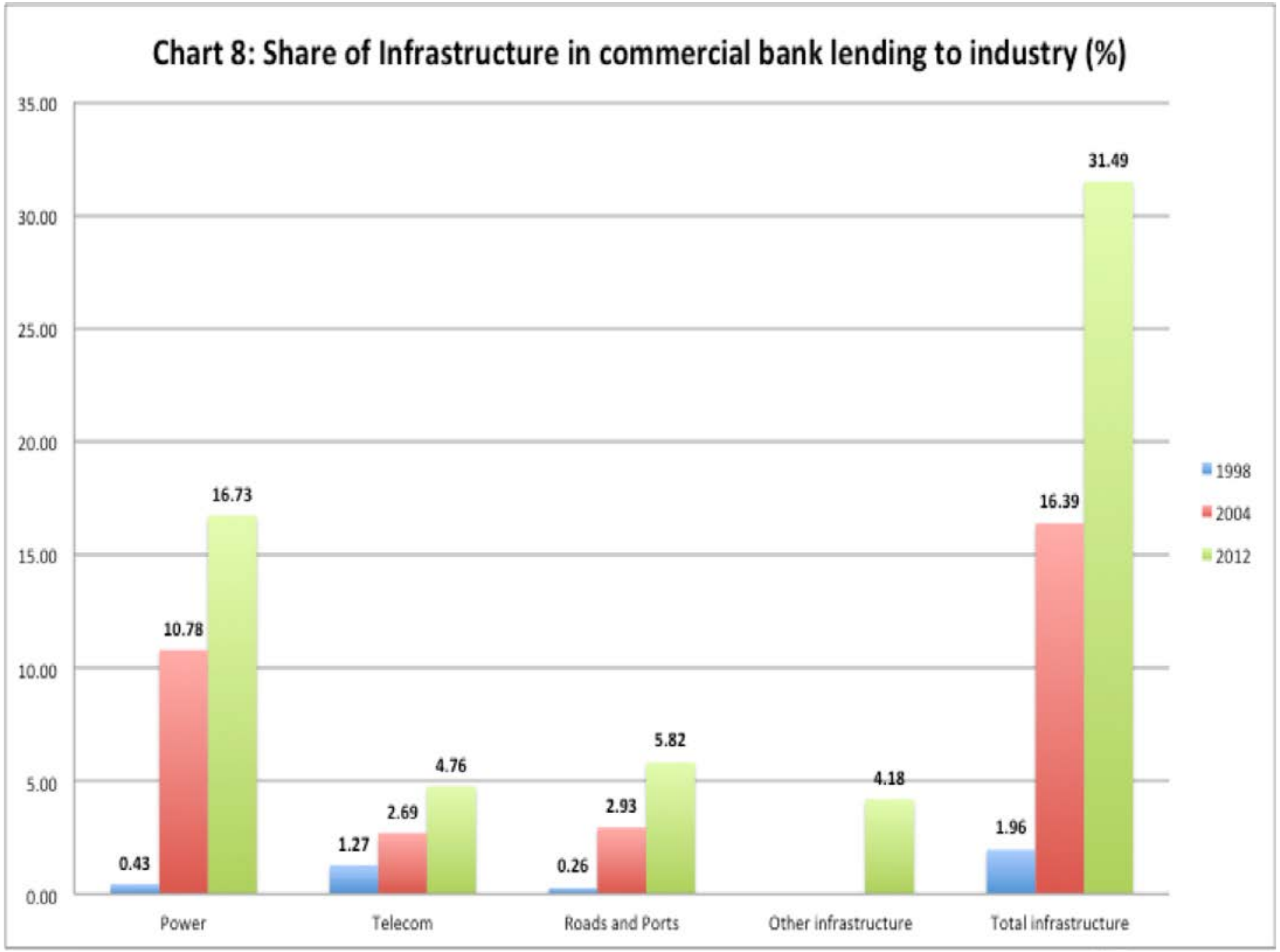


Chart 8: Share of Infrastructure in commercial bank lending to industry (%)
35.00
30.00
25.00
20.00
15.00
10.00
5.00
0.00
0.43
10.78
16.73
1.27
2.69
4.76
0.26
2.93
5.82
4.18
1.96
16.39
31.49
Power
Telecom
Roads and Ports
Other infrastructure
Total infrastructure
1998
2004
2012

The other imbalance

- Dependence of domestic demand expansion not on credit financed public expenditure but credit financed private expenditure.
- Global growth dependent on leverage.
- Develeraging a necessity.
- Makes recovery even more difficult.

The growth story before the crisis

	Ten-Year Averages	
	1988–97	1998–2007
World	**3.4**	**4.1**
Advanced economies	**2.9**	**2.6**
United States	3.0	3.2
Euro area	. . .	2.0
Japan	2.9	1.3
Other advanced economies[2]	3.6	3.3
Other emerging market and developing countries	**4.1**	**5.8**
Regional groups		
Africa	2.3	4.3
Central and eastern Europe	0.9	4.0
Commonwealth of Independent States[3]	. . .	5.7
Developing Asia	7.9	7.3
Middle East	3.7	4.8
Western Hemisphere	2.9	2.7
Memorandum		
European Union	2.3	2.3

Growth in developing countries

	Ten-Year Averages	
	1988–97	1998–2007
Other emerging market and developing countries	**4.1**	**5.8**
Regional groups		
Africa	2.3	4.3
Sub-Sahara	2.3	4.2
Excluding Nigeria and South Africa	2.3	4.7
Central and eastern Europe	0.9	4.0
Commonwealth of Independent States[1]	. . .	5.7
Russia	. . .	5.3
Excluding Russia	. . .	6.4
Developing Asia	7.9	7.3
China	9.9	8.9
India	5.9	6.5
Excluding China and India	6.3	4.1
Middle East	3.7	4.8
Western Hemisphere	2.9	2.7
Brazil	2.0	2.3
Mexico	3.0	3.1