

Closing China's Trade Surplus

September 2007

Douglas E Nyhus

nyhus@econ.umd.edu

<http://www.inforum.umd.edu>

The Problem

- China's merchandise trade surplus has grown from about 2% of GDP in 2004 to nearly 7% today
- Forecast to grow nearly another 1% in the next three years before subsiding
- Despite some 15% appreciation from 2002 levels by 2010 and some 20% by 2017.
- High Household savings rates exist as households save to pay for previously free goods such as medical care and K-12 education and college education
- Surplus remains large in absolute size through 2017

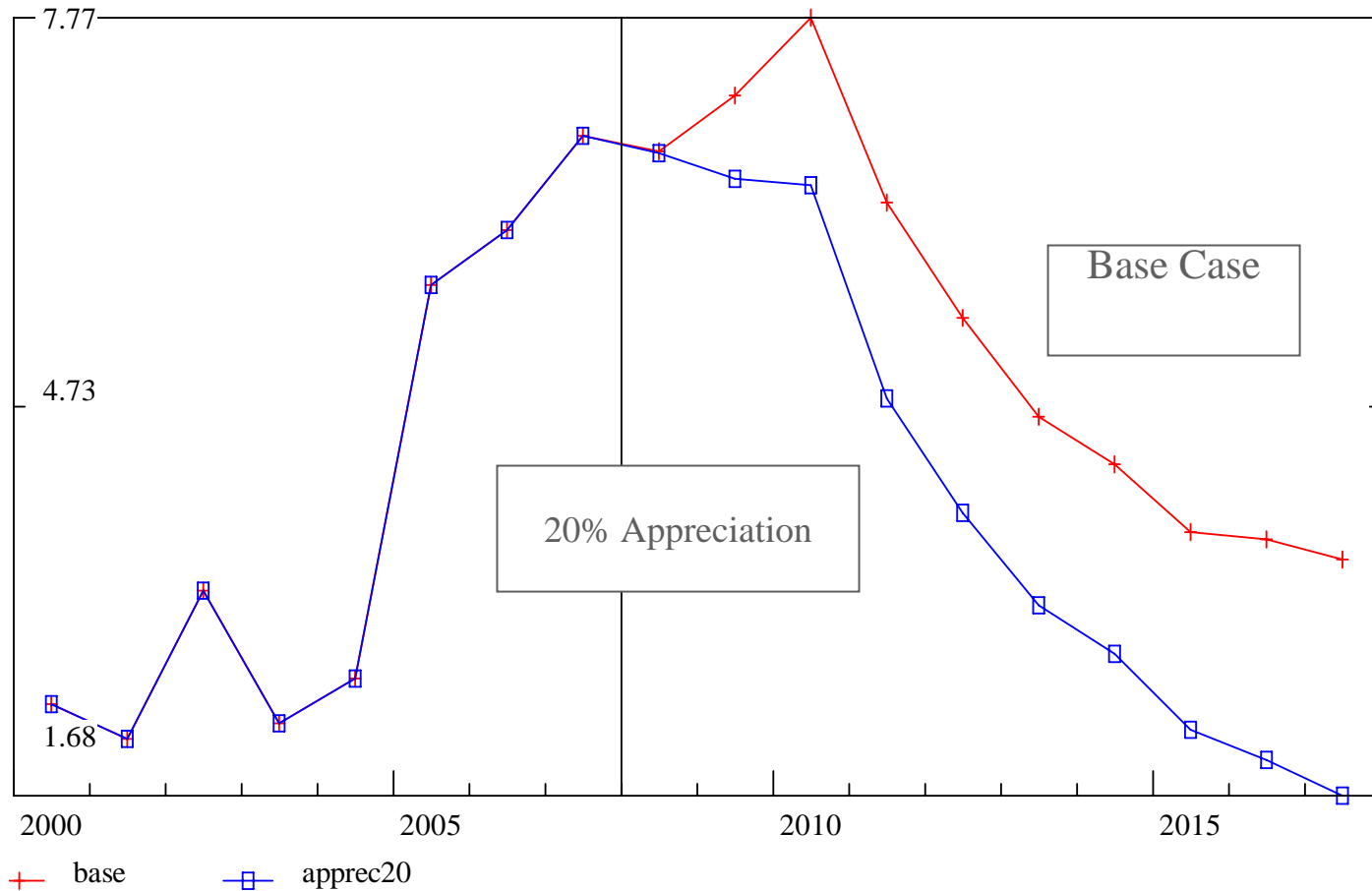
Business as Usual Forecast

	2002	2007	2017	07-17
	=====	=====	=====	=====
Gross Domestic Product	121859	205482	487811	9.1
Private Consumption	52571	74339	178559	9.1
Public Consumption	19120	24408	42624	5.7
Total Fixed Investment	43632	91542	217020	9.0
Net exports	3999	15302	31283	7.6
GDP Deflator	100	114	124	0.9
Net exports, Current Prices	3999	15936	23715	2.9
Exports	30943	96583	337658	13.3
Imports	-26944	-80646	-313943	14.6
Net Trade as Percent of GDP	3.3	6.8	3.9	
Exchange rate, yuan per 100US\$	828	758	661	

Effect of Currency Appreciation

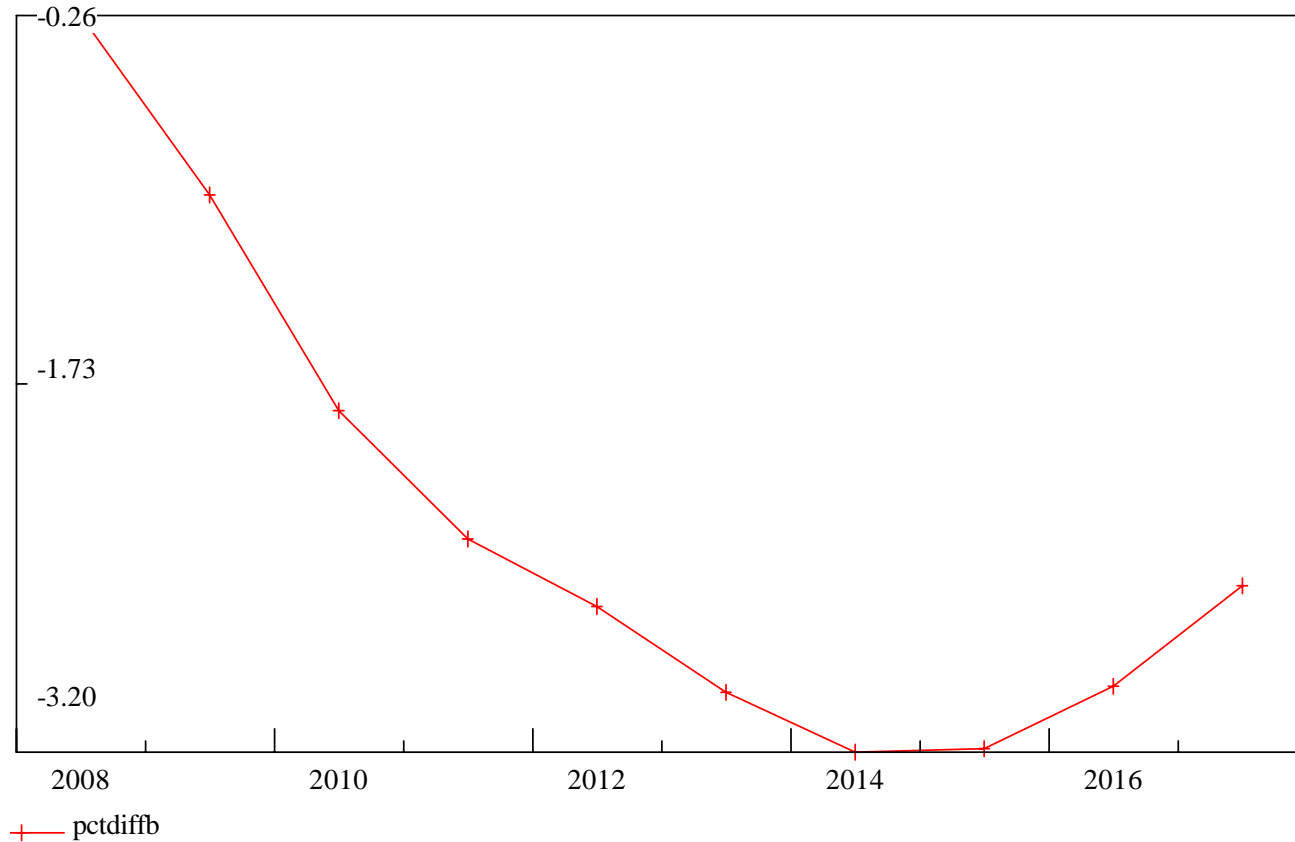
Figure 1: Net Trade

Percent of GDP



Appreciation's Effect on GDP

Figure 2: Real GDP
Percent deviation from base



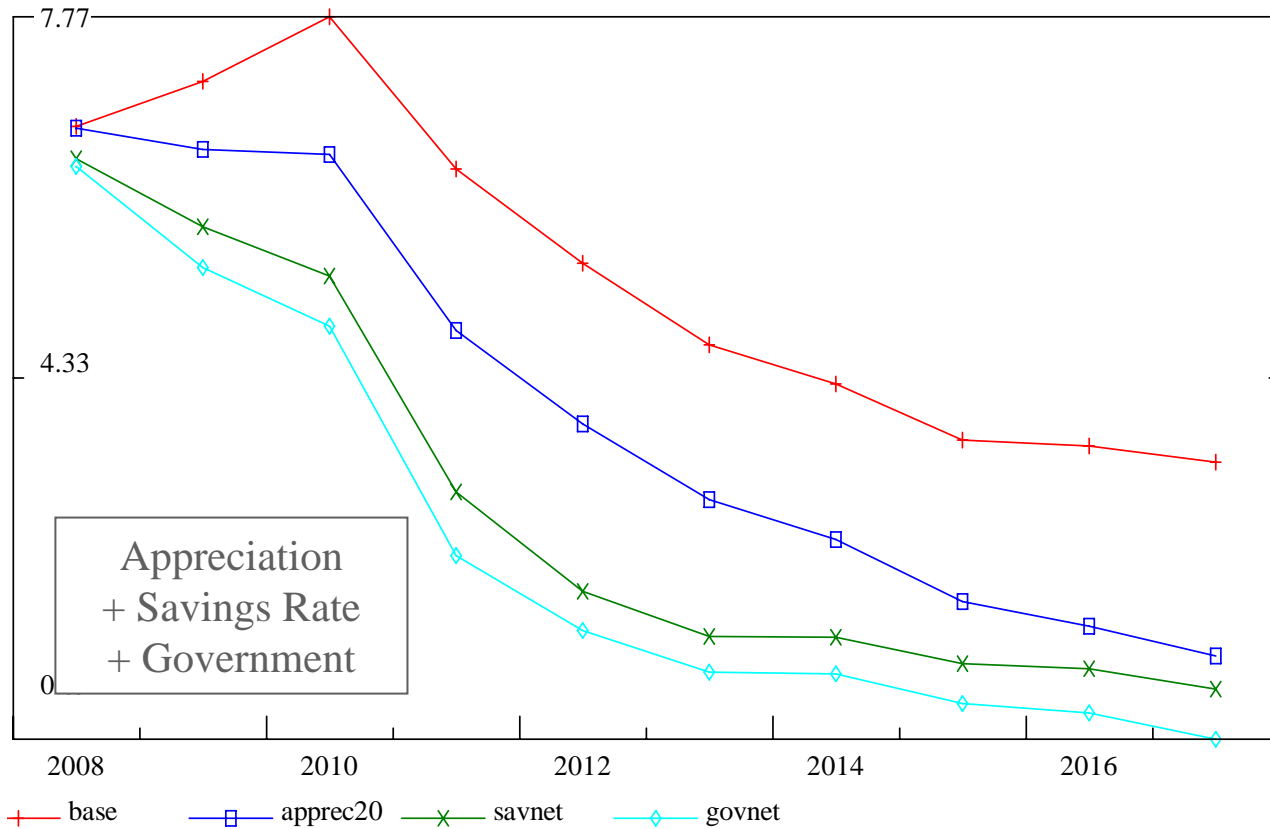
Demand Side Measures

- Institute policy measures to reduce the household savings rate by 8 percentage points by 2012
- Increase real government spending on education and health by 50% by 2012
- No changes from base in central or local government spending on administration
- Financed by debt – tax rates left unchanged

Demand Side Effects on Net Trade

Figure 3: Net Trade: percent deviation from base

Lower savings rate and Increased Gov't spending



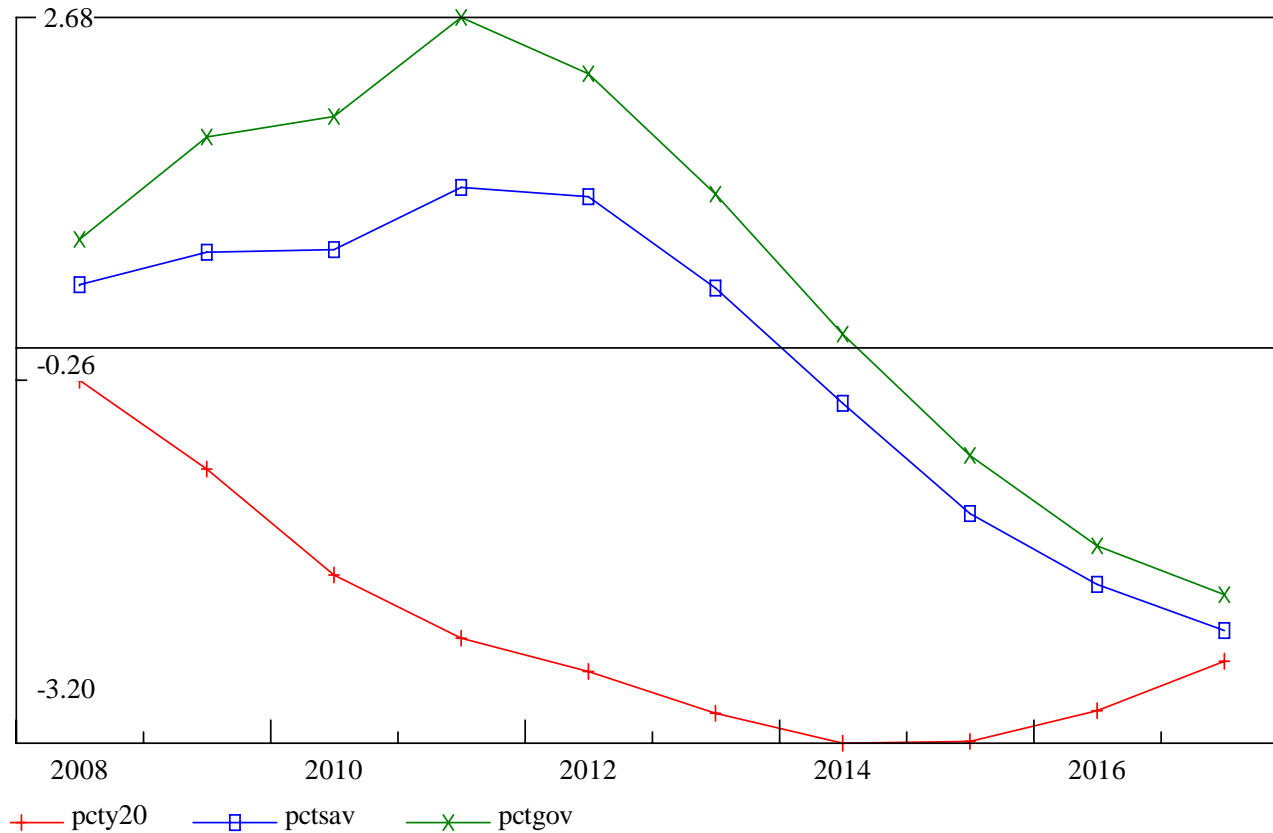
Savings Rate Change Effects

	2002 prices	Percent of base
	2012	GDP in 2012
Total Gains	12697	3.8
Household Direct	10286	3.1
Household Indirect	1505	0.5
Investment	6070	1.8
Net Trade	-6679	-2.0
Inventory	1515	0.5

Real GDP Deviations from Base

Figure 4: GDP: Percent deviation from base

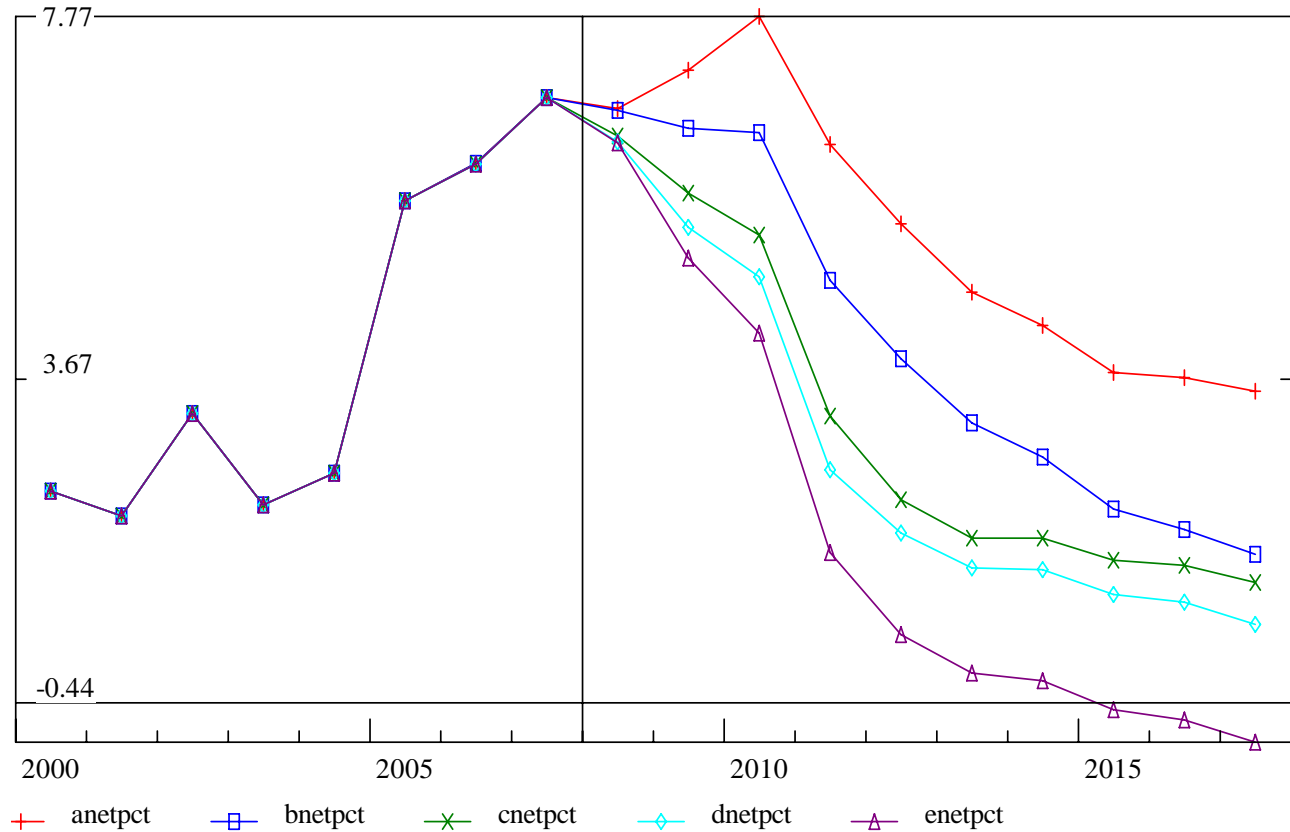
Lower savings rate and Increased Gov't spending



Increasing Appreciation to 35% above Base

Figure 5: Net Trade

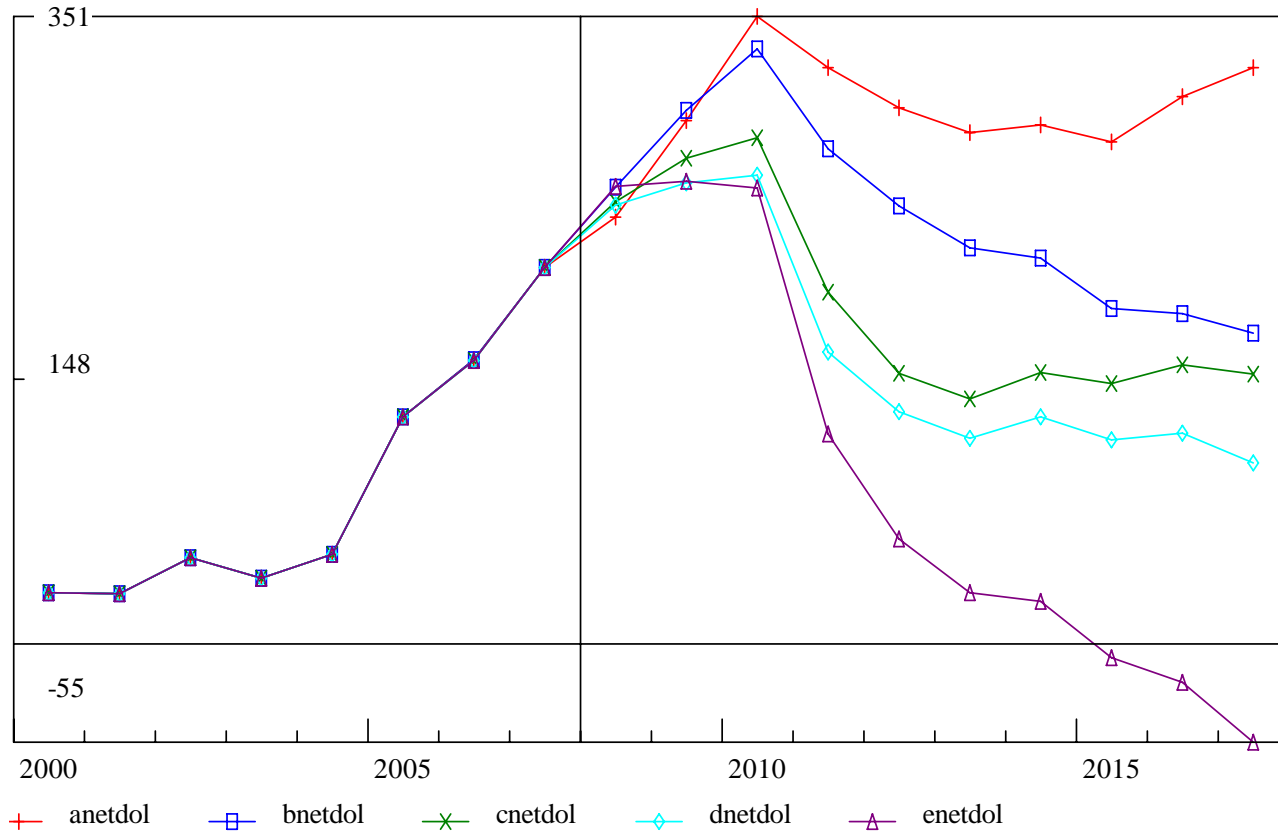
Percent of GDP



Trade in US Dollars

Figure 6: Net Trade in Billions of US Dollars

Billions of US Dollars



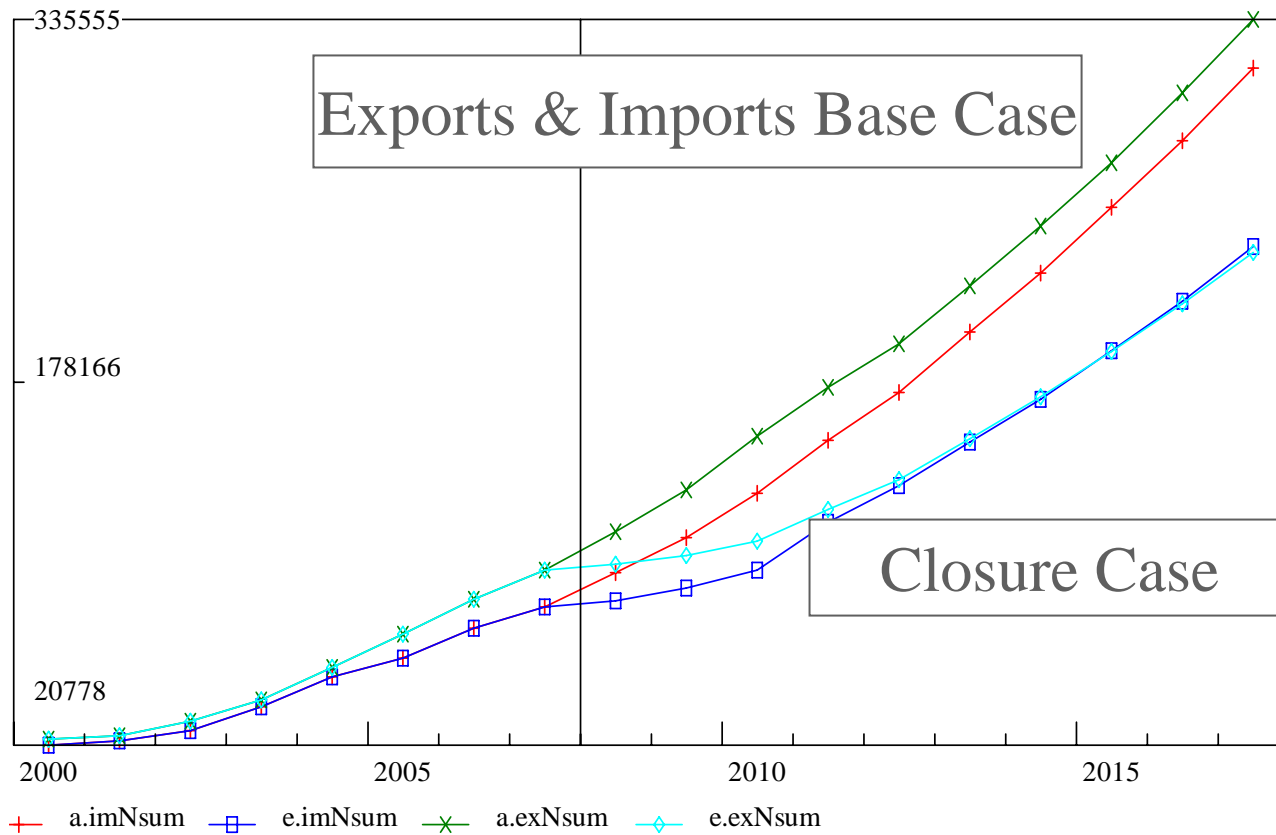
Trade Balance in 2017 (100 Mill Yuan)

		2017 Base	2017 Closing	Percent Change
Exports	Nominal	335555	234199	-30.2
	Real	280609	241725	-13.9
	Price	120	97	-19.2
Imports	Nominal	314218	236698	-24.7
	Real	249345	264597	6.1
	Price	126	89	-29.4
Net	Nominal	21337	-2499	
	Real	31264	-22872	

Nominal Exports and Imports

Figure 7: Exports and Imports

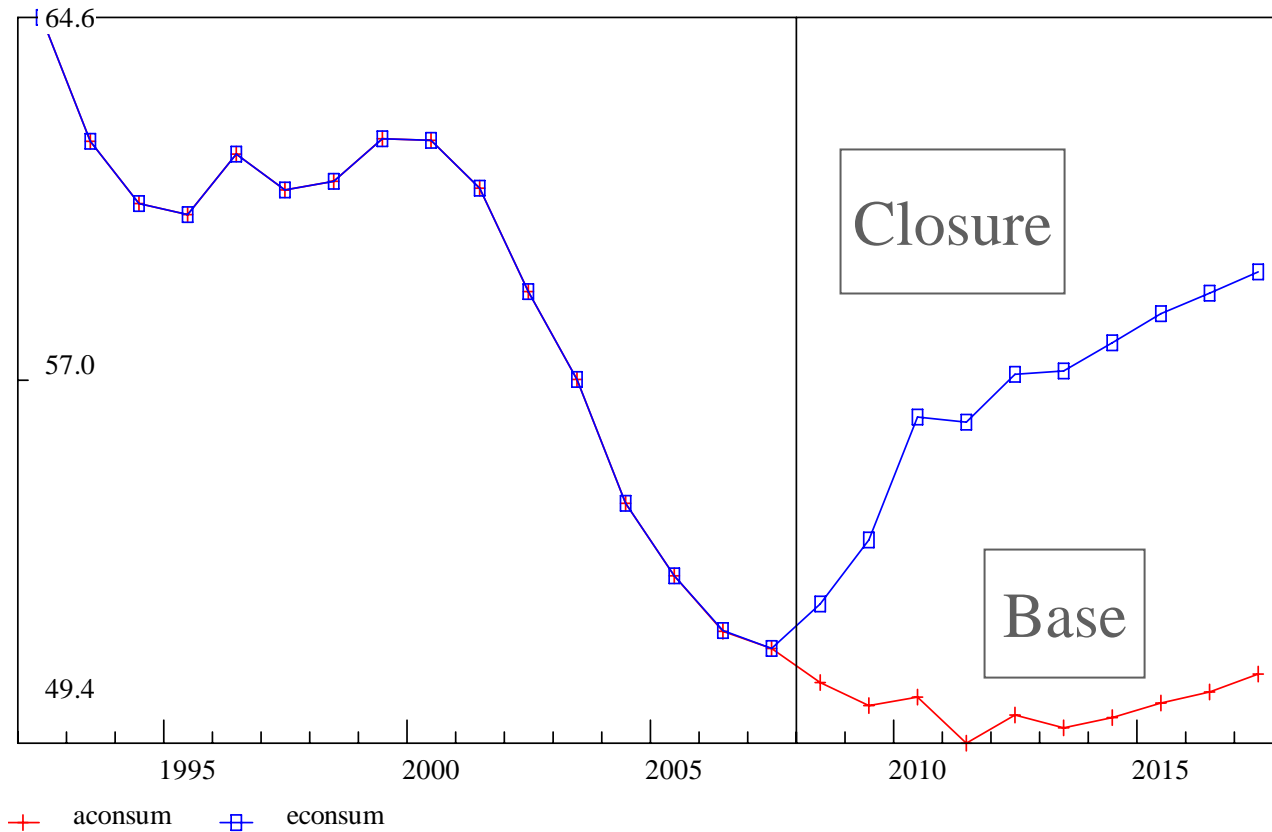
100 million Yuan



Changing Economic Structure

Figure 8: Consumption as a Percent of GDP

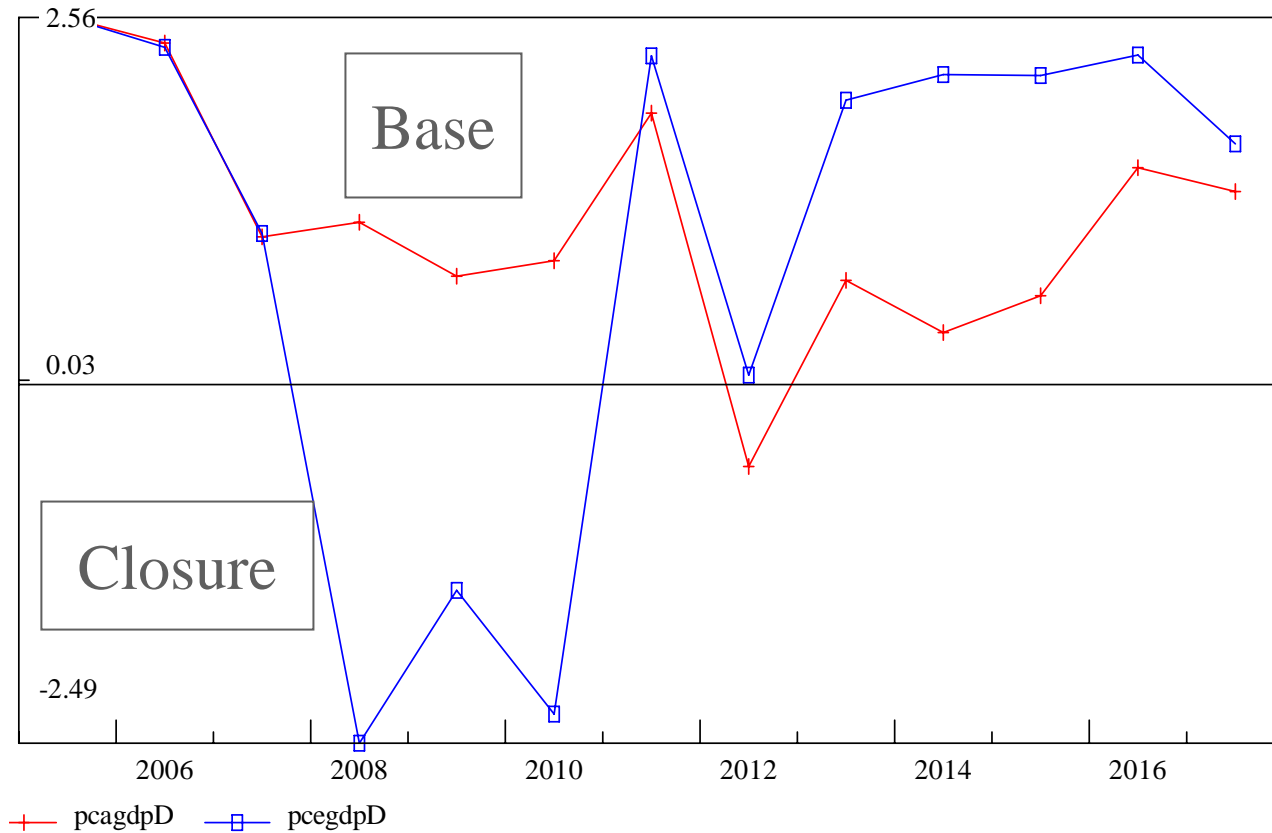
Percent of GDP



Inflation

Figure 9: GDP deflator

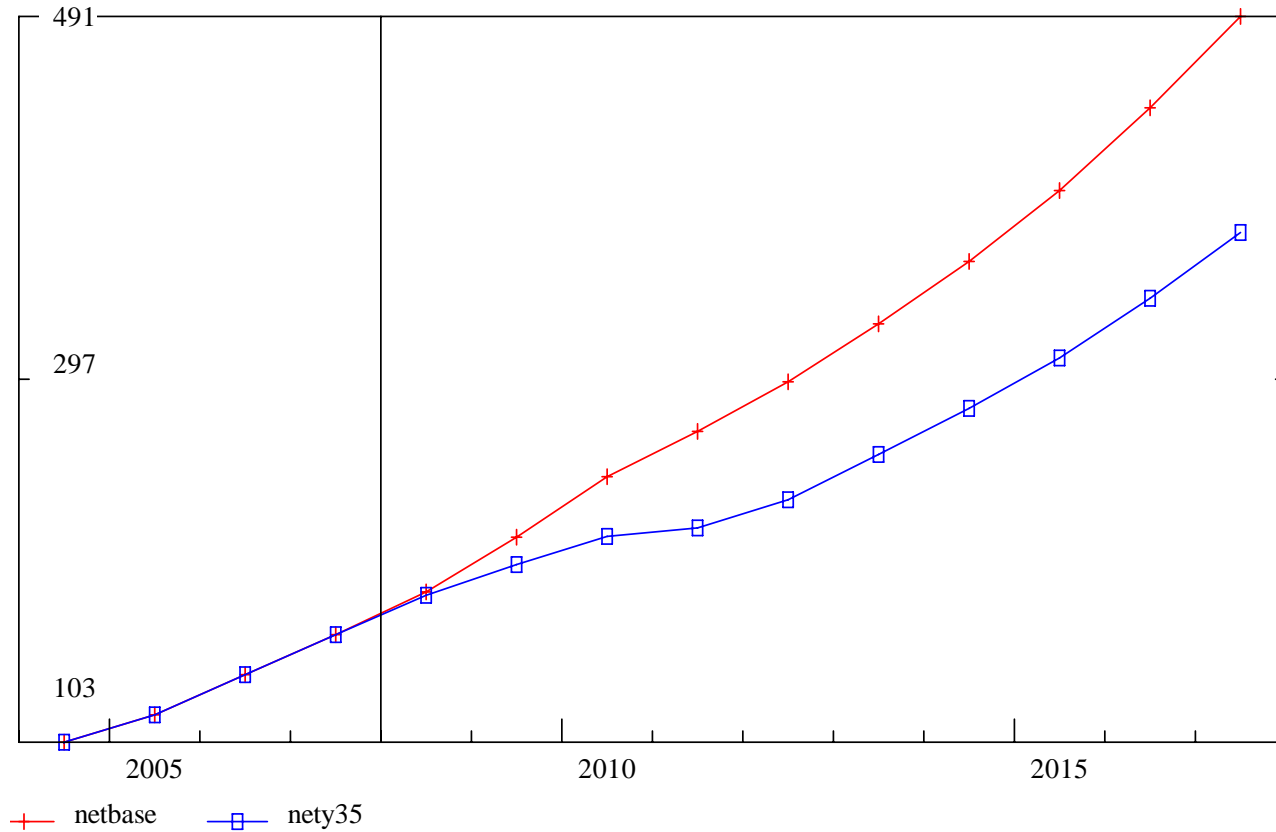
percent



China's Surplus with the USA

Figure 10: US Net Deficit with China

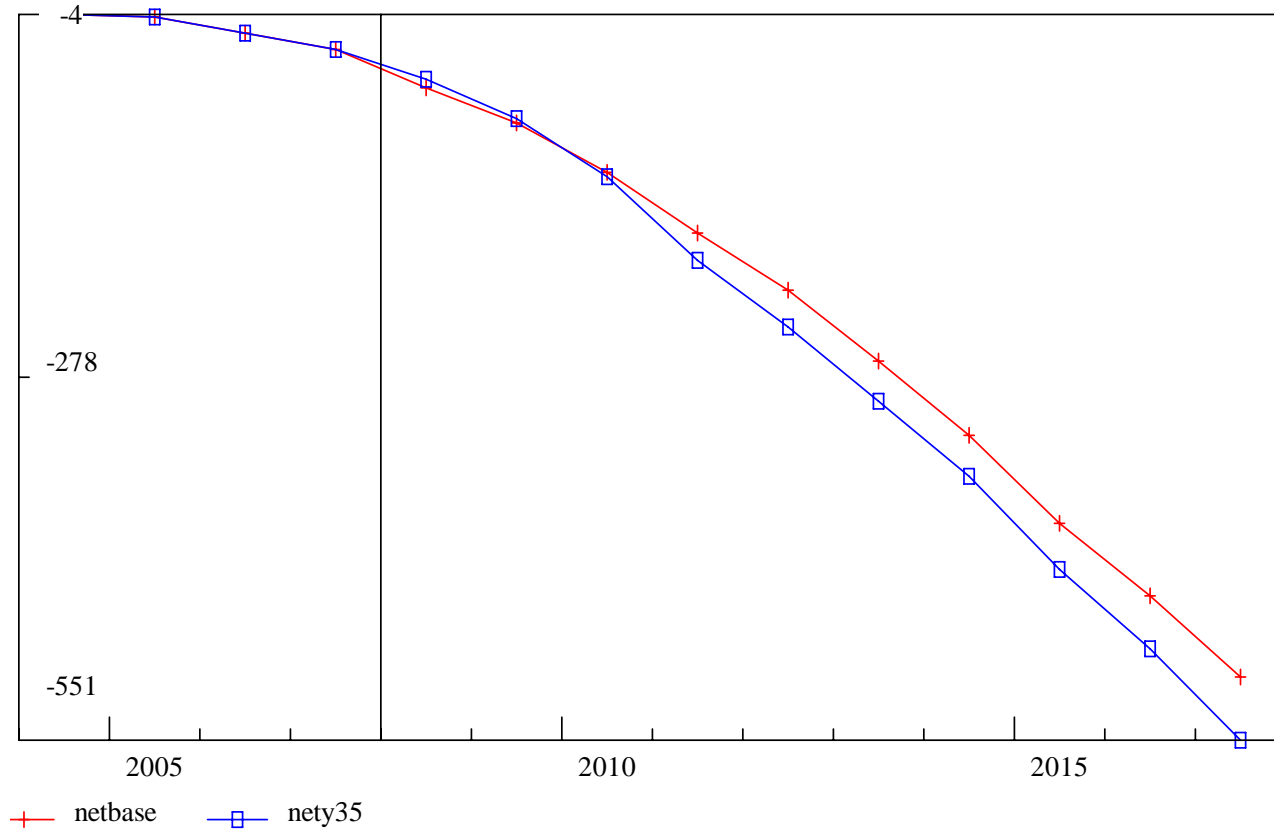
Billions of US\$



China's Deficit with Japan

Figure 11 China-Japan net trade

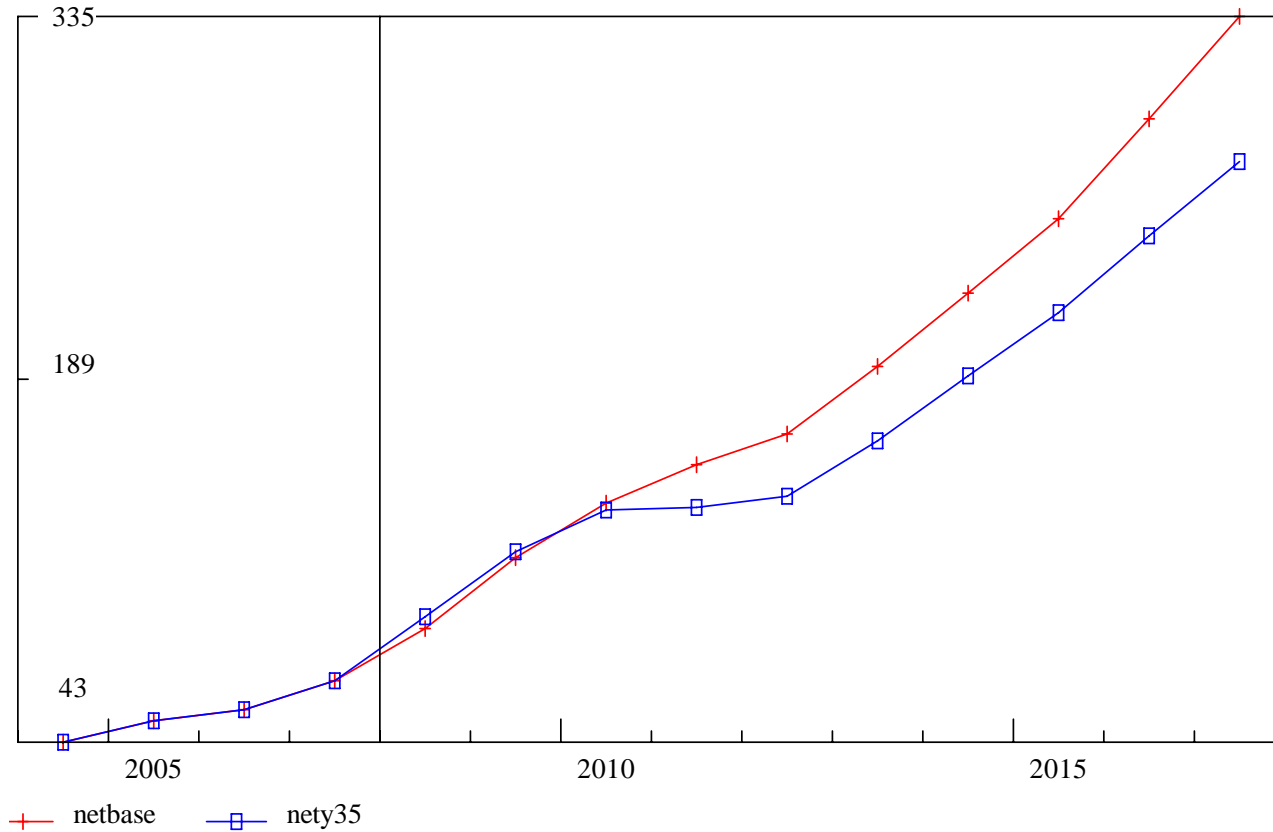
Billions of US\$



China's Surplus with Europe

Figure 12 China-Europe net trade

Billions of US\$



Gross Output Gains

	Output	Volumes
Sector		2017 Percent Difference
	Total Gross Ouput	-4
Gainers	57 Education	21
	56 Health Care & sports	20
	24 Medicines	18
	12 Beverages	18
	53 Restaurants	10

Gross Output Losers

8 Non-ferrous Mining	-66
7 Ferrous Mining	-20
26 Rubber Products	-18
30 Metal Products	-18
30 Non-ferrous Metals	-18

Gross Output Changes in Five Largest Sectors

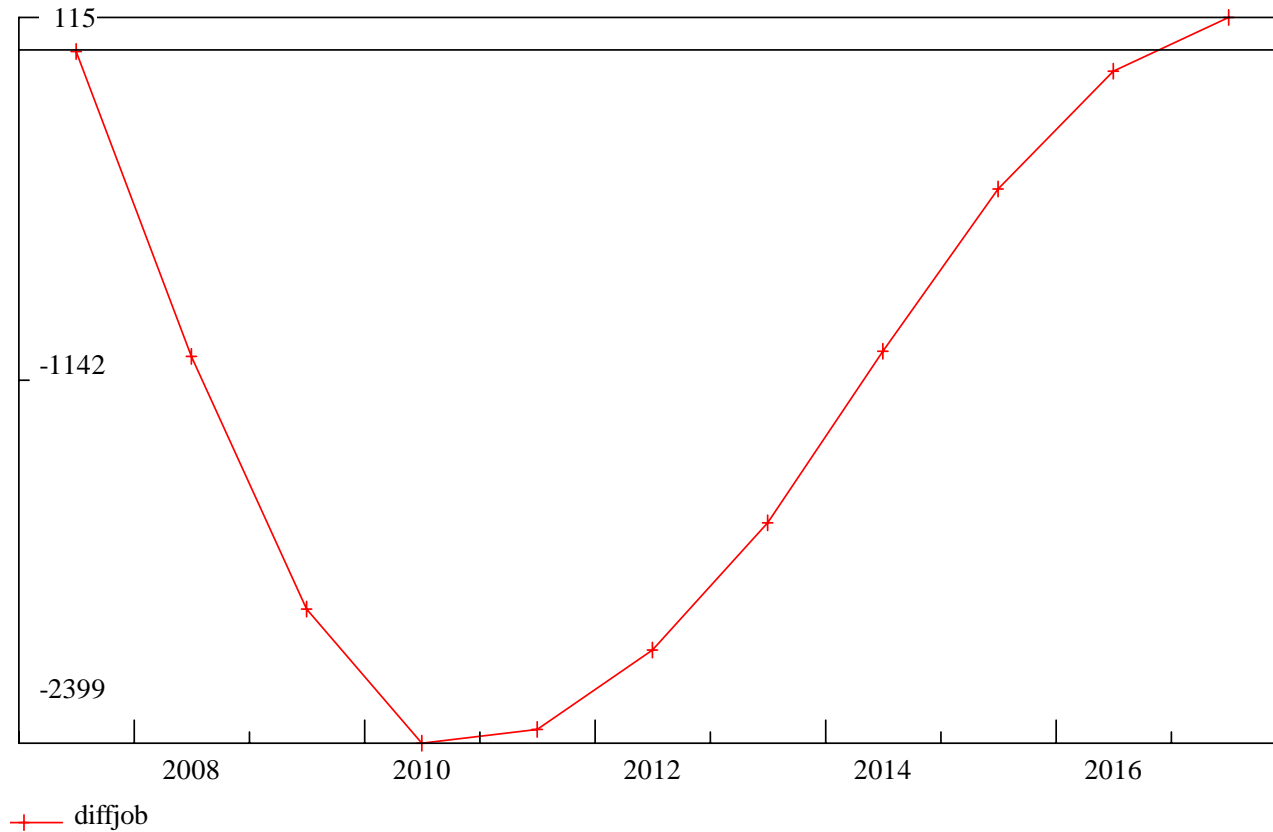
39 Electronic & Comm Mach.	-8
45 Construction	1
55 Real Estate	1
52 Trade	-5
42 Electricity	-5

Export Changes in Five Largest Exporting Sectors

39 Electronic Machinery	-7
14 Textiles	-16
52 Commerce	-14
38 Electric Machinery	-11
40 Instruments	-18

Employment Percent Deviations from Base

Figure 13: Employment Difference
in 10,000 jobs



Employment Changes in Five Largest Employing Sectors

	Difference	10,000 Persons
Total		115
1 Agriculture		834
38 Construction		14
52 Public Administration		-2
48 Real Estate		10
50 Education		255