

# China's Exchange Rate, Trade Balance, and Wage Explosion

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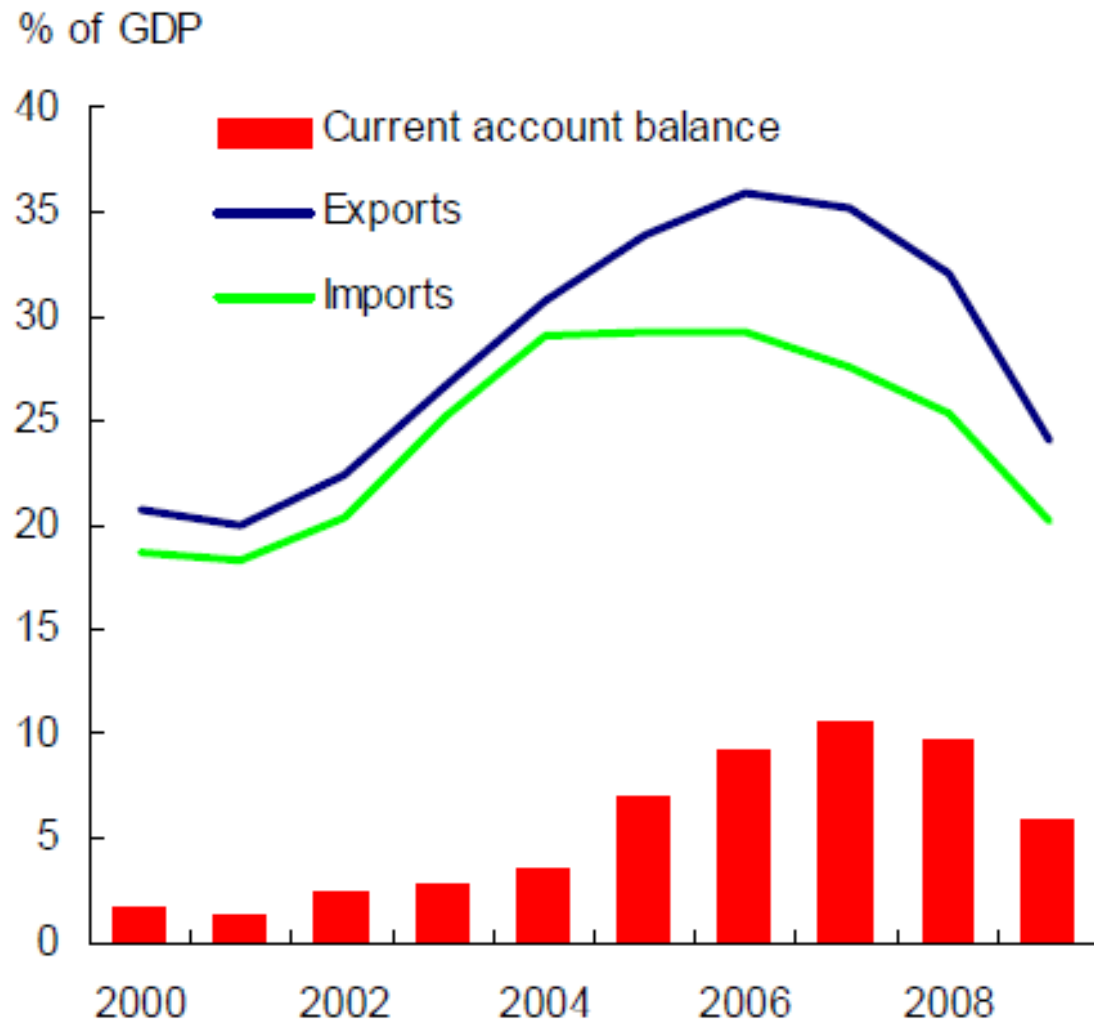
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### Some of China's Quantitative Objectives in its 11<sup>th</sup> Five-Year Plan

Indicator	Type	2006-2010 target	2006-2009 actual
GDP real growth (%)	Anticipated	7.5	11.4
Per-capita GDP real growth (%)	Anticipated	6.6	10.8
Increase of share of services in GDP (%)	Anticipated	3.0	3.5
Reduction of energy use per unit of GDP (%)	Obligatory	20.0	15.6
Reduction of water use per unit of industrial VA (%)	Obligatory	30.0	31.1
Reduction of COD emission (%)	Obligatory	10.0	9.7
Reduction of SO <sub>2</sub> emission (%)	Obligatory	10.0	13.1
Average number of years of schooling (yr)	Anticipated	9.0	8.9
Population covered by basic urban pension (100 mln)	Obligatory	2.2	2.4
Coverage new rural coop. health system (%)	Obligatory	80.0	94.0

Source: UBS

## Trade as a Share of China's GDP



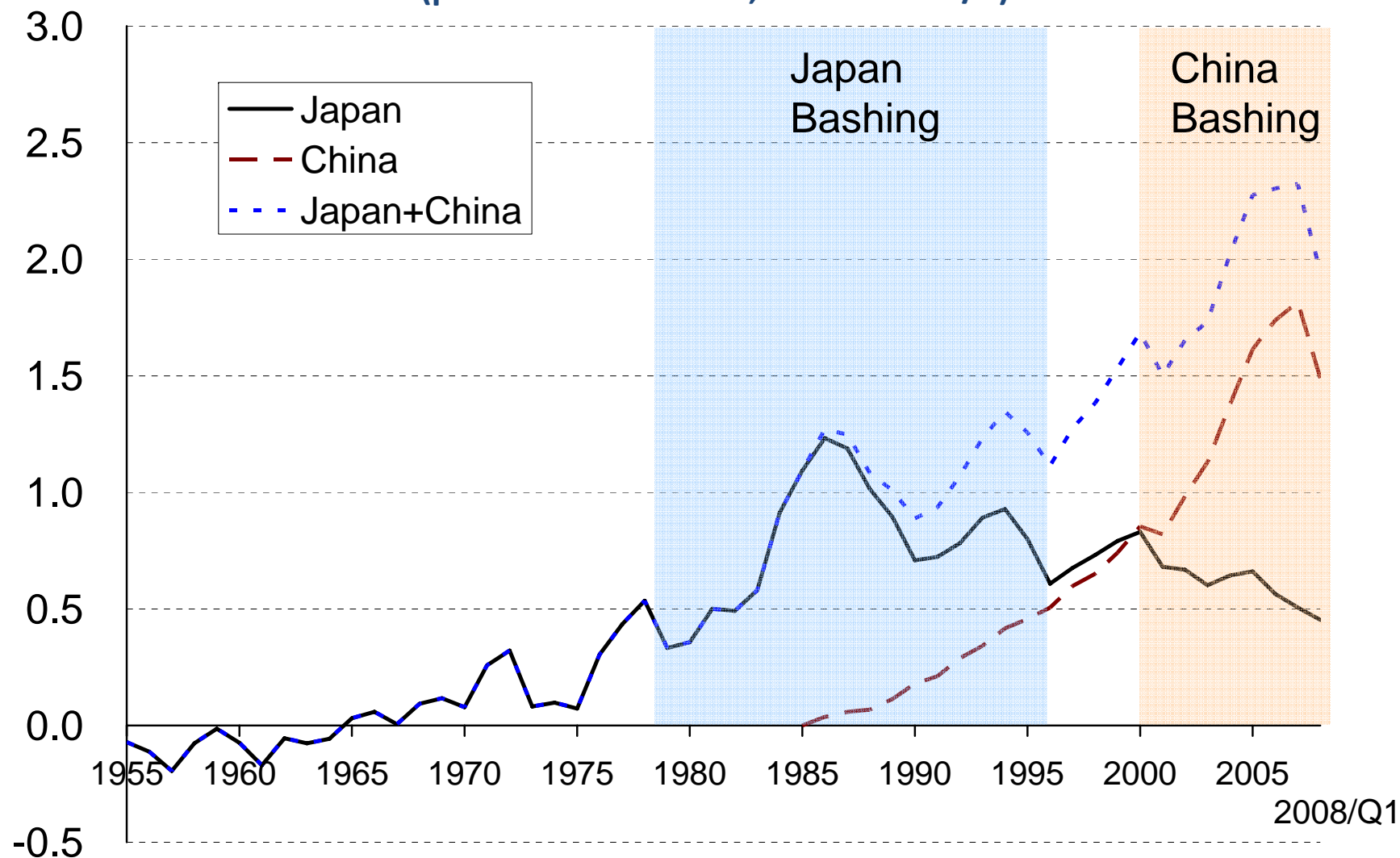
Source: UBS

# Thesis

- For creditor countries producing manufactured goods on the periphery of the dollar standard such as China with current account surpluses, foreign mercantile pressure to appreciate their currencies or move toward more flexible exchange rates is misplaced.
- As with Japan's earlier experience, exchange rate appreciation, or the threat of it, causes macroeconomic distress without having any predictable effect on the trade surpluses of creditor economies.

# Figure 6: Bilateral Trade Balances of Japan and China versus the United States

(percent of U.S. GDP, 1955 – 2008/1)

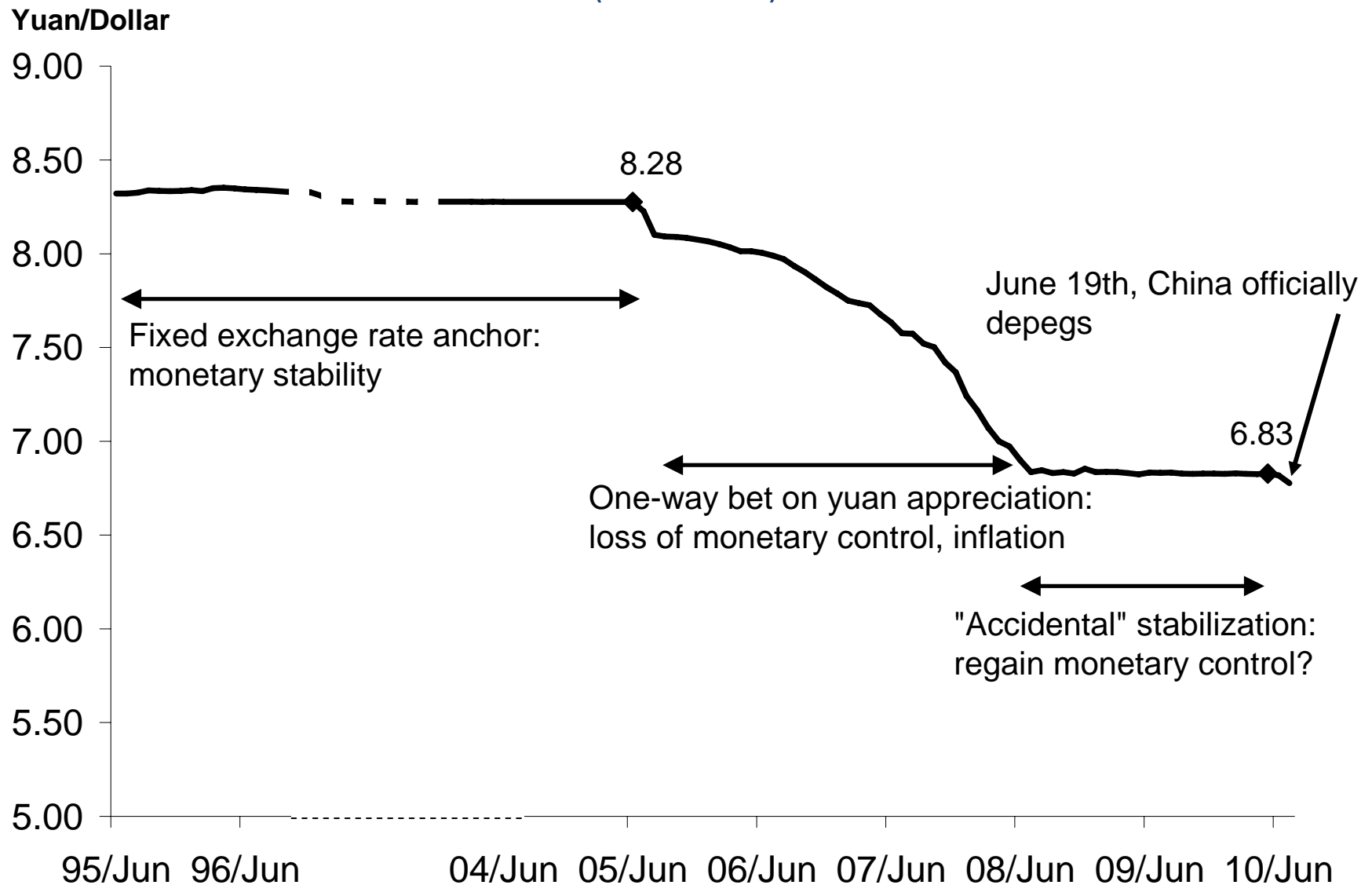


Source: Kenichi Ohno, BEA

# U.S. Mercantile Pressure on China

- China Bashing: 2000 to ?
  - China surpasses Japan in 2000 as having the biggest bilateral trade surplus with the U.S
  - Unlike Japan, export surge is “across the board” in low value added manufactures.
- Focus is primarily on appreciating the Renminbi:
  - Schumer-Graham bill of March 2005 for a 27.5% tariff on U.S. imports from China unless RMB appreciates (withdrawn October 2006, but new threat in 2007)
  - Section 3004 of U.S. Public Law 100-418: U.S. Secretary of Treasury must report twice a year on whether countries with trade surpluses are “manipulating” their currencies.
- RMB rises by 2.1% on July 21 2005, and begins slow upward crawl
- Sept 29, 2010, U.S. House of Rep, in bipartisan vote, authorizes Dept of Commerce to impose tariffs on imports from China to offset “unfair” exchange rate and other trade practices.

**Figure 1: China's monetary policy and the yuan/dollar rate  
(1995-2010)**



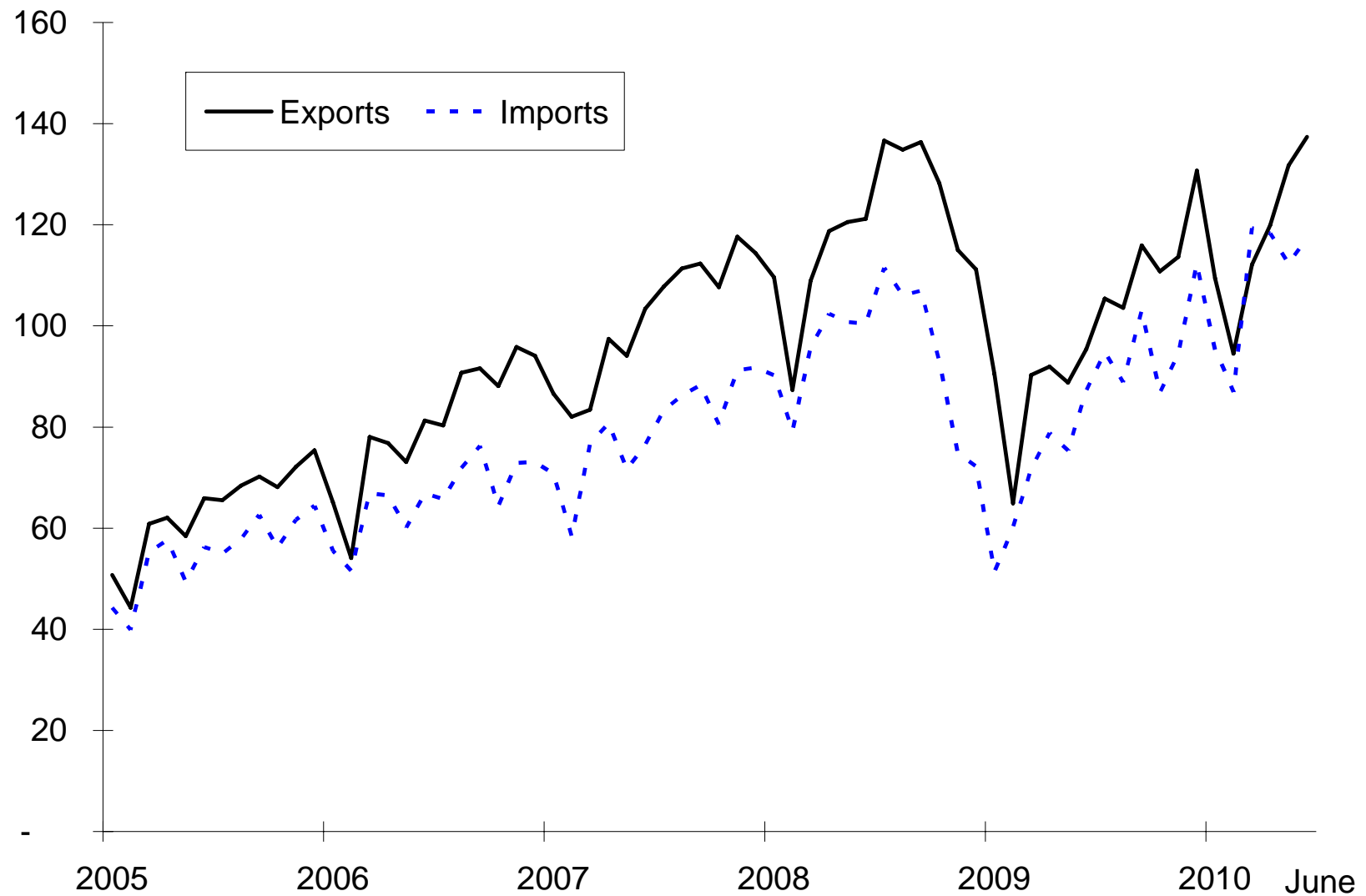
Source: Federal Reserve Economic Data

## The Yuan/Dollar Rate: A Potted History

- 1995 to 2004 rate fixed at 8.28 Y/\$ to stop inflation and anchor price level
- July 2005 to July 2008, one-way bet on RMB appreciation: hot money inflows, buildup of official exchange reserves, loss of monetary control, disruption of forward exchange market.
- July 2008 to Nov. 2008, unwinding of dollar carry trade with appreciation of effective dollar ex rate.
- Y/\$ rate reset at 6.83 July 2008 through June 2010. Monetary control regained with a massive expansion of bank credit to support fiscal stimulus for offsetting sharp fall in exports
- June 2010, RMB officially unpegged from dollar but the rate moves very little—less than 2 percent as of Oct.

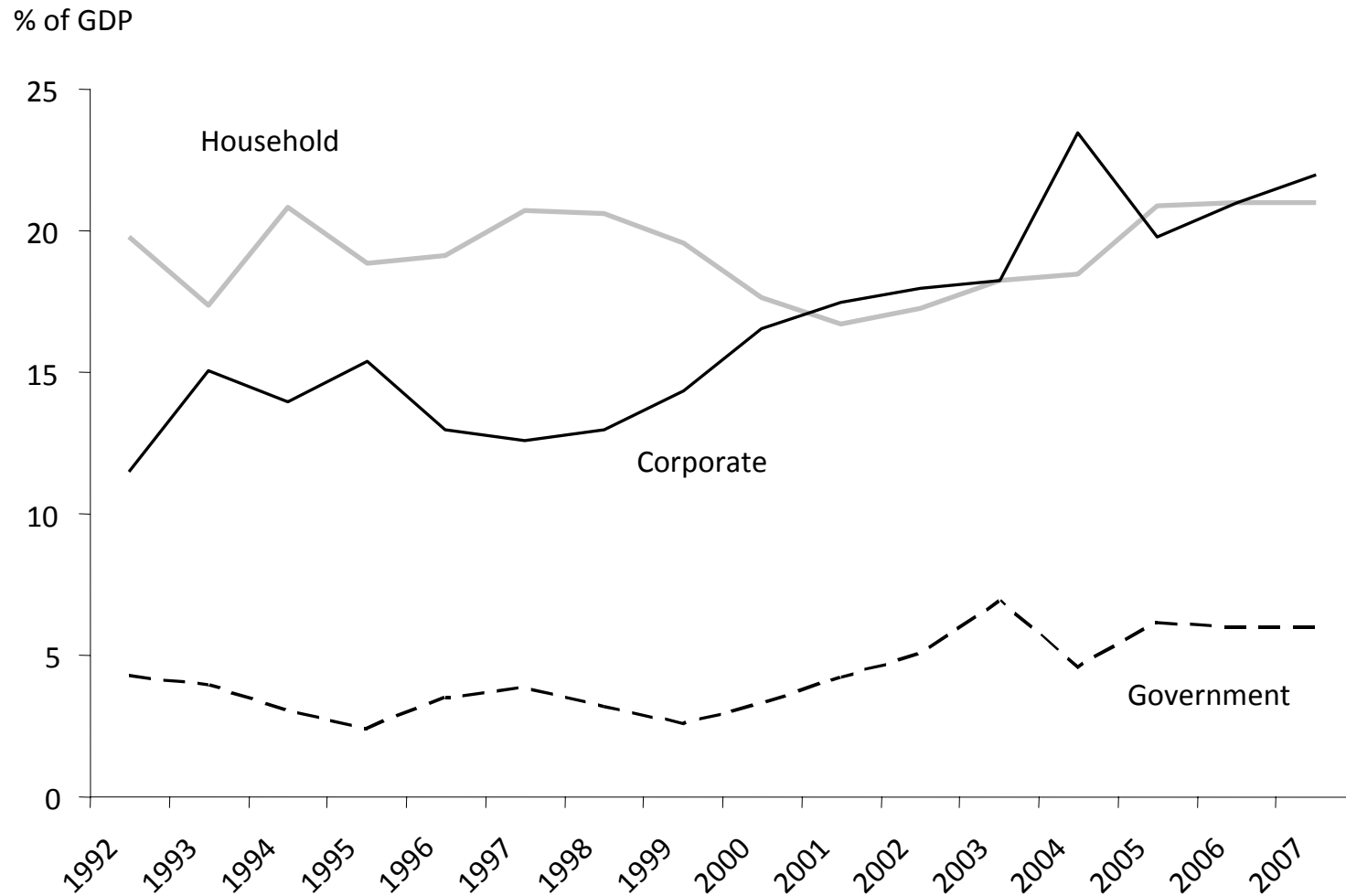


**Figure 9: China's Nominal Trade**  
(in billions of U.S. dollar, monthly)



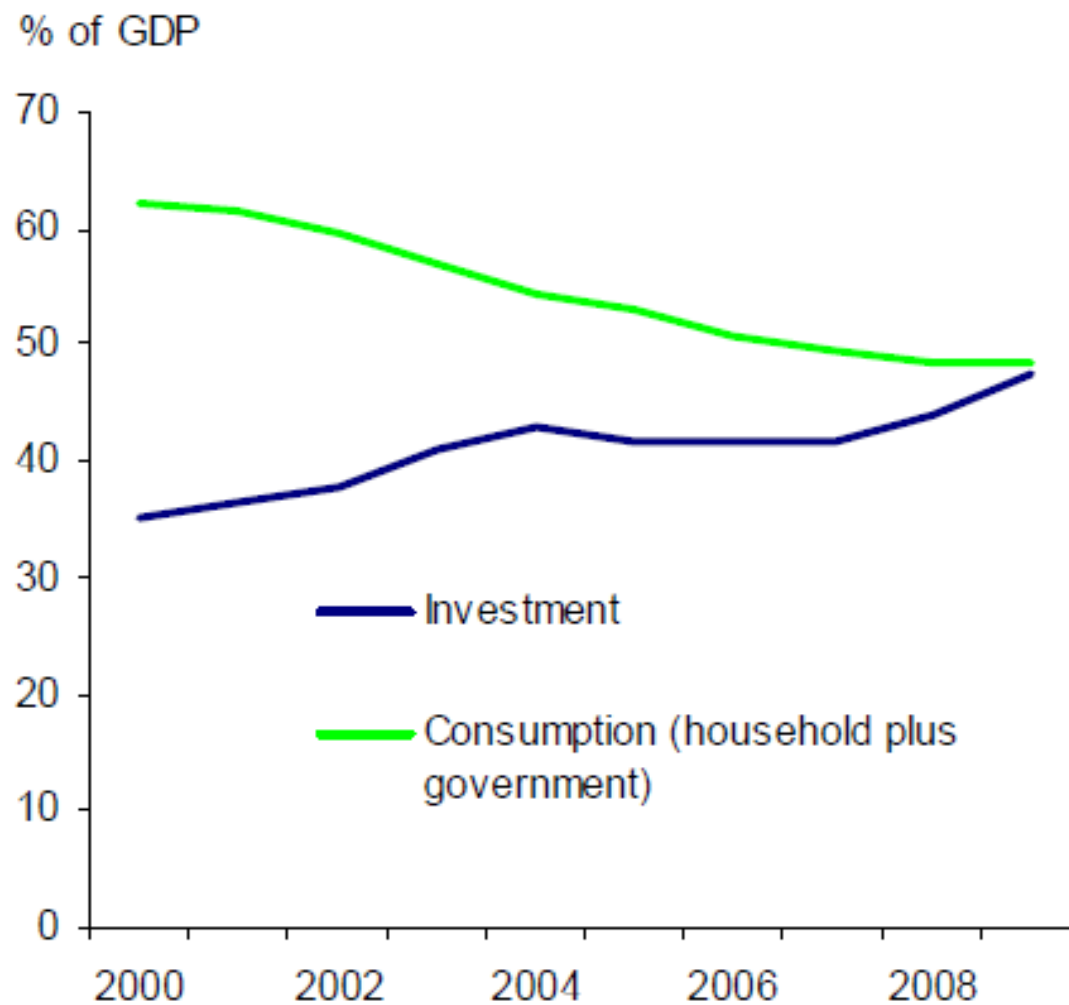
Source: China Customs Statistics Information

## China's Savings by source



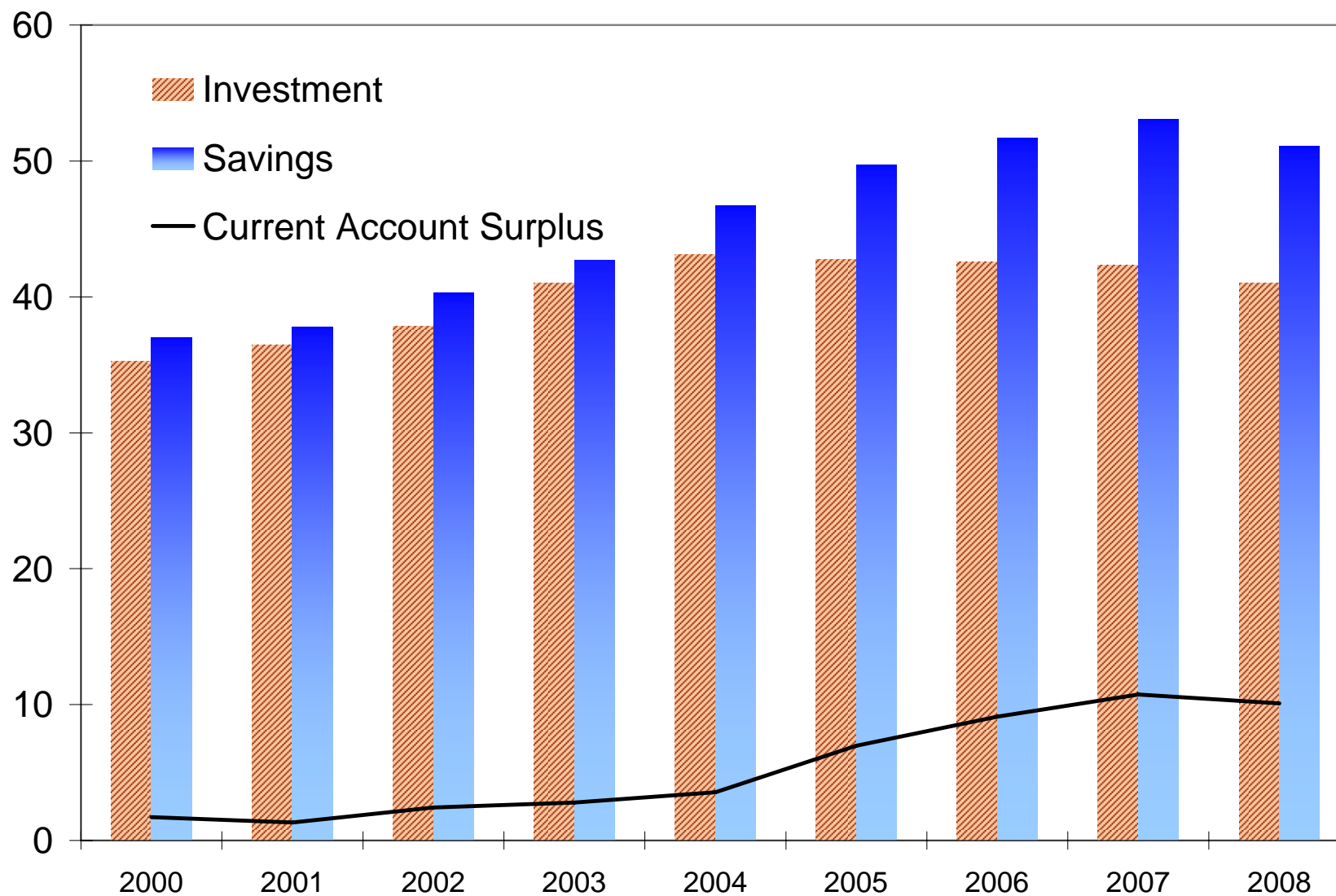
Source: CEIC, GS Global ECS Research.

## Share of Investment and Consumption of China's GDP



Source: UBS

**Figure 16: Investment, Savings and Current Account of China**  
(as a percent of GDP)



Source: *EIU*

# Exchange Rate and the Trade Balance

$$\mathbf{X - M = S - I = Trade (Saving) Surplus}$$

**X** is exports and **M** is imports broadly defined,  
**S** and **I** are gross domestic saving and investment

Two theoretical Approaches:

- (1) Microeconomic focus on **X – M** : the elasticities approach to the trade balance; and
- (2) Macroeconomic focus on **S – I** : the absorption approach to the trade balance.

# Effect of Appreciating the Renmimbi ?

- *Elasticities Approach:*

$X \downarrow$   $M \uparrow$  and trade surplus declines

- *Absorption Approach:*

$S \updownarrow$   $I \downarrow$  and trade surplus ?

But if  $I$  is sensitive to the exchange rate and slumps, trade surplus increases. Investment in China's open economy, with multinational firms, is huge: more than 40% of GDP.

- Japan's experience with ever-higher yen, 1971 – 95:  
Investment eventually slumped with general deflation, followed by “lost” decades, but the trade surplus remained.

# Expected Appreciation of RMB

- “Hot” money flows into China
  - sharper build up of official exchange reserves
  - threatened loss of monetary control as base money expands from foreign exchange intervention
  - sterilization disrupts normal flow of bank credit
  - domestic interest rates bid down with possible bubbles in asset markets such as real estate.
- No natural capital outflow to finance China’s huge trade (net saving) surplus

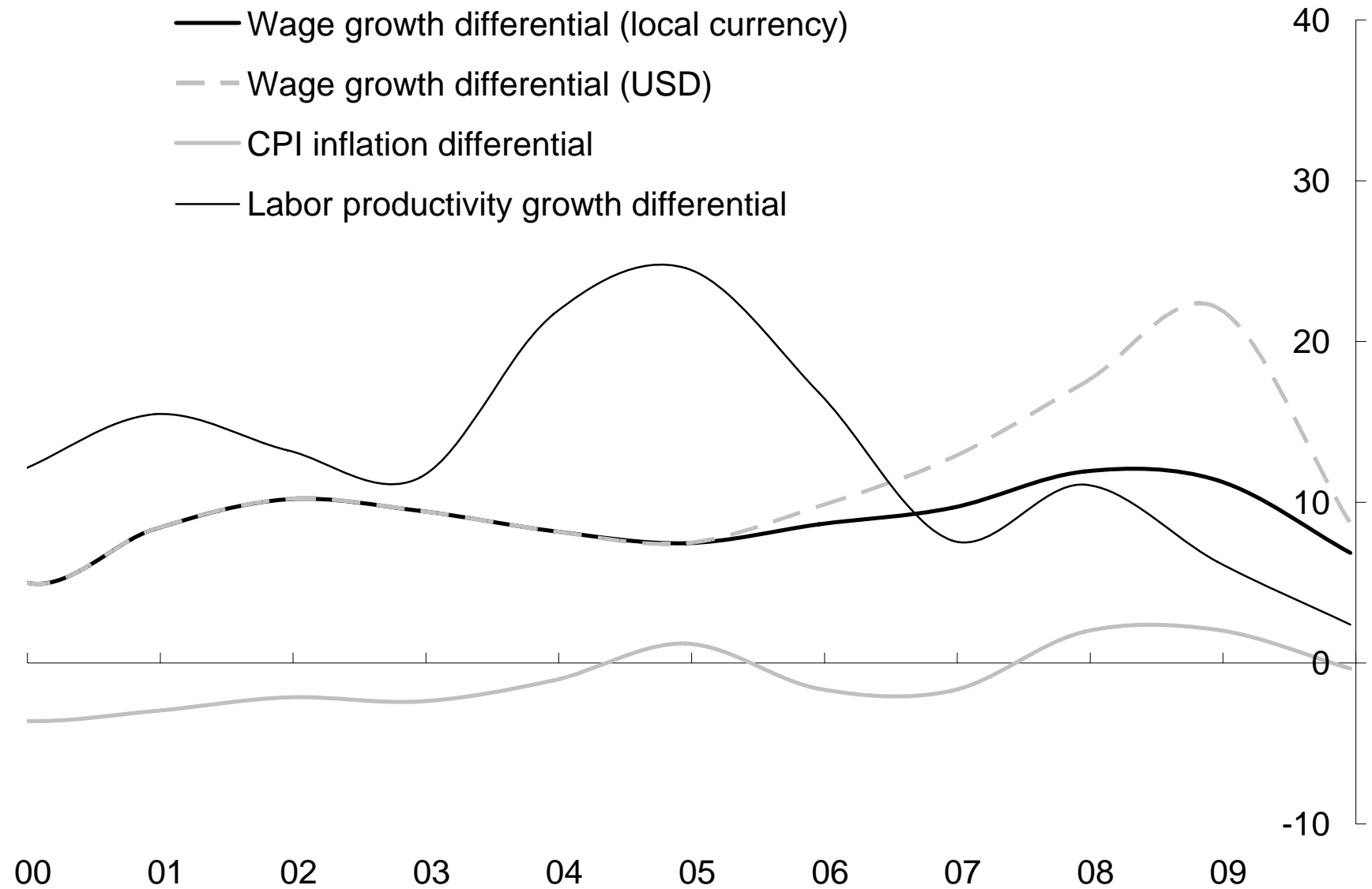
# Wage and Labor Productivity Growth: Unit labor Costs in China

- Discrete changes in the yuan/dollar rate will not predictably affect the trade (net saving) balance.
- But to sustain a stable Y/\$ rate, balancing “international competitiveness” still requires that Chinese unit labor costs (ULCs) approach those in the United States.
- Evidence suggests that if the nominal exchange rate is stable, money wages in the high-growth country rise sufficiently fast that ULCs converge.
- Conversely, with actual or expected appreciation, money wage growth slows with no tendency to converge to a stable equilibrium.



# China-US Wage Growth, CPI, and Labor Productivity Growth Differential

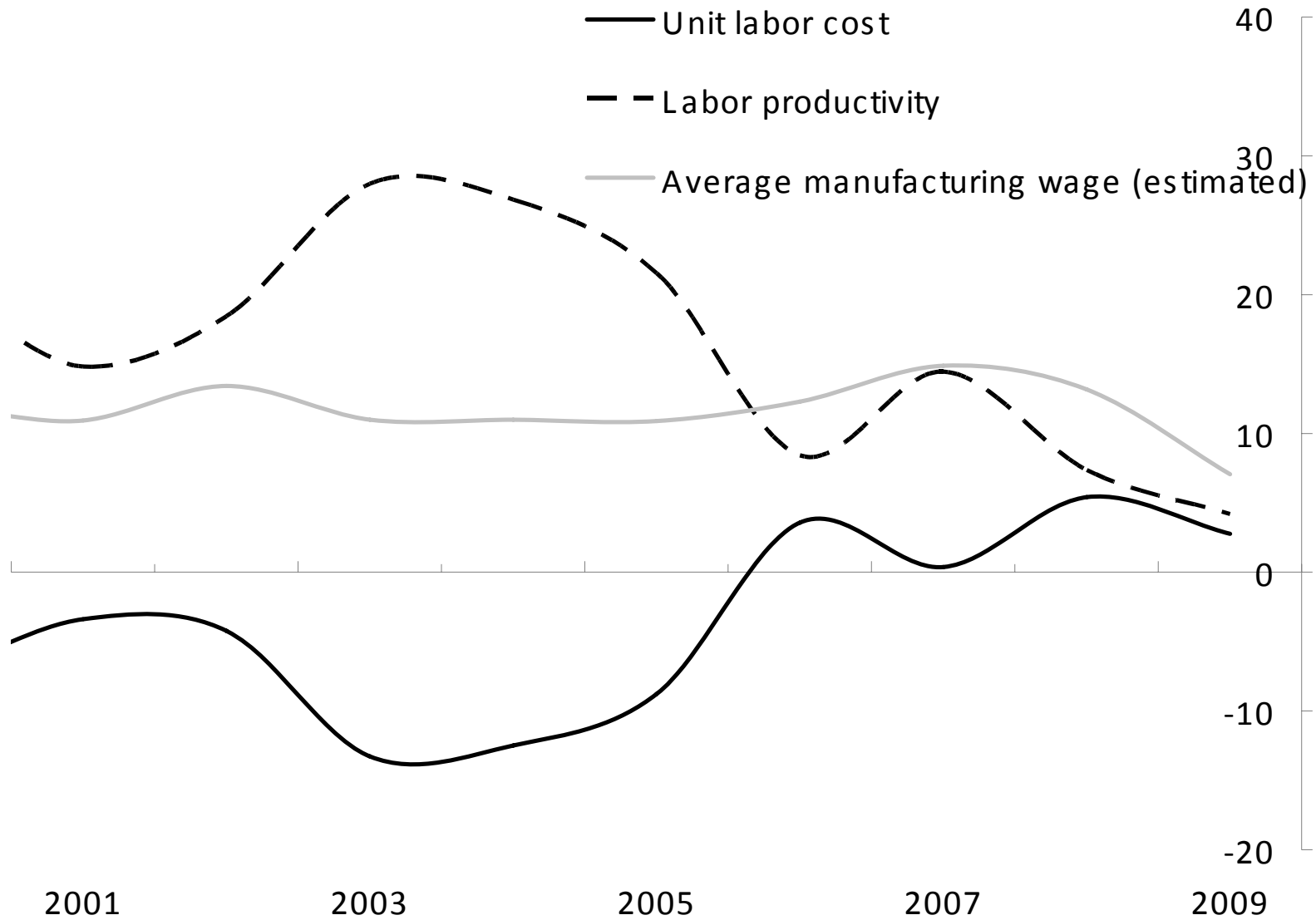
% chg yoy



Source: Goldman Sachs

# China's Manufacturing Sector Wage, Labor Productivity and ULC

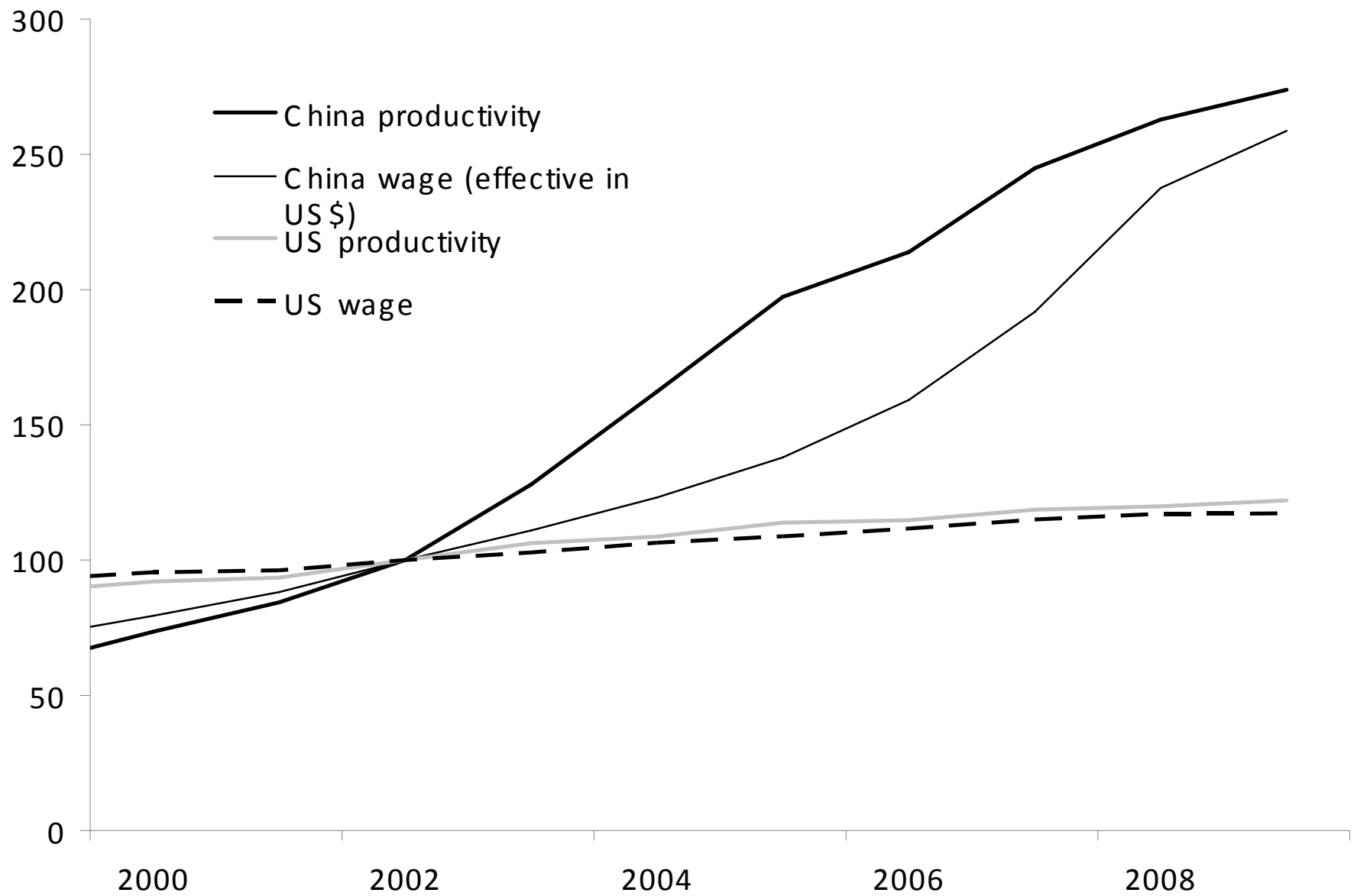
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Source: Goldman Sachs

Base year = 100

## China's productivity and wage growth



Source: Goldman Sachs

Earlier Evidence from Japan since 1950

Japan and the United States, 1950-1971, with the Yen Fixed at 360 per dollar  
(average annual percent change in key indicators)

<b>Wholesale prices</b>		<b>Money wages</b>		<b>Consumer prices</b>		<b>Industrial production</b>	
U.S.	Japan	U.S.	Japan	U.S.	Japan	U.S.	Japan
1.63	0.69 <sup>a</sup>	4.52	10.00	2.53	5.01	4.40	14.56
<b>Real GDP</b>		<b>Nominal GDP</b>		<b>Narrow money</b>		<b>Labor productivity</b>	
U.S.	Japan	U.S.	Japan	U.S.	Japan	U.S.	Japan
3.84	9.45 <sup>a</sup>	6.79	14.52 <sup>a</sup>	3.94	16.10 <sup>b</sup>	2.55	8.92 <sup>c</sup>

*Source: IFS, Japan Economic Yearbook, Economic Survey of Japan, OECD Economic Surveys and Bureau of Labor Statistics.*

a1952-1971.

b1953-1971.

c1951-1971.

# Manufacturing Wage Growth for U.S. and Japan 1950-71 with Exchange Rate Fixed at 360 Yen per Dollar

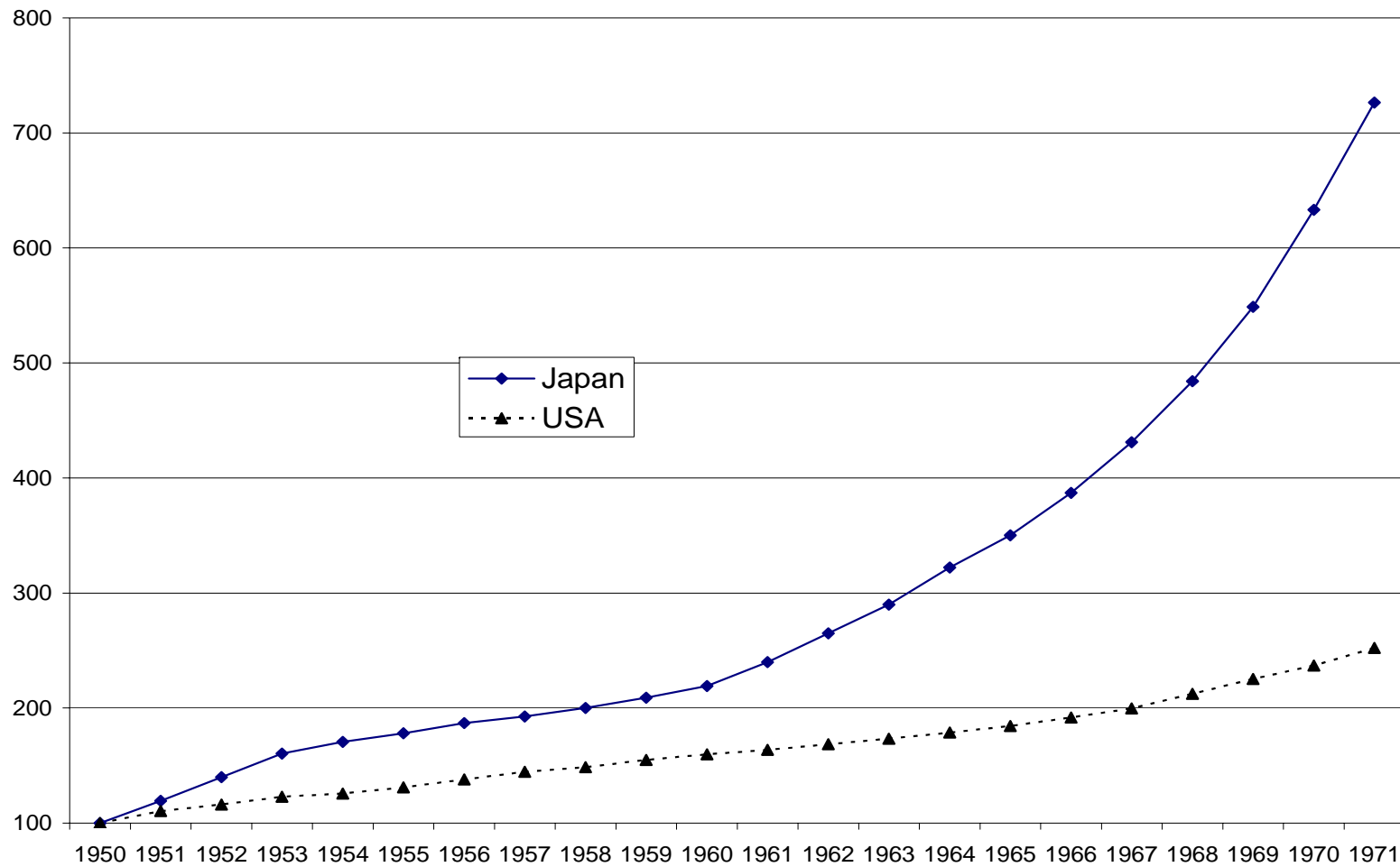
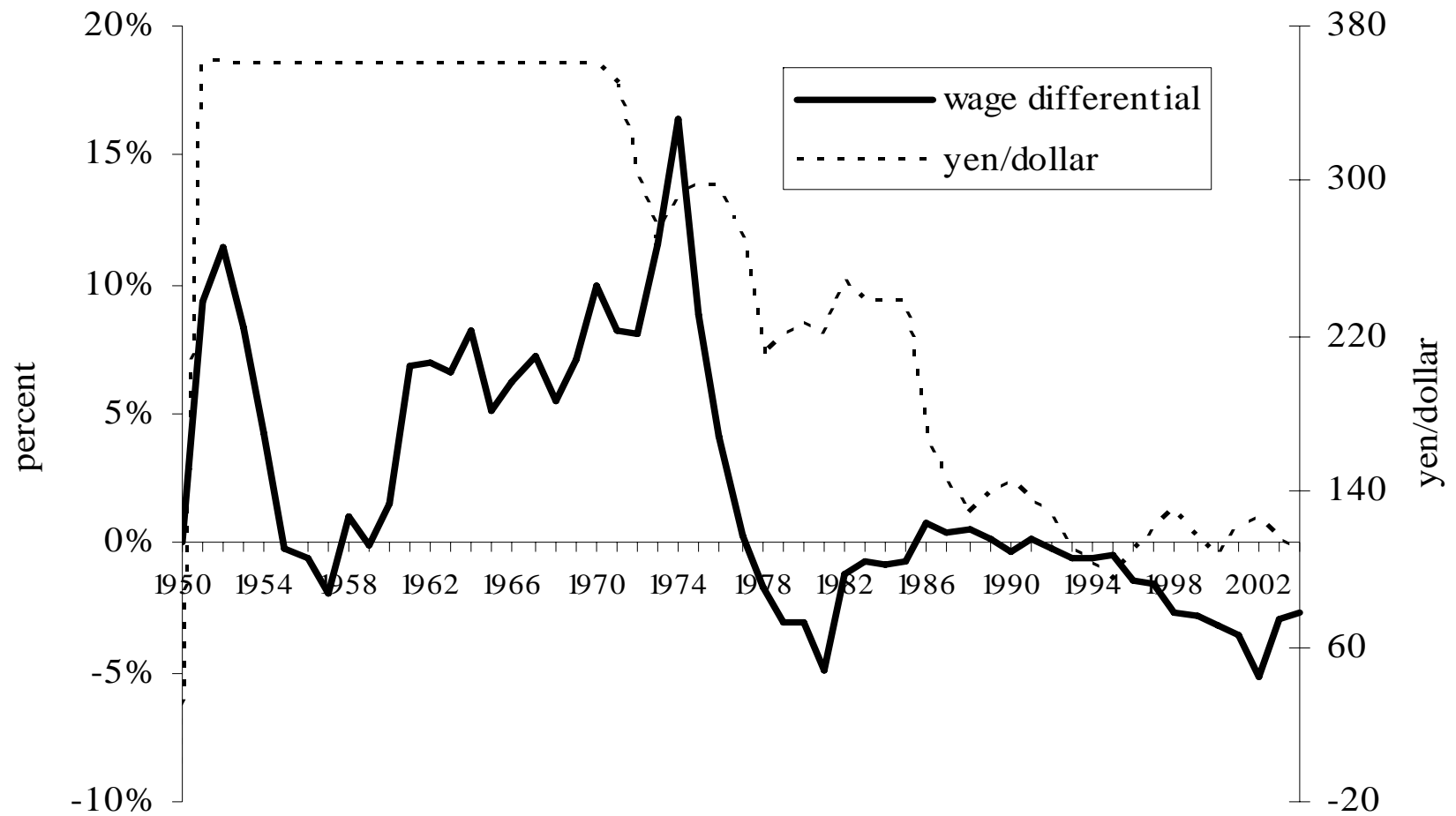


Figure 2: Differential in Wage Growth between Japan and U.S., and Yen/Dollar Rate, 1950-2004



# Conclusion

- In the long run, exchange rate appreciation and money wage growth are *substitutes* .
- But anticipated exchange appreciation induces hot money inflows, upsets the financial markets, and inhibits wage growth.
- For a catch-up economy with naturally high productivity growth like China, stabilize the exchange rate and allow fast wage growth
- But additional steps to increase personal income and consumption remain necessary to reduce the trade (net saving) surplus