Friedrich-Schiller-Universität Jena

# That Chinese "juggernaut" – should Europe really worry about its trade deficit with China?

*Andreas Freytag*

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*Andreas Freytag* (andreas.freytag@ecipe.org) is a Senior Fellow at ECIPE and a Professor of Economics, FSU Jena

# The Problem

High growth of China’s trade with the EU in the last 8 years.

Europe is China’s largest export market and is the fourth most important destination of export from the EU.

This in general is beneficial to both China and Europe.

However:

Europe has built up a trade bilateral deficit in its relation with China speedily.

➔ Alarmist criticism, and demands for actions to be taken to correct this imbalance.

Labelled a ‘juggernaut’, which is ‘out of control’ by Trade Commissioner Peter Mandelson, and criticised in vary harsh terms by European leaders such as Nicolas Sarkozy, China has been warned that this deficit cannot keep growing.

# To justify the claim, one needs to…

*firstly*, demonstrate that a bilateral deficit is damaging to Europe's economy;

*secondly*, give evidence that the Chinese export growth has come, in some way, at the expense of Europe;

*thirdly*, and as a matter of positive science, demonstrate that it is an undervalued currency that have determined export growth, or the substantial part of it.

# Outline

1. Is the souring deficit a problem?
2. Is there evidence of currency manipulation against Europe in China?
3. An alternative explanation: trade balance as macroeconomic adjustment parameter for China’s macroeconomic policies
4. Conclusion: how relevant is the EU’s bilateral deficit with China?

## 1. Is the Soaring Deficit a Problem?

The trade deficit has more than doubled within 5 years.

**Table 1:** Bilateral Trade deficit with China 2002-2006 (bn. EUR)

| | 2002 | 2003 | 2004 | 2005 | 2006 |
|---|---|---|---|---|---|
| **Trade Deficit** | -54.7 | -64.2 | -79.3 | -106.8 | -128.4 |
| **Sum of Exports and Imports** | 124.5 | 146.6 | 175.7 | 210.1 | 255.1 |

Source: European Commission (2007).

Parallels between the US and Europe's bilateral trade deficit with China have often been drawn.

In the eyes of observers worried about Europe's trade deficit with China, there has been a convenient similarity: the US bilateral deficit with China has also grown rapidly in the last ten years.

**Table 2**: Current account balance as share GDP: USA, China and Europe 2001-2008 (% of GDP)

| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007* | 2008* |
|---|---|---|---|---|---|---|---|---|
| **USA** | -3.8 | -4.4 | -4.8 | -5.5 | -6.1 | -6.2 | -5.7 | -5.5 |
| **China** | 1.3 | 2.4 | 2.8 | 3.6 | 7.2 | 9.4 | 11.7 | 12.2 |
| **EU** | -0.3 | 0.2 | 0.2 | 0.5 | -0.2 | -0.7 | -1.0 | -1.2 |

Source: IMF (2008); *: estimated figures.

The key difference is the overall current account deficit. The US has been running a considerable current account deficit for many years (see Table 2), that has been around 5-6 percent of GDP in the last five years.

By contrast, Europe has no unsustainable overall current account deficit.

## China’s trade pattern has changed fundamentally in the last 20 years.

Export of ‘hard’ manufactures – consumer electronics, apparel, et cetera – has increased considerably while there has been a significant decline in export share of agricultural produce and soft manufacture, such as textiles. This shift has led to a significant presence of *processing trade*.

As companies have increased the sophistication of their supply-chain fragmentation, processing trade has become more present.

In fact, the share of processing trade in China’s export appears to have grown over the last decades – from 47 percent in 1992 to 55 percent in 2005.

This means that China needs to import a significant share to be able to export.

According to a recent study, around 50-75 percent of the value of China’s processing exports is accounted for by imported inputs.

Exports from China to Europe has replaced other countries' export to Europe. Europe has a rising deficit with China but not with other emerging markets.

Accordingly, the bilateral trade balance with Japan, Mexico, India, Hong Kong and South Africa shows the tendency to activate.

In particular, the trade balance with Russia – excluding fuels – turned from almost minus six billion EUR in 2000 to a surplus of 25 billion Euros in 2006.

From the perspective of these countries, the swing is also substantial. If the renmimbi's undervaluation was the only reason for the soaring EU-deficit, an overvaluation of the rand, the ruble and other currencies would be the only explanation for the EU surplus with these countries.

Such claims have never been made, and for good reason so.

**Table 3**: EU-27 trade balance with China and selected emerging markets (all goods except fuel, bn. €)

| | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 |
|---|---|---|---|---|---|---|---|---|
| **China** | -32.8 | -48.5 | -50.8 | -54.8 | -64.2 | -79.2 | -107.8 | -130.5 |
| | | | | | | | | |
| **Hong Kong** | 4.9 | 8.8 | 11.1 | 10.2 | 8.4 | 9.2 | 9.7 | 9.3 |
| **India** | 0.1 | 0.4 | -0.4 | 0.7 | 0.6 | 1.1 | 3.0 | 2.7 |
| **Japan** | -39.7 | -46.6 | -35.6 | -30.2 | -31.4 | -31.3 | -30.1 | -32.2 |
| **Mexico** | 6.4 | 8.5 | 9.1 | 10.2 | 9.1 | 9.2 | 9.7 | 9.5 |
| **Russian Fed.** | -0.9 | -5.4 | 4.1 | 8.6 | 9.3 | 12.2 | 19.8 | 25.3 |
| **Singapore** | -1.3 | -1.8 | -0.1 | 0.5 | -0.7 | -1.0 | -1.1 | 0.3 |
| **South Africa** | -0.1 | -1.5 | -1.7 | -1.5 | 0.4 | 2.3 | 4.0 | 3.7 |
| | | | | | | | | |
| **Sum** (without China) | -30.7 | -37.6 | -13.5 | -1.8 | -4.2 | 1.8 | 14.9 | 18.7 |
| **South Korea** | 8.9 | 10.2 | 7.4 | 6.0 | 9.6 | 12.8 | 13.9 | 17.4 |
| **Brazil** | -0.1 | 1.9 | 1.0 | 2.6 | 6.3 | 7.3 | 7.5 | 8.4 |

Source: Eurostat (COMEXT database, access December 2007 and January 2008, own calculations.

Many studies confirm that China's comparative advantages are in low-tech (miscellaneous manufactured articles) and medium-tech products (machinery and transport equipment).

In both product categories, China runs a trade surplus with the EU of more than 55 billion euro.

For the category 'miscellaneous manufactured articles' one would certainly expect comparative advantages for China.

Comparative advantage is important in the context of the alleged link between soaring deficit and currency undervaluation.

Trade statistics, and analysis of comparative advantage, strongly suggests that EU-China trade has grown most significantly in areas where the comparative advantages of the two entities can be exploited ➔ Europe benefits!

**Table 4**: EU-27 trade balance with China in different product categories (Mio. EUR)

| | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 |
|---|---|---|---|---|---|---|---|---|
| Crude materials, except fuels | -181 | -159 | -247 | -142 | 165 | 465 | 900 | 2.392 |
| Manufactured goods classified by material | -4,175 | -6,020 | -6,070 | -5,860 | -5,773 | -8,479 | -11,954 | -17,566 |
| Machinery and transport equipment | -4,261 | -11,211 | -11,974 | -15,132 | -21,985 | -31,797 | -44,066 | -55,829 |
| Miscellaneous manufactured articles | -22,953 | -29,760 | -30,814 | -33,032 | -35,895 | -39,164 | -51,828 | -58,209 |
| Other | -1,367 | -1,517 | -2,142 | -1,037 | -1,584 | -1,804 | -1,947 | -2,209 |

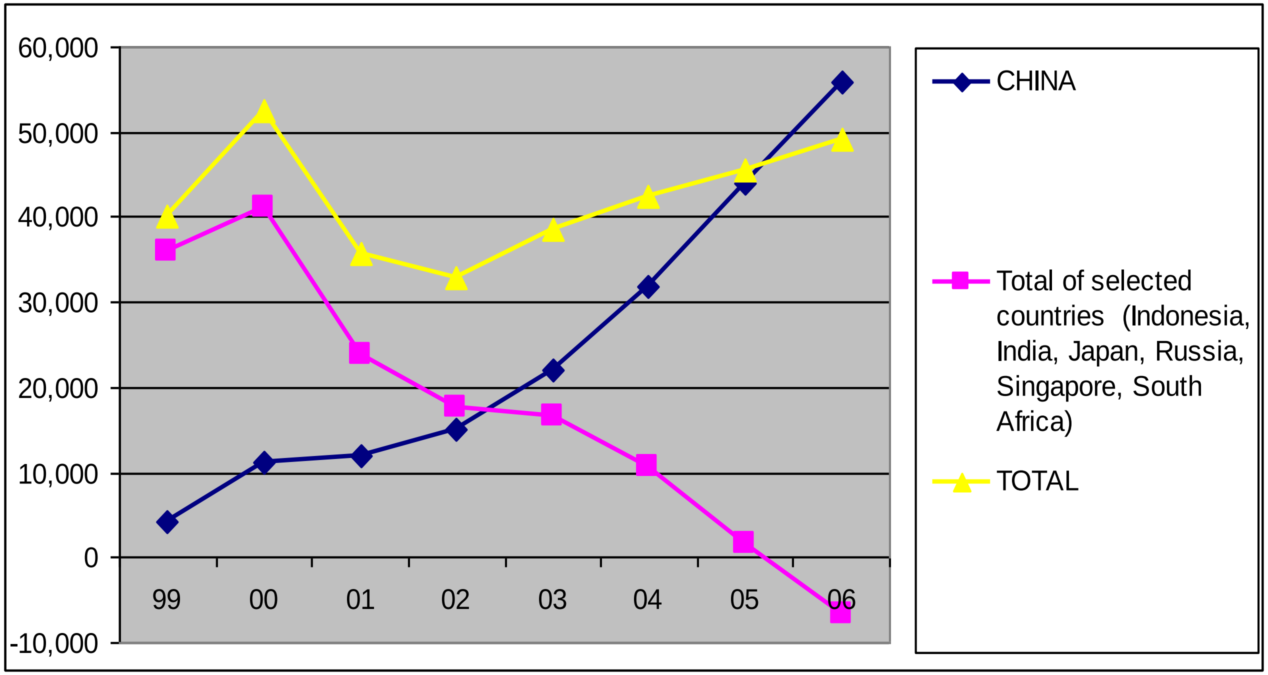
Source: Eurostat (COMEXT database, access December 2007 and January 2008, own calculations.

**Table 5:** Chinese Surplus (+) in Machinery and Transport Equipment (2006, Mill. €)

| Produkt | Saldo |
|---|---|
| **Laptops** | -10,883.8 |
| **Other computers and parts** | -18,374.7 |
| **Other telecommunications equipment** | -18,492.2 |
| **Telephones** | -8,113.8 |
| **Electric machinery (e.g. household, signs)** | -12,939.8 |
| **Specialized machinery (27% for textile)** | 4,276.1 |
| **Vehicles and transport machinery** | 5,875.5 |
| **Other** | 2,823.6 |
| **Total** | **55,829.0** |

Source: Eurostat (COMEXT database, access December 2007 and January 2008, own calculations.

**Figure 1:** EU trade deficit (+) with China and selected countries in 'Machinery and Transport Equipment' from 1999 to 2006 (Mio. EUR)




Source: Eurostat (COMEXT database, access December 2007 and January 2008, own calculations.

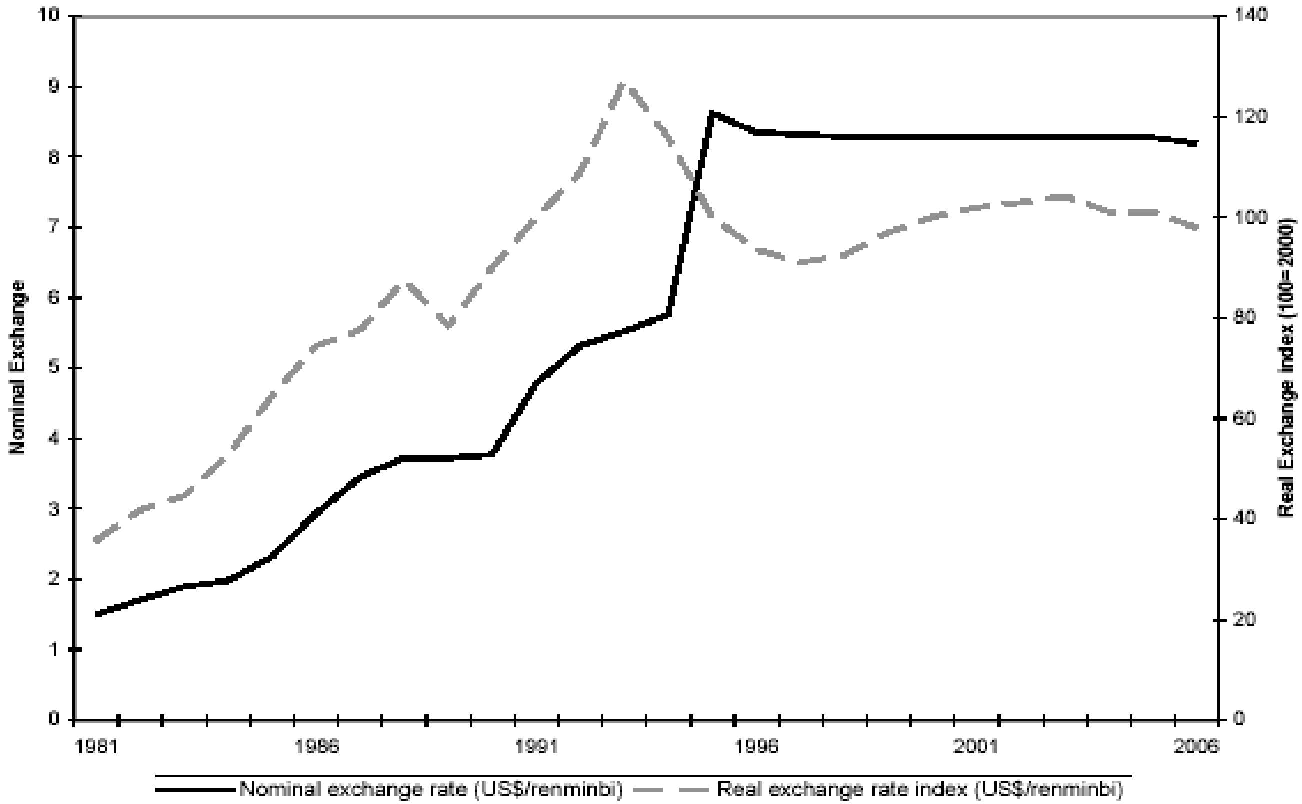
It seems that much of the increase in the European Union's net imports from China, especially in manufacturing, probably can be characterised as a replacement of net imports from other countries.

China has specialised in unskilled labour-intense and semi-skilled labour-intense goods, which is in line with mainstream trade and development theory.

➔ So far the data suggests that China has taken a more or less standard path into the world economy and the global division of labour.

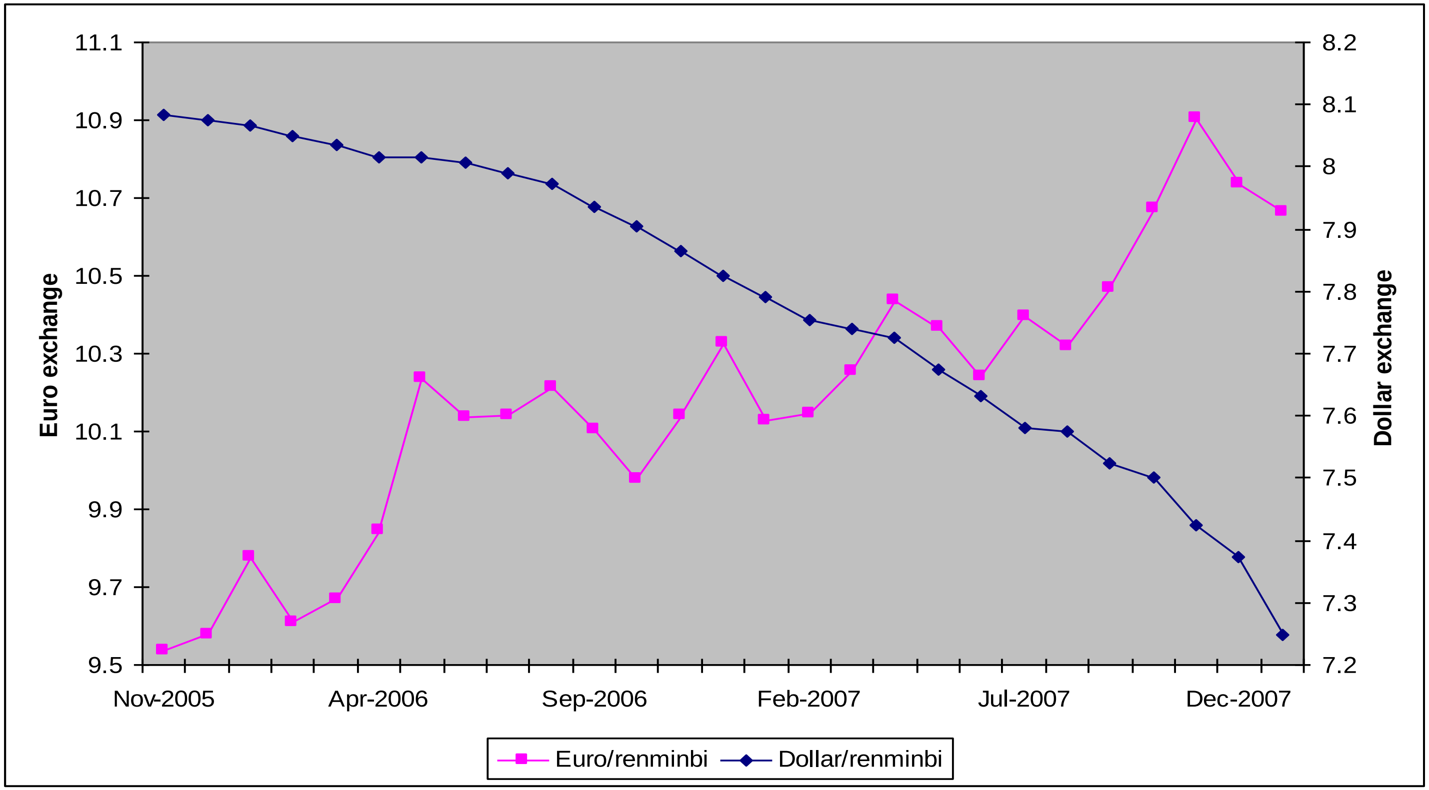
# 2. Is there evidence of currency manipulation against Europe in China?

**Figure 2**: Nominal and real exchange rate of the Renminbi 1980 -2006




Source: World Bank (2008).

**Figure 3:** Renminbi/Euro and Renminbi/USD between June 2005 and end of 2007




Source: Eurostat (COMEXT database, access December 2007 and January 2008, own calculations.

Several authors argue that the renminbi is undervalued to the order of 25 to 40 per cent towards the US dollar.

Using the underlying balance or macroeconomic balance approach, Goldstein and Lardy (2006) argue that a ‘normal’ current account surplus in China should be approximately 1.5 per cent of GDP (instead of more than 10 per cent).

According to this norm, China’s currency is rated below its real equilibrium exchange rate causing the high current account surplus.

However:

There are several analyses of similar stripe that challenge the claim that the renminbi is undervalued.

One example: a recent study suggests that since 1980, the renminbi has been fluctuating between +3 and -5 per cent around its equilibrium exchange rate.

## The discussion about China's 'correct' exchange rate reveals serious shortcomings.

There are significant differences with respect to the methods as well as the exact specifications used by different authors, leading to different and conflicting conclusions.

The papers cited in this Policy Brief are no exceptions. The robustness of the estimations of equilibrium real exchange rates must therefore be questioned.

Furthermore some authors tend to dissimulate the details of their approach, and this particularly applies to those who claim significant undervaluation.

As with many other models, the result is dependent on the assumptions used in the modelling exercise.

When reviewing many of the analysis of the 'correct' exchange rate, it is difficult to fully understand the logic of the assumptions.

# 4. An alternative explanation: trade balance as macroeconomic adjustment parameter for China’s macroeconomic policies

What analytical tools must be brought into the analysis of a country’s economic relations with the rest of the world?

One important element conspicuously missing in many analyses of trade deficits and currency undervaluation is capital flows ➔ bop-theory needed!

In general, the balance of payments of a country is zero.

Imbalances can only occur in the current account (i.e. the trade balance), the capital account and/or the balance of foreign reserves.

Such imbalances do not automatically reflect disequilibrium.

On the contrary, international capital flows are widely accepted as a means to foster a more efficient international allocation of capital.

## Intertemporal approach to te balance of payments

(1) $BIP = C + I^{Home} + X - M$

(2) $BIP = C + S$

(3) $S = I^{home} + I^{Abroad} + dR$

(4a) $\mathbf{S - I^{Home} = X - M}$ $\Leftrightarrow$ (4b) $I^{Abroad} + dR = X - M$

The (individual) intertemporal decision about savings and investment follows a microeconomic calculus. After this decision, there will be an exchange rate adjustment that allows the transfer in the current account.

Example: Risk increases in China

Risk ↑ → Investments ↓ → net capital export ↑ → (real) depreciation of the renminbi → exports ↑ and imports ↓ ➔ trade surplus

Is this really an advantage??

Savings preferences are symmetric in foreign countries. For China, there is a potential destination in the United States, which has a preference for consumption or investment beyond savings. Accordingly, this country runs a trade deficit and a capital account surplus.

The capital account can be interpreted as the intertemporal budget constraint.

Contrary to the Marshall-Learner condition approach, based on price elasticities outlined in the previous sections, the role of the (real) exchange rate is different in this context: it is not a policy variable but an *adjustment parameter*.

It cannot be said in advance if a current-account deficit is undesirable or not.

For example, it can be sensible for developing or emerging countries (such as China), or a country with a relatively young population (such as the US), to run a current account deficit as response to net capital inflows **if and only if** these are invested.

Ageing economies such as Germany or Japan may be better off with a current surplus, investing their savings abroad.

Today, China has the world's highest foreign reserves. Savings are partly invested abroad, partly invested in China and partly used to build up foreign reserves.

(1) The domestic capital market in China is not fully liberalised and sufficiently sophisticated to absorb domestic savings effectively ➔ parking theory.

(2) Risk considerations may play a role. The Chinese banking system is fragile and full of risks due to continued politically-motivated corporate lending.

(3) China may also build up a reputation by accumulating reserves.

(4) Trade surpluses at an early stage of a country's economic development tend to be used to buy knowledge in order to foster the ability to specialise on medium- and high-tech goods in the long run.

➔ Second best rationality! Yet as long as the situation prevails, foreign reserves serve as insurance against the risks associated with it.

Considering the current rise of inflation, it can be expected that China’s policies will change.

Depreciation can only be accompanied by an increase in money supply, which leads to a real appreciation of the currency and increasing inflation ➔ trade surplus vs. trade deficit

The Chinese government could try to sterilise the increase in reserves and to stop money growth (and actually does so).

From this perspective, and taking account of the latest increase in Chinese inflation to more than 7 per cent, the next question for China is whether it should let the renmimbi appreciate.

But if the appreciation will lead to a reduction in the trade balance, remains an open question.

How does a stop in Chinese capital outflow serve the rest of the world?

At best, expectations of a ‘correcting’ EU-China trade balance should be moderate.

## 4. Conclusion: how relevant is the EU's bilateral deficit with China?

The analysis in this Policy Brief leads to the following conclusions:

1. Europe's soaring bilateral deficit with China should not cause worries. Europe does not run a considerable overall current-account deficit. The bilateral trade deficit with China results to a great deal from shifting European demand; it has shifted away from third countries' goods towards Chinese suppliers.
2. It cannot be taken for granted that the renminbi is systematically undervalued; the evidence is mixed and speculative.
3. The structure of the trade balance between China and Europe is also a result of China's overall macroeconomic policies. Yet China is now faced with domestic economic pressures that are likely lead to more of incremental revaluation, or even to a currency float.

**We failed to…**

*firstly*, demonstrate that a bilateral deficit is damaging to Europe's economy;

*secondly*, give evidence that the Chinese export growth has come, in some way, at the expense of Europe;

*thirdly*, and as a matter of positive science, demonstrate that it is an undervalued currency that have determined export growth, or the substantial part of it.

There is neither a case for being concerned about the bilateral deficit with China nor for enjoining China to revalue its currency to address the matter.

Trade policy measures are not justified.

To a certain extent, China does behave in the way economic theory as well as Western politicians always have recommended:

Internal (moderate) reform was backed by external liberalisation and export orientation. For this policy development, China should be applauded.

China has been careful with external capital-market liberalisation, which is also one (of several) textbook recommendation.

Thank you!