



## What if the US imposes a tariff on China's exports to force a revaluation?

The US government has been pressuring the Chinese to revalue their currency. The Chinese have kept a fixed exchange rate of 8.28 renminbi to the US dollar since 1995. The US government finds that 'China's fixed exchange rate is now an impediment to the transmission of price signals and international adjustment, and imposes a risk to its economy, China's trading partners, and global economic growth'.<sup>1</sup>

Part of the pressure on China to revalue comes from the Schumer-Graham bill introduced in the Senate calling for a tariff of 27.5 per cent on China's exports to the United States if the Chinese fail to change its currency policy.<sup>2</sup> The figure of 27.5 per cent is the average amount that the sponsors of the Senate bill cite as the undervaluation of the Chinese currency. The bill is expected to be voted on in July.

Of course there is a lot of bluff in such a piece of legislation. It is not in the interests of the United States to block imports from China. The grounds for such an action would be under Article XXI of the General Agreement of Tariffs and Trade that allows members of the World Trade Organisation (WTO) to take any extra action it considers necessary for the protection of its essential security interest. The argument made is that artificially low priced imports from China due to its undervalued currency is jeopardising the manufacturing sector of the United States and compromising US interests. The dubious nature of that argument would surface during any challenge in the WTO which is likely to follow if the legislation is passed.

Few Washington insiders truly believe such a Senate bill, even if it was passed, would be acted upon by the Administration. But some senior economists like Fred Bergsten argue that such action is necessary.<sup>3</sup> And there are other protectionist proposals in the Congress. One, also in the Senate, is to allow US firms to receive countervailing duties to

### Key points

- A US tariff on Chinese imports would:
  - leave the US marginally worse off
  - do little to the US current account deficit
  - make China worse off
- A retaliation by China would moderate effects on China, but make the US even further worse off
- A 27.5 per cent revaluation by China would initially plunge their economy into recession
  - but would have little net impact on the US current account deficit due to income effects in China offsetting price effects
- Pressing the Chinese to revalue to correct global imbalances is likely to be counter-productive

#### ECONOMIC SCENARIOS

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<sup>1</sup> US Department of the Treasury, 2005. 'Report to Congress on International Economic and Exchange Rate Policies, May 2005', Accessed [http://www.treas.gov/press/releases/reports/js2448\\_report.pdf](http://www.treas.gov/press/releases/reports/js2448_report.pdf), 2 June 2005.

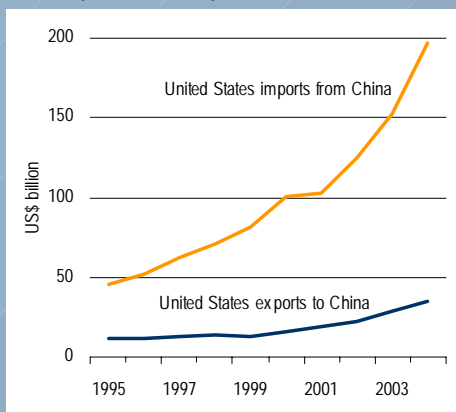
<sup>2</sup> Senate Bill S.295, 109<sup>th</sup> Congress 1st Session, February 3, 2005, <http://www.govtrack.us/congress/billtext.xpd?bill=s109-295>, Accessed 2 June 2005.

<sup>3</sup> Samuelson, R. 2005, 'A Trade Tightrope with China', Washington Post, 4 May. Accessed [www.washingtonpost.com](http://www.washingtonpost.com) 3 May 2005.

## Using these scenarios

Nobody can foretell the future. If they could, they wouldn't tell you about it. These scenarios are not predictions or forecasts. To make profitable investments from this information you also need to decide how likely the events portrayed here are, and what is already priced in the markets. The value of this material is in the insights it offers into the economic effects of various possible events.

### 1 Trade in goods — United States imports and exports with China



Source: United States Information Centre

#### Box 1 APG-Cubed

The framework used is APG-Cubed model (Version 60n) and subscribers will be familiar with its features. The key points for the scenarios here for the analytical results besides the standard 'adding up' conditions (someone's surplus has to be mirrored in someone else's deficit) are that:

- debt sustainability is built into the model and all borrowing's have to be serviced and eventually repaid;
- agents are forward-looking and form expectations about the future;
- goods and financial markets are formally linked and integrated; and
- real exchange rates and real interest rates are endogenous while nominal exchange rates for China and Hong Kong are pegged to the US dollar.

To see a full description of the model, either follow the links on this website or directly access [www.msgpl.com.au](http://www.msgpl.com.au)

compensate them for Chinese subsidies, including the under-valued Chinese exchange rate. Another proposal in the House of Representatives is to allow exchange rate manipulation as a reason for American companies to receive protection. Clearly, Congress is in a protectionist mood and there is the danger that a threat — having been made — takes on a life of its own and projects the US on a path where action become inevitable.

The Chinese argue that yes, there does need to be more flexibility in their currency — but not yet. They say they are not ready and are moving in three directions. One is to increase the volume of foreign exchange trading, another is to develop foreign exchange instruments for trading currencies including managing currency risk through hedging and the third direction is to strengthen its financial sector and regulations to make its financial sector more resilient to exchange rate fluctuations.<sup>4</sup>

There is some muddled thinking by legislators in the United States on the need for China to revalue its currency. Legislators look at the ballooning US trade and current account deficits, the huge growth in imports from China and the lack of commensurate growth in US exports to China (chart 1). 'Unfair trade' is the catch cry and hence the need for China to revalue its currency. But the US deficit is due to the imbalance of investment over savings in the United States and an excess of savings over investment in the rest of the world. The US current account deficit was analyzed at length in the last issue of *Economic Scenarios.com*.<sup>5</sup> It is the relative economics of expected returns to capital that is driving the current account deficit of the United States and the trade performance simply reflects that.

### Textiles: a complication

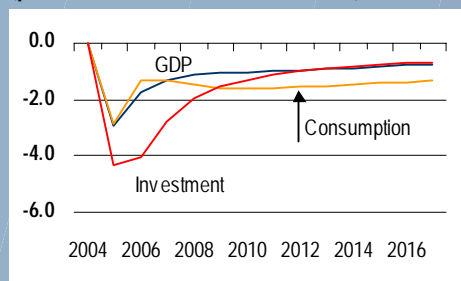
Against this backdrop, there is another trade dispute causing tension between the United States and China which is also joined by the European Union. The dispute surrounds textiles. On January 1 this year quotas on the importation of textiles into the United States and European Union were abolished. Imports of textiles from China — not an original signatory of the Multifibre Agreement — have since boomed partly as a response to the 'back loaded' removal of quotas, which mostly came at the end of the expiry of the Multifibre Agreement instead of being phased out over several years. Under the decision to remove the Multifibre Agreement and China's accession arrangements to the World Trade Organisation a safeguard clause was included to protect US and EU interests (among others) in the event of a surge in textile imports. The United States has already announced safeguard restrictions on seven categories of textiles. China initially responded with export taxes on 74 categories of textiles to counter concerns they would flood US and EU markets. But these export taxes have since been revoked in a move that ups the ante in the trade tensions between the United States, European Union and China.

<sup>4</sup> US Department of the Treasury, 2005, p. 14.

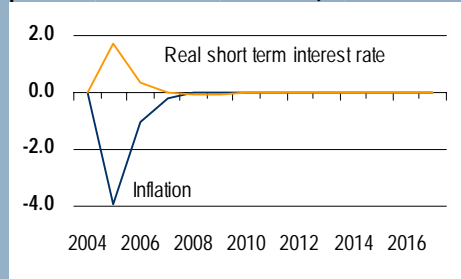
<sup>5</sup> *Economic Scenarios.com*, 'The United States current account deficit and world markets', Issue 10, [www.economicsscenarios.com](http://www.economicsscenarios.com).

**CHART 2: CHINA WITH A 27.5 PER CENT TARIFF ON IMPORTS INTO THE UNITED STATES**

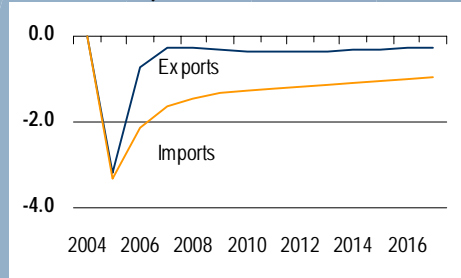
Real GDP, consumption and investment (per cent deviation from baseline)



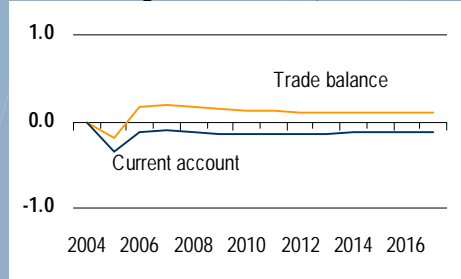
Interest rates and inflation (percentage point deviation from baseline)



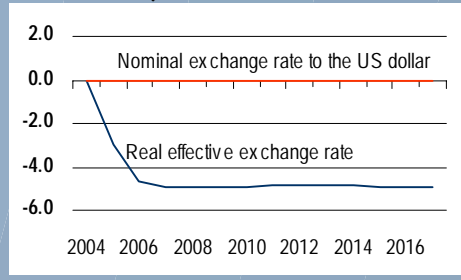
Exports and imports (per cent deviation from baseline)



Current account and trade balance (per cent of GDP change from baseline)



Exchange rates (percentage point change from baseline)



## What could China do: the scenarios

In this ‘hot bed’ of acrimony about unfair trade and currency manipulation it is possible, though unlikely, that the US could impose a tariff on imports from China. China, as an emerging economy and powerful nation in its own right cannot afford to let itself be pushed around by the US and EU. A challenge in the WTO against the legality of any move under Article XXI of the GATT would be one response, but that could take years to sort out. More probably China would take retaliatory action of its own, imposing tariffs on selective imports from the US, such as Boeing aircraft or Caterpillar earthmoving equipment, in an effort to garner support for China’s position among special interests within the United States. Since it is difficult to say exactly what China’s response might be and sectors at that level of detail are not in the APG-Cubed model, the retaliation scenario chosen is a general tariff imposed on US exports to China.

A third response is that China floats its currency which it says it wants to do at some point.<sup>6</sup> Accordingly, we investigate the effects of three scenarios.

- i. The United States imposes a 27.5 per cent on all imports from China.
- ii. China retaliates with a 27.5 per cent tariff on imports from the United States.
- iii. China revalues its currency against the US dollar by 27.5 per cent but maintains a peg rather than floating.

## Effects of a US tariff on Chinese imports

The effects on China for the scenario where the United States imposes a 27.5 per cent tariff on Chinese imports is shown in chart set 2 and the effects on the United States in Chart set 3.

### China

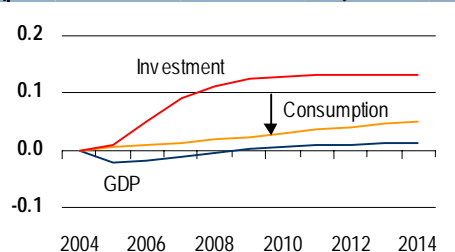
The extra US import tariff has a marked initial contraction on China’s total exports (panel 3 of chart set 2). Total exports from China could be 3 per cent below baseline in 2005. But China’s exports recover quickly as world trade flows adjust and China sends its exports elsewhere, making up for most of the lost trade to the United States. Other countries fill the gap left by lower Chinese exports to the United States. The dominant effect is a switching of exports to the United States once Chinese goods are discriminated against. Imports into the United States of durable manufactures from China, for example, fall by nearly 30 per cent below baseline in 2005. For non-durables, the fall is greater and is 37 per cent below baseline.

The initial drop in exports causes China’s real GDP to fall by nearly 3 per cent below baseline in 2005. Lower income growth causes real consumption and investment to also fall below baseline in 2005 before gradually recovering (panel 1 of chart set 2).

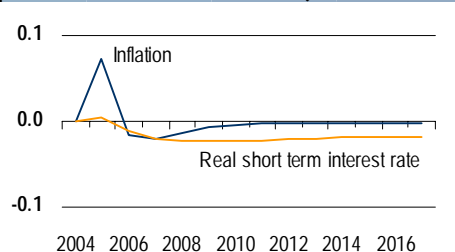
<sup>6</sup> *Economic Scenarios.com*, ‘What if China revalues its currency’, Issue 7, [www.economicsscenarios.com](http://www.economicsscenarios.com).

**CHART 3: UNITED STATES WHEN THEY IMPOSE A 27.5 PER CENT TARIFF ON CHINESE IMPORTS**

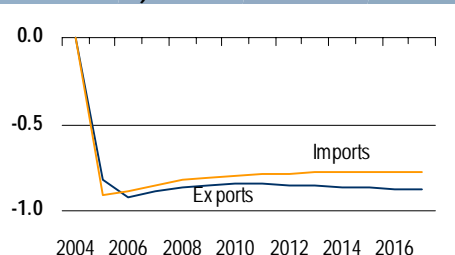
Real GDP, consumption and investment (per cent deviation from baseline)



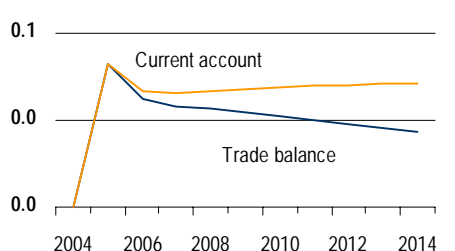
Interest rates and inflation (percentage point deviation from baseline)



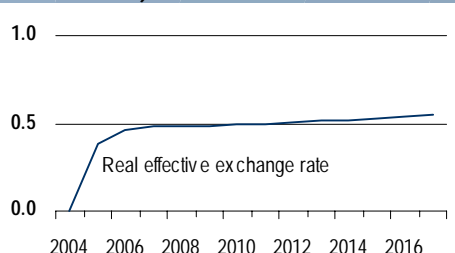
Exports and imports (per cent deviation from baseline)



Current account and trade balance (per cent of GDP change from baseline)



Exchange rates (percentage point change from baseline)



The drop in real economic activity in China is exacerbated by another mechanism operating. Given China is still maintaining a fixed nominal exchange rate with the US dollar and as the US dollar appreciates under this scenario, Chinese authorities have to tighten monetary policy. This tightening causes real short term interest rates to rise (panel 2) and exacerbates the effect of the imposition of the US tariff on imports from China. With lower real consumption and investment, there is a fall in inflation of 4 percentage points below baseline (panel 2 of chart set 2).

The lower real consumption and investment causes imports to initially fall by 3.3 per cent below baseline in 2005, but they recover more slowly than exports do.

### United States

The outcome for the United States imposing the tariff is different (chart set 3) and much smaller than the effects on China. There is only a slight reduction in US real GDP below baseline in net terms until 2009.

While imports cost more overall in the United States, the effect on the macroeconomy is not great due to several factors:

- i. There is a lot of switching of trade from China to alternative sources of imports.
- ii. Although growing China is not the largest trading nation with the United States.
- iii. There is a boost to domestic investment as the economy shifts away from reliance on China and some reliance on domestic sources of production and as real interest rates fall due to a spike in US inflation.
- iv. There is additional revenue collected from the tariff and a reduction in the United States fiscal deficit.

These factors limit the adverse consequences of the tariff on real GDP in the United States.

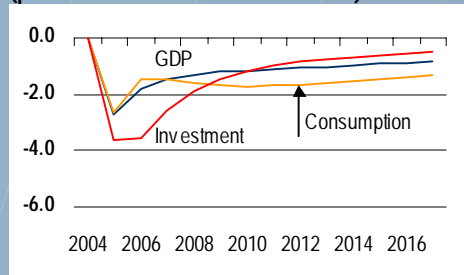
Imports and exports (in total) fall to around 1 per cent below baseline from 2005 onwards, but there are large negative effects on imports from China as noted before while there are positive effects on imports from other countries such as Japan, Indonesia and Taiwan.

The positive effect on the current account deficit over baseline (panel 4 of chart set 3) is only small since the overall savings investment balance changes little in the United States or the rest of the world.

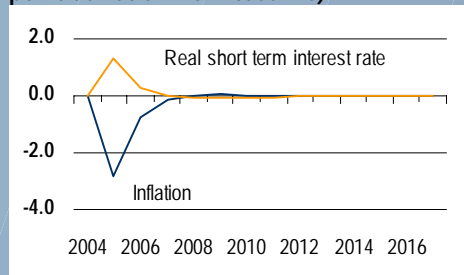
Note that the actions of the US are to cause a real effective depreciation of the Chinese currency, not the real appreciation they are seeking! By not buying goods from China, Chinese export prices fall on world markets and they are more competitive on other markets— a real effective depreciation.

**CHART 4: CHINA WITH RETALIATION**

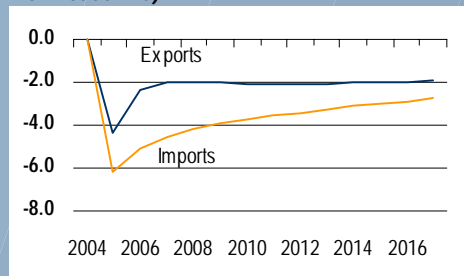
Real GDP, consumption and investment (per cent deviation from baseline)



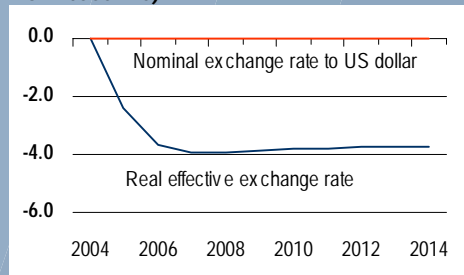
Interest rates and inflation (percentage point deviation from baseline)



Exports and imports (per cent deviation from baseline)

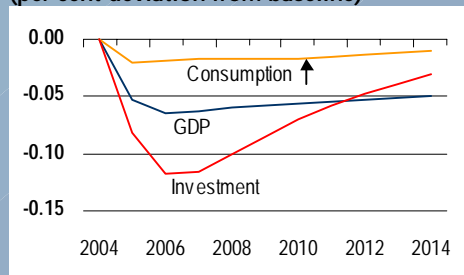


Exchange rates (percentage point change from baseline)



**CHART 5: US WITH CHINA RETALIATION**

Real GDP, consumption and investment (per cent deviation from baseline)



## Retaliation

Under this scenario, China retaliates by imposing a 27.5 per cent tariff on goods from the USA at the same time that there is the imposition of the US tariff (chart set 4).

In this case there is a large drop in total China's imports (panel 3 of chart set 4) although there is significant switching from imports from the United States to other sources. Higher cost imports causes inflation to rise in China so the combined effect of the US tariff on imports and China's retaliation is a smaller reduction in inflation than before (compare panels 2 of chart set 4 and chart set 2). Inflation is now only 3 percentage points below baseline in 2005.

The smaller drop in inflation in China means there is a smaller real effective depreciation of the exchange rate (panel 4 of chart set 4).

The effect of the retaliation to the United States is to cause a smaller overall real appreciation of the US currency so the monetary response by China's authorities to maintain the currency peg is moderated. The effect on China's real investment is therefore moderated in 2005 than when the US imposes a tariff on China's exports to the US alone. The same is true for real GDP (panel 1 of chart set 4).

The retaliation by China causes US total exports to fall, but the effect is not great since China is not a significant destination for US goods. The decline in US real GDP and real consumption is greater. Real GDP could be more than 0.05 per cent lower than baseline for several years from 2005 onwards (chart 5).

The overall message is that retaliation by China moderates some of the effects of the US tariff on Chinese imports and it imposes marginally greater costs on the United States. The retaliation does little to change the US current account deficit or the overall trade balance of the United States, which in any case showed small effects from tariff changes.

## Effects of a revaluation

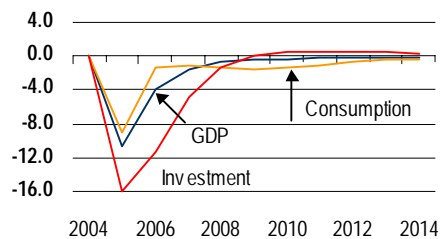
When China revalues its currency by 27.5 per cent, its goods become more expensive in world markets. Exports fall as a result by 11 per cent below baseline in 2005 (panel 3 of chart set 6).

Since exports have fallen, so has aggregate demand and so there is a drop in inflation. Real short term interest rates (nominal rates adjusted for expected inflation) rise by 8 percentage points above base in 2005 as a result of the appreciation (panel 2 of chart set 6).

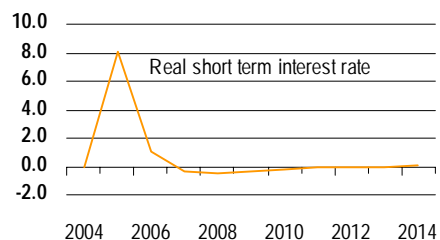
The higher real interest rates depress investment, real consumption and therefore real GDP. China's real GDP could be over 10 per cent below baseline in 2005 and nearly 4 per cent below in 2006 (panel 1 of chart set 6). Given that baseline growth of real GDP in China is 9 per cent, the currency appreciation of the magnitude implied by the mooted United States legislation would put China into recession. Little wonder that China is resisting any large appreciation of the currency quite apart from any financial stability aspects.

**CHART 6: CHINA WITH A 27.5 PER CENT REVALUATION**

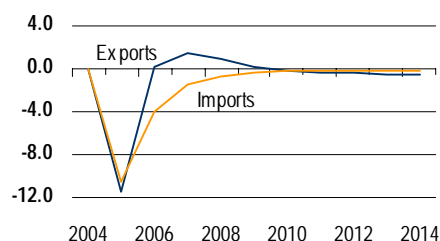
**Real GDP, consumption and investment (per cent deviation from baseline)**



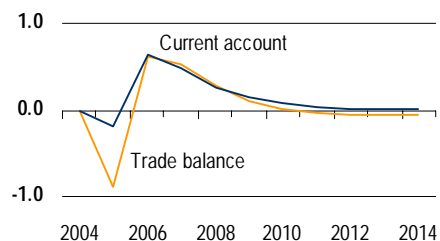
**Interest rates (percentage point deviation from baseline)**



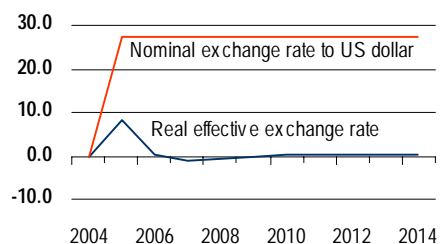
**Exports and imports (per cent deviation from baseline)**



**Current account and trade balance (per cent of GDP change from baseline)**



**Exchange rates (percentage point change from baseline)**



The fall in imports (panel 3 of chart set 6) may seem surprising given the large appreciation of the currency and hence fall in import prices. Chinese consumers should shift away from local goods to imported goods. They do, but note there are two effects operating here. One is the price effect just described that boosts imports. The other is an income effect. Falling output and incomes means total consumption falls and this reduces the consumption of imports (as well as local goods). It happens that the negative income effect outweighs the positive price effect so overall imports initially decline by 10.5 per cent below baseline in 2005 before gradually recovering as the economy recovers.

With both imports and exports declining when China revalues its currency there is little change in the trade balance or the current account balance. If there is little change for net capital flows there can be little change on current accounts of other countries. In fact there is little change to the current account deficit of the United States. To reiterate what we emphasised in our last report on the US current account deficit, the proximate cause of the deficit is the savings and investment imbalances around the world — not China’s exchange rate regime.

## Implications

Imposing a tariff on Chinese imports into the United States to force a revaluation is a counterproductive idea. It does nothing for the United States’ overall economic performance except worsen it marginally and provides little change to the current account deficit. The policy is unlikely to cause China to revalue its currency. It could even stiffen China’s resistance to a revaluation and lead to retaliation. Even if China did revalue there is no significant effect on the United States due to offsetting price and income factors. One caveat is that we have not assumed any change by China in their huge holdings of US Treasuries — a change that would have repercussions for US bond prices and interest rates. But that is another scenario and left for a later issue.

That a revaluation has little impact on the United States imbalances does not mean that China should not revalue its currency since it would give them far greater control over the management of their domestic economy. It would take the heat out of the Chinese economy and avoid the use of other less efficient methods to cool their economy. It would, for example, give China an alternative to managing a looming housing price bubble. Our earlier report on China’s possible revaluation goes into the pros and cons of a currency change.<sup>7</sup> Note too, that in going from deflation a few years ago to inflation now above that of trading partners, China’s real effective exchange, which is what matters, is already appreciating.

Trade tensions and pressures on the Chinese government to appreciate their currency are not productive avenues to solving the global imbalances that are emerging. Our last report showed that the single biggest step the United States could take to remove some of the global imbalances that have emerged is to rein in their large and growing fiscal deficit and to raise their domestic private savings rate.

<sup>7</sup> *Economic Scenarios.com*, ‘What if China revalues its currency?’, Issue 7, [www.economicsscenarios.com](http://www.economicsscenarios.com).

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