

**FOR  
AGENDA**

SM/11/140

June 29, 2011

To: Members of the Executive Board

From: The Secretary

Subject: **People's Republic of China—Spillover Report—2011 Article IV Consultation**

Attached for consideration by the Executive Directors is the spillover report for the 2011 Article IV consultation with the People's Republic of China. This paper, together with the associated staff report for the 2011 Article IV consultation (SM/11/139, 6/28/11), is tentatively scheduled for discussion on **Wednesday, July 13, 2011**. Unless an objection from the authorities of the People's Republic of China is received prior to the conclusion of the Board's consideration, the document will be published. Any requests for modifications for publication are expected to be received two days before the Board concludes its consideration.

Questions may be referred to Mr. Teja (ext. 34520) and Mr. Goyal (ext. 36875) in SPR.

Unless the Documents Section (ext. 36760) is otherwise notified, the document will be transmitted, in accordance with the procedures approved by the Executive Board and with the appropriate deletions, to the WTO Secretariat on Friday, July 8, 2011; and to the Asian Development Bank, the European Commission, the European Investment Bank, and the Organisation for Economic Cooperation and Development, following its consideration by the Executive Board.

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# PEOPLE'S REPUBLIC OF CHINA

## SPILOVER REPORT—2011 ARTICLE IV CONSULTATION

June 27, 2011

### KEY POINTS

**Issues.** Spillover reports explore the external effects of policies in systemic economies, focusing on issues raised by key partners. In the case of China, these partners saw benefits from its growth, especially during the crisis, but were also concerned to varying degrees about spillovers from (1) a potential disruption to China's so far steady growth; (2) the slow pace of currency adjustment; and (3) a further build up in foreign exchange reserves, already the largest in the world, and the closed capital account.

**Findings.** The main messages flowing from the analysis are as follows:

- China's capacity to both transmit and originate real shocks is rising, implying an important stake for the world in its stability. Insofar as its export-oriented growth model is a source of stresses, economic rebalancing is crucial.
- Currency appreciation is important to that process but alone yields only limited spillovers. Significant positive effects on others' output and trade require a comprehensive transformation that reduces China's household and corporate savings rates and raises depressed factor prices. The latter could also alleviate concerns that China's competitiveness is built on a distorted cost structure, thus easing trade tensions—itsself a risk to the world economy.
- Conversely, *failure* to rebalance the growth model would imply unprecedented increases in export market share, potential overhang in capacity, and adverse spillovers from resulting stresses on corporate and bank balance sheets.
- China's policies can affect global capital flows, although that role is secondary to fundamentals such as emerging market country growth and advanced country liquidity conditions. While China's large purchases of reserve currency assets reduce their yields and push capital to emerging markets, it is unclear what the net effect of its closed capital account is, and what opening it up would do.

Approved By  
**Reza Moghadam and  
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## SPILLOVER REPORTS

Spillover reports examine the external effects of domestic policies in five systemic economies, i.e., the S5, comprising China, Euro Area, Japan, United Kingdom, and the United States. The mere existence of external effects does not imply that policy modifications or collective action is needed—that depends on many considerations, including the presence of economic externalities. The aim rather is to stimulate discussion, providing a global perspective for policy advice in Article IV discussions and input for the Fund's broader multilateral surveillance.

In each case, key partners are asked about *outward* spillovers from the economy in question, on the basis of which staff choose issues for analysis. To facilitate candor, spillover reports do not cite who raises a specific issue. For this report, the consulted were officials and analysts from the other S5 and from selected emerging markets (EMs)—Brazil, Hong Kong SAR, India, Indonesia, Korea, Mexico, Poland, Russia, Singapore, and Thailand.

This report does not try to capture the full extent and historical significance of China's new influence on the world economy. Rather, it focuses on a few forward-looking issues raised by partners, brings to bear relevant analysis, and describes the reactions of the Chinese authorities. Technical papers underlying the analysis can be found in [China Spillovers: Selected Issues](#). A separate forthcoming report will summarize the themes emerging from discussions with the S5.

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# I. BACKGROUND

1. Few countries have so obviously gained from integration into the open world trading system as China, its growth coinciding with its ascendancy as an exporter and manufacturer. China is now the first or second largest trading partner of 78 countries with 55 percent of global GDP (versus just 13 countries with 15 percent of global GDP in 2000). Still, there is more to its influence on the world economy [see background paper, China's Evolving Role in Global Trade]:

- From a network perspective, China is now the world's most "central" trader, with the most sizable connections to other major traders (Table 1). This means that China can *transmit* real shocks widely, whether these originate domestically or elsewhere.

**Table 1. Centrality in Global Exports**

(Rank, with 1 being the most central)

	Total Exports		Capital Goods		Consumer Goods	
	2000	2008	2000	2008	2000	2008
China	4	1	5	1	1	1
Euro Area	1	2	3	3	2	2
Japan	3	4	1	2	3	4
U.K.	5	5	7	9	5	3
U.S.	2	3	2	4	4	5
Brazil	15	12	14	15	15	17
Russia	10	8	18	19	13	7
India	19	15	17	16	14	9
Korea, Rep.	7	6	8	5	7	6
Mexico	6	10	6	7	6	8

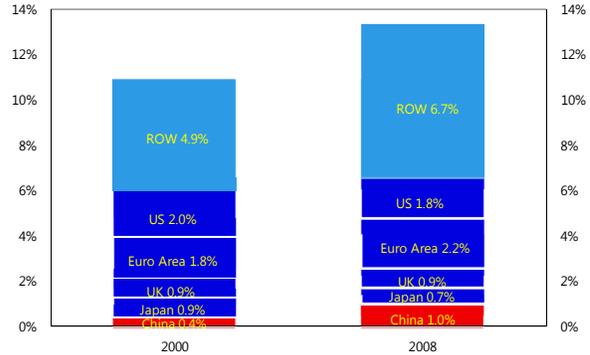
Source: Background paper, "China's Evolving Role In Global Trade"

- The caricature of China as merely a cog in the global supply chain—wherein imported inputs and exported processed goods respond passively to final demand

in the G7—is changing. This means China's capacity to *originate* shocks has risen, with its share of final demand in major partners doubling during 2000–2008 (Figure 1). Even if that share is half that of the United States and Euro Area, it is rising, and the planned emphasis on domestic consumption will only accelerate the trend.

**Figure 1. Contributions of Countries' Final Demand to Partners' GDP**

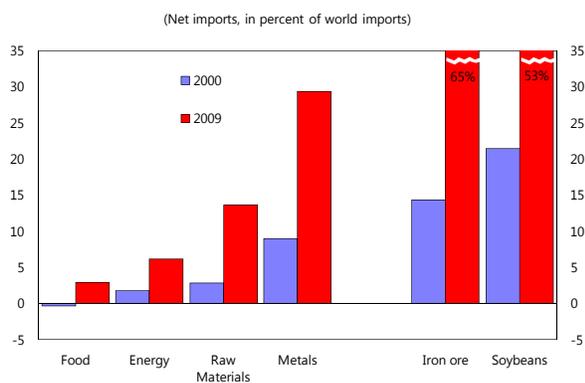
(Weighted average across major trading partners)



Source: Background paper, "China's Evolving Role in Global Trade"

- China has become a dominant importer across a range of commodities (Figure 2). In metals, per capita intensity now rivals that in advanced economies, rising from less than 15 percent of the level of advanced economies in 2000 to almost 90 percent in 2009. This partly reflects its manufactured exports orientation and role as processor but also the bias toward capital induced by domestic factor prices distortions (more on this below). Thus, as discussed in Section III, the spillover to world commodity prices is now significant.

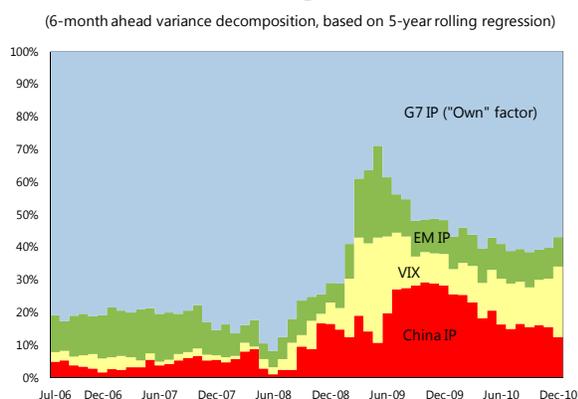
**Figure 2. China's Share of Global Commodity Trade**



Source: Background paper, "China Spillovers: Global Commodity Markets"

2. With a largely closed capital account, the main channel of Chinese spillovers to the rest of the world is trade. Figure 3 shows that Chinese output now accounts for a significantly higher share of the variance in G7 output [see [Mapping Cross-Border Financial Linkages](#), SM/11/108]. More generally, a simple global VAR model suggests that each 3 percent fall in China's industrial production (1 standard deviation, or 1 percent of GDP) reduces production in advanced partners by around 0.1 percent.

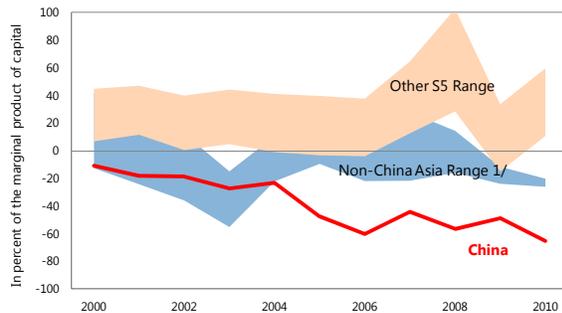
**Figure 3. G7 Industrial Production: Contribution of "Own" and "Exogenous" Factors**



3. China's ascent has yielded important growth effects in many parts of the world (Box 1). It has also brought obvious benefits to consumers in terms of low prices and fostered productivity-enhancing competition on a global scale. But that story is also associated with two underlying concerns.

4. The first concern is that, even if fundamentals like scale economies, capital, skills, etc. explain China's growth path, that path also reflects a policy model geared to exports, with savings (the highest in the world) channeled into investment (also the highest) in manufacturing and infrastructure that supports trade expansion. At the risk of oversimplification, the dynamic is:

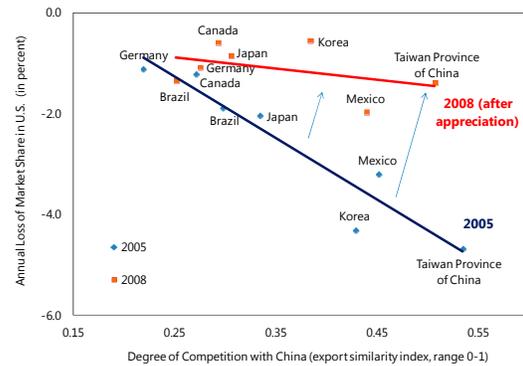
- Household savings are raised by an inadequate pension and health safety net. In addition, corporate savings (as large as those by households) tend to be high since firms, operating in a controlled financial system, retain profits for future use rather than distribute dividends.
- Excess savings depress real interest rates, reinforce savings behavior (a low return requires more saving in order to reach a targeted balance; see [China 2011 Article IV Staff Report](#), Box 9), and encourage investment in capacity creation—capacity that is used to meet foreign demand at an attractive real exchange rate and low input prices. Figure 4 illustrates the total effect of distortions on the cost of capital, which in China has risen over time and helped keep capital costs low, thus spurring investment.

**Figure 4. Imputed Tax/Subsidy on Capital Costs**

1/ Includes Indonesia, Korea, Singapore, and Taiwan Province of China.

Source: Background Paper, "Factor Pricing, Overcapacity, and Sustainability Risks"

5. The second underlying concern is the shift—some would say the *resulting* shift—in manufacturing output and jobs to China. Figure 5 relates the loss in market share for many countries with the similarity of their exports with China's. Interestingly, the intensity of that relationship fell between 2005 and 2008 when the RMB appreciated markedly. This is in line with other evidence that Chinese competition and currency matters for the export shares of EMs, although the effect is moderate (see background paper, [Impact of China's Competition: Brazil and Mexico](#)).

**Figure 5. Competition with China and Loss in Market Share**

Source: Background Paper, "Impact of China's Competition: Brazil and Mexico"

6. Not surprisingly, the sustainability of China's export-oriented growth model has been questioned—most importantly, in China itself. Indeed, the Chinese authorities recognize the need for economic rebalancing, with greater reliance on consumption, and this is official policy under the 12th Five Year Plan. The key issue for the rest of the world would be its timing, pace and spillover effects.

## II. PARTNER CONCERNS

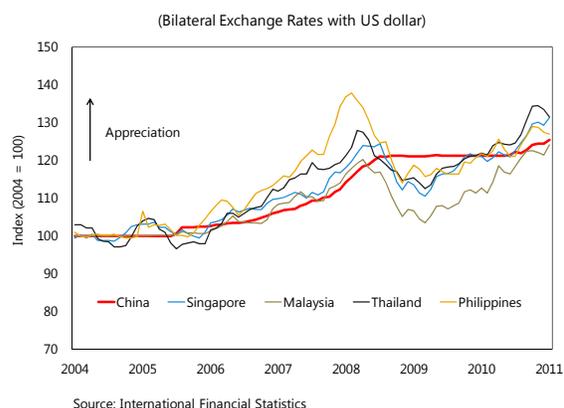
7. Looking ahead, there were three areas of interest to partners: (1) spillovers from the tail risk of disruption if stresses in the current growth model erupt before it can be changed; (2) the impact of policies to adjust the currency and rebalance demand; and (3) potential effects from reserve or net foreign asset (NFA) accumulation and capital account policies. The following points were made:

- *Sustainability of rapid growth.* While maintenance of Chinese growth has been a big plus for partners through the global crisis, concerns were expressed about the tail risk of disruption. The concern is that overheating in China could put added pressure on commodity prices and draw short-term capital to the region. Further, continued high investment could, down

the road and absent sufficient progress in rebalancing, create excess capacity, given uncertain demand prospects in advanced economies, thus risking a hard landing that reverberates beyond China.

- *Commodity prices.* Many counterparts cited China's role in pulling up commodity prices—a plus for commodity exporters but not for the rest. China's strong growth and infrastructure investment were expected to sustain such demand, with some moderation as the economy rebalances; insofar as resource intensity is affected by factor cost distortions, addressing the latter could ease demand.
- *Currency adjustment.* While many acknowledged that China's growth had brought benefits, including lower costs and an imperative for firms to raise productivity, some saw an undervalued currency as having displaced employment. Some with floating exchange rates believed, however, that their flexible exchange rate regimes had limited the impact (as their own currencies weakened with the loss in market share). Most stressed the positive spillovers from faster appreciation of the RMB, with some noting that this could facilitate a move up in the currencies of other Asian supply chain countries (Figure 6).

**Figure 6. Regional Co-Movement of Currencies**

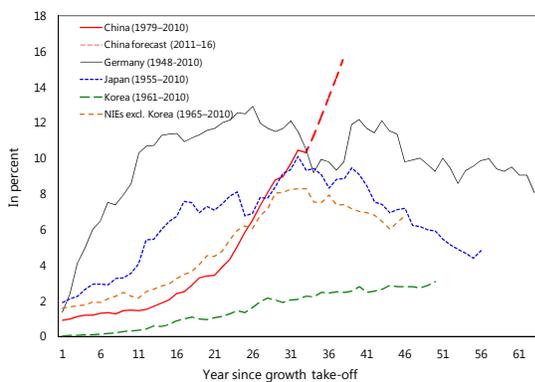


- *Structural policies for rebalancing.* Most partners considered these to be at least as important as currency appreciation. The same policies that facilitate and bottle up high net savings also make for a very low cost of capital relative to productivity; together with other cheap input costs (land, power etc.), these boost China's already high competitiveness. Absent broader reforms to stimulate consumption and raise input costs (see [China 2011 Article IV Staff Report](#)), faster currency appreciation yields only marginal benefits.
- *Asset prices and capital flows.* Despite the restricted capital account, China can still affect global asset prices via its large on-going reserve or NFA accumulation—but how large might these effects be? Some officials also thought that a closed capital account could be diverting capital flows from advanced markets to EMs with more open capital accounts.

### III. SPILLOVERS FROM INTERNAL STRESSES

8. China recently has been an important buffer for the world economy but, in the post-crisis spirit of being less dismissive of tail risks, what happens if the underlying export-and-associated-investment led model were to falter [see background paper, [Factor Pricing, Overcapacity, and Sustainability Risks](#)]? Looking at the market shares of countries with sustained booms (Figure 7), China's current trajectory entails unprecedented gains in market share—potentially implying a price or profit squeeze in China's corporate sector and nonperforming loans in banks. Unprecedented market shares may yet occur, but evidence from Chinese industries such as steel, shipbuilding, and machine tools suggests that it will be difficult to accommodate price cuts within existing profit margins and productivity gains. What would be the spillovers if these firms had to reconcile high supply capacity with unexpected demand weakness?

**Figure 7. Market Shares of Selected Economies Since Growth Take-off**



Source: Background paper, "Factor Pricing, Overcapacity, and Sustainability Risks"

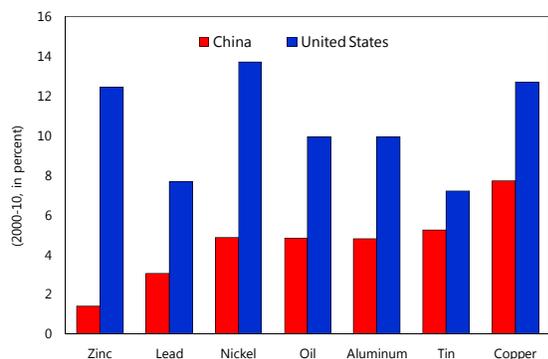
9. Based on a global model with real and financial variables [see background paper,

[China Spillovers: Analysis from a Global VAR](#)], deterioration in the quality of corporate and financial balance sheets could hit many players through trade and investment. For example, an increase in Chinese corporate default probability (from lower expected asset values at each value of debt) of 2 percentage points (a benchmark deterioration seen in U.S. recessions) lowers industrial output by about  $\frac{3}{4}$  percent in emerging Asian economies and  $\frac{1}{2}$  percent in commodity exporters; the impact on most advanced economies is generally small (except Japan, where it would be  $\frac{1}{2}$  percent); deterioration in China's banking sector produces similar effects.

10. With China's commodity consumption rising even more rapidly than output, the country has been an important—but hardly sole—driver of higher commodity prices [see background study, [China Spillovers: Global Commodity Markets](#)]. Figure 8 shows the contribution of variation in China's demand to variation in commodity prices—a concept that captures the role of China as the marginal consumer moving prices. Figure 9 shows that, in the case of oil, China has accounted for an estimated 20 percent of the price rise since end 2004. While these contributions are high, they do not yet rival that of advanced economies such as the United States, reflecting the latter's size and the persistence of its output shocks. Nevertheless, the impact on commodity exporters of a slowdown in China would be significant, with a 3 percent

reduction in the growth rate of industrial output (1 standard deviation, or 1 percent of GDP) resulting in price declines of 6 percent

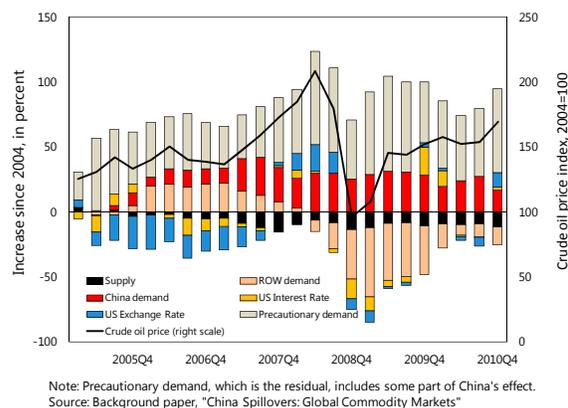
**Figure 8. Commodity Price Variance Decomposition**



Note: 4-quarter variance decomposition to 1 standard deviation shock in industrial output  
Source: Background paper, "China Spillovers: Global Commodity Markets"

for oil and base metals such as copper; the impact on other commodities is low, reflecting much more elastic supplies and demands.

**Figure 9. Decomposition of Crude Oil Prices**



Note: Precautionary demand, which is the residual, includes some part of China's effect.  
Source: Background paper, "China Spillovers: Global Commodity Markets"

## IV. CURRENCY ADJUSTMENT AND REBALANCING

**11.** On the question of RMB appreciation, China Article IV staff reports have argued that faster correction of an RMB "substantially below the level consistent with medium-term fundamentals" is necessary to rebalance demand and lower the current account surplus. But it is by no means sufficient: other reforms also are needed to reduce savings. From a spillovers perspective, what difference does it make if China only revalues or also implements reforms to reduce savings?

**12.** A number of approaches were used to answer this question quantitatively. First, an input-output model combining the production structure with information on trade

connections is used to calculate the immediate short-run impact of appreciation and other rebalancing measures on partners' trade and output [see background paper, [China Spillovers: Impact of Rebalancing on the Supply Chain](#)]; relatedly, a trade elasticities methodology estimates the differential effects across sectors [see background paper, [Estimating China's Spillovers: A Sectoral Trade Elasticities Approach](#)]. Second, a global vector auto regression models the intermediate-run (peak effects usually occur within a year) interactions across 30 advanced and emerging countries [see background paper, [China Spillovers: Analysis from a Global VAR](#)]. Third, the Fund's GIMF model simulates the medium-

term effects (3–5 years) of both a straight RMB appreciation and a comprehensive rebalancing package [see background paper, [China Spillovers: GIMF Simulations of Rebalancing and Currency Appreciation](#)]. Purely as an illustration, a real effective appreciation of 20 percent connotes a “substantial” change.

**13.** The results in Tables 2–3 suggest that real appreciation would raise partners’ output. Large advanced economies experience limited effects, but countries in the Asian supply chain could over time see fairly large increases in output and in current accounts. RMB appreciation benefits final goods producers such as Japan and Korea. Intermediate goods producers in emerging Asia may experience a deterioration in their current account balances initially. Over time, however, as production adjusts to meet Chinese final demand and as market share is gained outside China, their output and current account balances improve.

**14.** The main result, however, is that rebalancing policies greatly increase the positive spillover from currency adjustment. If private consumption in China also were to rise with currency appreciation, the growth and trade balance effects more than double. China contracts before production structures adjust but the ultimate impact is mildly positive (which is fine, since the point of rebalancing is not to raise growth in China but to render it sustainable). It bears reiterating that the above is a partial treatment of global imbalances, which requires action by many sides.

**Table 2. GDP Impact of Appreciation and Rebalancing (in percent)**

	20% Real Appreciation		20% Real Appreciation and Other Reforms for Rebalancing	
	Near term (I-O, GVAR)	Medium term (GIMF) 1/	Near term (I-O, GVAR)	Medium term (GIMF) 1/
China	-2.0 to -3.1	-8.8	-2.0 to -2.3	1.0
U.S.	< 0.05	0.07	< 0.05	0.15
Euro Area	< 0.10	0.12	< 0.10	0.21
Japan	0.10 to 0.30	0.07	0.10 to 0.30	0.22
U.K.	< 0.50	...	< 0.10	...
EM Asia	0.25	0.33	0.25 to 0.30	1.0
Commodity	< 0.30	0.09	< 0.30	0.20

1/ Cumulative effect at peak

**Table 3. Current Account Impact of Appreciation and Rebalancing (in percent of GDP)**

	20% Real Appreciation		20% Real Appreciation and Other Reforms for Rebalancing	
	Near term (I-O)	Medium term (GIMF) 1/	Near term (I-O)	Medium term (GIMF) 1/
China	-0.69	-2.91	-0.70	-5.17
U.S.	0.02	0.08	0.02	0.25
Euro Area	0.10	0.05	0.10	0.19
Japan	0.11	0.04	0.11	0.04
U.K.	0.05	...	0.11	...
EM Asia	0.30	-0.31	0.31	-0.76
Commodity	-0.02	0.11	-0.01	0.31

1/ 5-years.

**15.** The estimated impacts on advanced countries do seem small. However, the results in Tables 2–3 need to be seen in perspective. For one, the effects on advanced countries are many times larger measured against their manufacturing sectors, which are the ones most affected by Chinese competition. More importantly, the effects would be much larger measured against an arguably unsustainable trajectory—an inherently difficult baseline to model; the attenuation of risk, as rebalancing moves the economy to a sustainable path, would also lower risk premiums and magnify the benefits of China’s adjustment. Finally, the modeling work here incorporates many countries, thus dispersing the impact of relative price shifts that other models would attribute to one or two country clusters.

## V. FINANCIAL SPILLOVERS

**16.** The channels of China's influence on global asset prices are complex. On one hand, that influence is greatly constrained by China's relatively closed capital account. On the other, the sheer size of China's savings (the highest in the world in dollar terms), its rising foreign currency reserves (also the largest), and the composition of those reserves, should all affect asset prices. How to think about these effects?

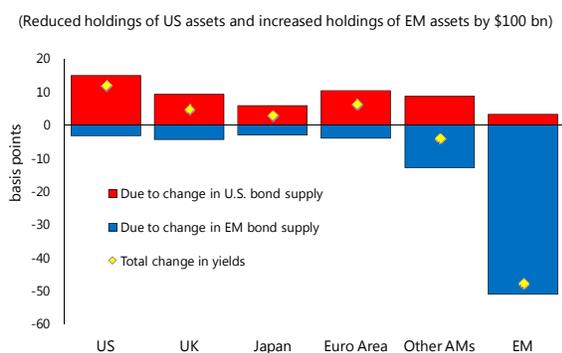
**17.** First, if China accounts for over one-third of global wealth accumulation over the next five years, how might its allocation of savings affect global markets? If the current portfolio "preference" remains, as is likely in the next few years, demand for Chinese assets will push up their price. Relative to the United States, Chinese asset prices would need to rise by 60 percent to equate demand and supply [see background paper, [China's Saving: The Impact on Global Financial Conditions](#)]. To arrest this price rise, China's central bank could supply more *domestic* bonds and sterilize the monetary effect by accumulating reserves (buying *foreign* bonds)—in the simulation, \$600 billion over the baseline in foreign asset purchases and domestic bond sales is required; in this case, EMs may face upward pressure on their asset prices to the extent that advanced country yields are pushed down by further reserve accumulation, and capital is thus pushed out to EMs. Alternatively, China may liberalize its capital account; in this case,

EM asset prices could go either way (depending on the intensity of Chinese vs. advanced country portfolio reallocations—see background paper for an illustrative scenario). Exchange rate flexibility and steps to reduce saving could alleviate asset price pressures.

**18.** Second, what difference does the composition of reserves make to yields in different currencies? Data on the composition of China's reserves are not known, but the general presumption is that at least two-thirds are allocated to U.S. dollar assets. A simple mean-variance portfolio model can be used to estimate the effect of a US\$100 billion shift from U.S. to EM treasuries [see background paper, [Potential Impact on Global Bond Markets of Reallocating Reserves](#)]. The reallocation, equivalent to about one-quarter of annual reserve accumulation, is assumed to be gradual and orderly—which admittedly abstracts from important market effects that an overt announcement might have. The results in Figure 10 suggest that: (i) U.S. long-term yields would rise by some 12 basis points (as more of these bonds must be absorbed in the market); (ii) yields in advanced countries would rise by about half that figure (these being closer substitutes); and (iii) EM yields could fall sharply, by as much as 50 bps. While these results have been checked for robustness, any static exercise is at best a starting point for discussion, and comes with

important caveats noted in the background paper. For instance, were China to spread its purchases more evenly between advanced and EM bonds, the impact on U.S. and EM yields would be much smaller. Overall, and without claiming too much for this partial analysis, it may be noted that the size of the effect on U.S. yields is similar to those of Warnock and Warnock (2009), but larger than the Gagnon et al (2010) estimate of the impact of U.S. quantitative easing (albeit in stressed and unusual market conditions).

**Figure 10. Impact on Yields of Portfolio Reallocation in China**



Source: Background paper, "Potential Impact on Global Bond Markets of Reallocating Reserves"

**19.** Third, how do China's capital controls affect potential outcomes in EMs? Many EMs have faced a surge in capital inflows since the amelioration of the crisis in 2009, reflecting strong fundamentals in these countries as well as easy monetary conditions in advanced economies. But it has been argued that reserve accumulation and capital controls in China also have played a role. This is plausible insofar as reserve accumulation depresses yields in advanced countries, thus pushing capital to EMs. Moreover, capital controls mean that

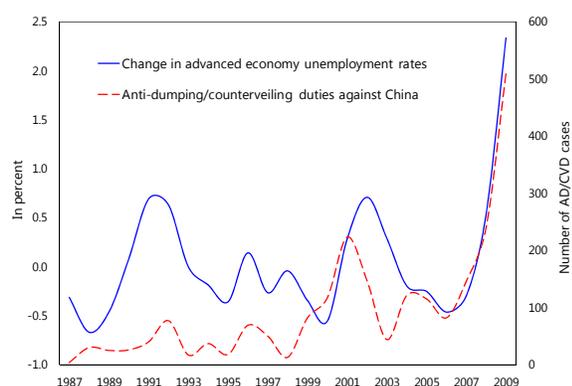
investors have few avenues to gain direct exposure to one of the world's fastest growing economies, thus diverting capital to others in the asset class. However, evidence on the latter effect is hard to find [background paper, China's Closed Capital Account and Capital Flows to Emerging Markets]:

- In theory, it is unclear which way net flows would go if China were to open up its capital account. Chinese savers currently have few choices between bank deposits (with zero to negative real returns), a volatile domestic stock market, and real estate (whose prices have risen to a degree that the term "bubble" is often employed). Such outflows could exceed the presumed body of capital waiting to pour into China.
- In practice, it is unclear how much is dammed up behind the wall of capital controls. Stocks listed in Hong Kong SAR, where mainland shares are half of market capitalization, tell an ambiguous story. Their performance, either in terms of gross inflows or prices, does not suggest huge demand pressure. On the other hand, the weight to put on this observation is not obvious: it might just be that the stocks listed in Hong Kong SAR are the "wrong ones", e.g., too export oriented (while, going forward, the China growth story seems more about domestic sectors). Indeed, China's FDI abroad quadrupled to US\$60 billion during 2007–2010, suggesting desire for outward investment.

## VI. AUTHORITIES' REACTIONS

**20.** The Chinese authorities welcomed the spillover analysis as adding an important dimension to the discussion of policies of systemic economies. They agreed that, by virtue of the economy's size, China has important spillover effects. They emphasized that maintaining domestic stability is the most important spillover. Policies during the crisis—anchoring demand and regional currencies—illustrate the broad context of China's policy choices. While stable growth in China will continue to support the global recovery, instability elsewhere has complicated the task of rebalancing China's economic structure. The tide of trade complaints attending the global recession and unemployment (Figure 11) also can disrupt the process, and calls into question the commitment to globalization.

**Figure 11. Advanced Economy Unemployment Rates and Trade Complaints**



**21.** The authorities agreed that China affects the rest of the world primarily through the trade channel. Though the large volume of

processing trade may overstate its influence, China is the last link in the supply chain, and its place cannot be easily substituted. As the economy rebalances, its influence will rise. At present, however, the authorities see the United States and European Union as leading sources of global demand.

**22.** With China developing rapidly, the authorities expect demand for commodities to continue to rise. But demand also depends on the efficiency of resource use, on which progress is being made and further improvements are envisaged in the 12th Five Year Plan (e.g., in energy use). The authorities cautioned that estimates of China's demand need to account for the effect of processing trade—to the extent that China is bundling goods for consumption by others, estimates of per capita use are overstated. Empirical analyses should control for factors such as speculation and concentrated production. They emphasized that China's effect remains smaller than major advanced economies.

**23.** The authorities argued that China's competitiveness rests on structural advantages such as the low cost of labor. Such cost advantages have underpinned the rise of processing trade and market shares, as multinational firms have relocated production to China. High saving has contributed to the low cost of capital. As financial sector reforms

are implemented and rebalancing and structural changes occur (e.g., demographic shifts), saving would fall and the cost of inputs (capital, land, energy, environment) would rise.

**24.** The authorities regarded the planned rebalancing of growth as good for China and for the world. However, for maximal impact, they considered that this needs to be matched by rebalancing in advanced markets. Otherwise, the latter's overall current account deficits would not shrink (instead, bilateral deficits would simply fall vis-à-vis China and rise against other low-cost producers). They stressed that rebalancing is a long-term process with complex effects. A sudden large appreciation would have large deleterious effects on exporters and the economy, with related negative spillover effects on the output of partners, such as commodity exporters. The importance of processing trade in China's exports suggests that conventional estimates of currency appreciation on the trade balance are overstated. Relatedly, the authorities argued that it is far from clear that Asian supply chain currencies would follow the RMB: the former currencies depreciated while the RMB was stable during the crisis, and caution is warranted in postulating regional behavior.

**25.** The authorities considered concerns regarding excess capacity and growth

downsides as over stated. High returns on capital suggest the need for further investment, given also China's stage of economic development and infrastructure needs. Much of investment in recent years has been geared to infrastructure, and domestic demand is increasing rapidly. If there is a tail risk of disruption to growth, it comes from protectionist pressures that could interrupt the transition to a rebalanced economy.

**26.** China's international reserve purchases are seen by the authorities to have a stabilizing role in global financial markets, particularly against the backdrop of fiscal challenges in advanced markets. The saving rate is expected to decline, alleviating pressures on domestic asset prices. Further, a range of macro-prudential tools are available to stabilize asset prices. The authorities noted that large reallocations of net foreign assets are neither realistic (not matching past investment behavior nor accounting for market considerations such as liquidity) nor necessarily in their interest. Finally, they saw no evidence behind the claim that China's capital controls are diverting capital flows to other EMs, which are rather driven by abundant liquidity in advanced markets.

## VII. CONCLUDING REMARKS

**27.** The main messages that emerge from the discussion are the following:

- China's size and connectedness are such that any economic disruption there would have material adverse consequences for the rest of the world. Insofar as some of the tensions—e.g., excess capacity in parts of manufacturing and rising real estate prices—stem from the current growth model, it is important to the rest of the world that these are addressed quickly by accelerating the rebalancing process.
- Currency revaluation is key to that process, but alone yields only limited benefits to the rest of the world. Positive spillovers hinge more on other reforms to rebalance domestic demand, especially steps to reduce household and corporate savings and, concomitantly, to raise factor prices, especially for capital. Such reforms can also address concerns that China's comparative advantage is unfairly built on low and distorted cost structures, thus reducing trade tensions.
- While the impact on global financial markets is limited by the closed capital account, this will change as the RMB is internationalized and financial opening

occurs. The impact on foreign asset prices could be large.

**28.** The Chinese authorities welcomed the spillover analysis, noting that their policies have important global spillover effects. They considered that ensuring domestic stability is the most important spillover to the rest of the world. They view rebalancing of China's growth as good for China and for the rest of the world, and agreed that a comprehensive package of currency appreciation and structural reform would yield beneficial results. But they also emphasized that China's rebalancing needs to be matched by rebalancing in other parts of the world for maximum positive effect.

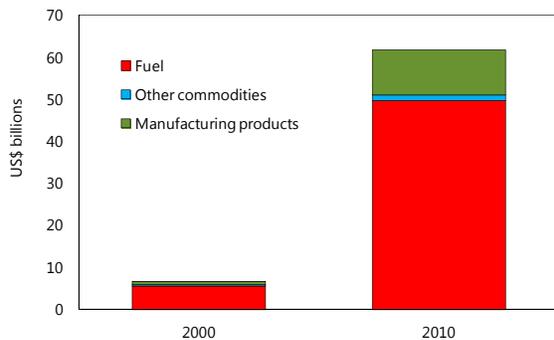
**29.** One goal of this spillover report has been to quantify the spillovers from various policies to rebalance demand in China and durably reduce the current account surplus. The payoff to the rest of the world, as it is for China, could be important. However, any disruption in growth arising from a failure to address the tensions implicit in China's export-oriented growth model would yield major *negative* spillovers. The stakes for the world in a smooth transition to a more domestically led growth model are thus significant.

### Box 1. China: Spillovers to Low Income Countries

China's commodity demand has materially boosted low income country (LIC) trade performance and a jump in outward FDI and development financing from China would help LICs tap natural resources and develop infrastructure and manufacturing capacity.

- China's share of LIC trade has almost trebled since 2000, reaching 14 percent in 2009, about one-half of the combined shares of the E.U. and the U.S. China is among the top 3 export destinations of nearly 30 percent of LICs, up from 8 percent in 2000.
- At over 80 percent, fuels and other commodities dominate China's imports from LICs (see [New Growth Drivers for Low-Income Countries: The Role of BRICs](#), SM/11/9).

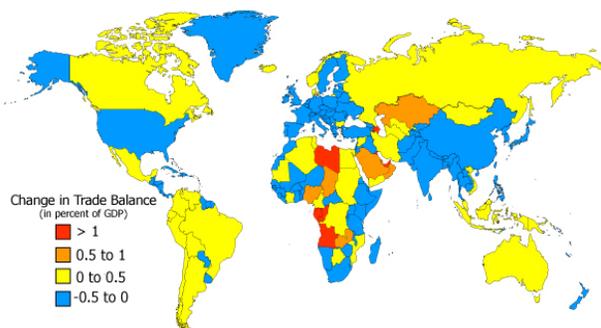
LIC Exports to China



Source: UN Comtrade

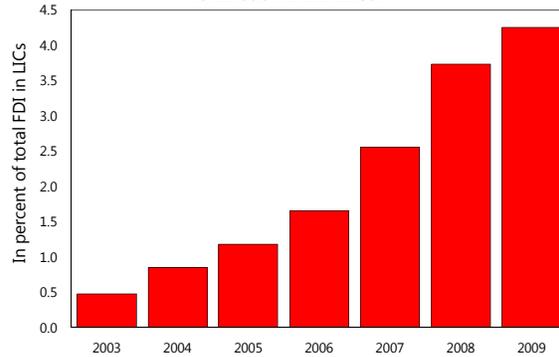
- Chinese demand has boosted LIC trade. A 3 percent increase in China's industrial output (or 1 percent of GDP) raises the terms of trade and the trade balance of several LICs by amounts noted in the figure below [see background paper, [China Spillovers: Global Commodity Markets](#)].

First-Round Trade Balance Effects of Oil and Base Metal Demand Shocks in China



- Although Chinese FDI to LICs is still a small fraction of total FDI inflows to LICs, it has increased more than ten-fold between 2003 and 2009. Large state-owned firms investing in natural resource sectors and infrastructure dominate Chinese FDI.

Chinese FDI in LICs



Sources: UNCTAD data; Bulletin of China's Outward Foreign Direct Investment, 2009

- Overall development financing is small relative to traditional donors, and concentrated in infrastructure. China's infrastructure spending in Sub-Saharan Africa (SSA) is, on average, double the IDA/IBRD sectoral allocation for infrastructure.
- Concessional financing commitments from China amounted to about \$3 billion in 2007 (compared to \$90 billion from traditional donors). This is expected to be scaled up—there are plans for a further \$10 billion to SSA over the 2010–12 period.
- Financing is significantly higher once non-concessional resources are included. China's development financing often involves multi-year packages of grants, loans, and lines of credit.

Some have called for greater disclosure on the destination and terms of China's financing flows, and for the need to take into account LIC debt sustainability, including cooperative approaches to debt resolution. Closer involvement with other donors and international lenders would also help ensure a coordinated approach.