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Living with China

Locally and Globally

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Living with China - Locally and Globally

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This is the text for the Mahbub Ul Haq Lecture to be delivered at the 28th AGM & Conference of the Pakistan Society of Development Economists, Islamabad, 15th November 2012.Parts of the material have been given at seminars in the University of Sussex and the LSE, at conference held at Yale Center for the Study of Globalization on 3rd and 4th December 2011 in honour of Professor Patrick Messerlin, at the Economics Retreat of the Department for International Development, September 2011, and as a Distinguished Guest Lecture at the University of Bradford, 15th November 2011. I am grateful to colleagues at all events for comments.

This paper considers the impact of the economic rise of China on both firms and competition in middle income countries (locally) and on the world trading system (globally). It examines the size and nature of the shock that China has administered to the world economy, the way in which firms and export sectors in one middle income country have accommodated that rise, some of the frictions and adjustment strains that China's rise pose for the world trading system, and two cases which I believe to pose threats to the world trading system if the parties involved do not behave with great care.

I will argue that integrating China into the global economy in a way that benefits nearly all presents perhaps the most important international trade and trade policy issue of the present era. The shock that the emergence of China is administering to the world economy is larger than any seen previously – and by a large margin. While the huge increase in global production that China has generated brings widespread benefits, there are inevitably stresses and indeed possibly some losers. I start to identify these in two exercises that are reported here, both, for reasons of data availability, carried out on Mexico. One looks at firm adjustment and the other at export margins. I then discuss China's role in the wider trading system – the WTO and in global imbalances – and finally identify two areas in which the poor handling of the integration of China into the world economy could derail the world trading system. I mention these latter issues not as inevitable disasters but as issues that are sensitive enough to explode if not handled delicately. An important role of economists in policy-making is to discourage inappropriate policies and descent into trade war as a result of the competition that China brings would certainly count as 'inappropriate'. It is as a warning, no more, that I address them in this paper.

The Shock

In the three decades following the Communist Revolution in 1947, China displayed a respectable but by no means spectacular rate of economic growth. After an initial fall, Maddison (2007) puts the growth in gross domestic product (GDP) at 4.4 percent per annum over the period 1952 to 1978 (table 2.2b) and growth in GDP per capita at 2.3 percent; this growth was associated with a strong re-orientation from agriculture to industry. Over this period, China increased its share of world GDP from 4.6 percent to 4.9 percent. Arguably more important from our point of view, however, is that over the preceding two hundred years China had played little role in the world economy and that the decades of Communism did nothing to redress this. In 1950 China exported goods worth $11.6 per capita of population at 1990 prices (compared with (war-torn) Japan's $42.21) and by 1973 this had grown to $13.26 (compared to Japan's $874.87) – Maddison (2007, table 2.4). So far as international economists were concerned, China barely existed.

In 1978, China took the first tentative steps towards opening up, first internally, with the household responsibility system, and then gradually externally. The outlines of the rest of the story are well-known: China grew phenomenally in terms of GDP, in terms of exports and even, actually, in terms imports. Table 1 summarises the situation.

Table 1 China's growth 1982-2009

	1982	2009	growth pa
Population (billions)	1.009	1.331	1.0%
GDP (constant 2000 US$ billions)	210.0	2937.5	10.3%
GDP, PPP (constant 2005 international $ billions)	590.1	8255.3	10.3%
GDP per capita, PPP (constant 2005 international $)	585	6200	9.1%

Source: World Development Indicators Online

Rows 2 and 3 of the table show that China maintained aggregate growth of over 10 percent per annum for nearly three decades, whether in (constant) market prices or international (PPP) prices. Moreover, China managed more successfully than other developing countries to control population growth – row 1 – with the result that incomes per head increased by 9 percent per annum. In earlier work – Winters and Yusuf (2007) - I showed such strong growth rates are not wholly unprecedented, for Korea, Taiwan and Japan all showed that similar trends for about two decades. Two features are unprecedented, however: first, the differential between the super-growers' growth rates and that of the world economy during their growth-phases – see Winters and Yusuf, table 1.2 – and second the combination of rapid growth and huge size. Table 2 below, which is partly based on a slide from McKinsey, makes the point powerfully. While it took Britain, as the only industrial country in the eighteenth century, 155 years to double income per head from the boundary of extreme poverty to well into middle-income territory, it took the USA and Germany about 60 years in the nineteenth century, Japan 33 years in the early twentieth century and China just 12 years in the later twentieth century! And while the first four examples covered no more that 2.6% of the world's population at the start of their growth spurts, China's applied to more than 20% of it.

Table 2: Chinese Growth in Long-Run Context

	doubling period		Initial population	
	years	duration	millions	% of world
Britain	1700-1855	155	9	1.4%
USA	1820-1873	53	10	0.9%
Germany	1830-1894	64	28	2.4%
Japan	1906-1939	33	47	2.6%
China	1983-1995	12	1023	21.8%

Notes: Period for the doubling of GDP pc from $1300 PPP to $2600

Sources: Maddison (2006), World population data interpolated from Goldewijk (2005), except for 1983 which comes from World Development Indicators online.

China's emergence from the shadows affected global equilibria in many areas such as the UN Security Council or the International Court of Justice as well as simple economic ones. However, so far as other countries are concerned, I would argue that those pertaining to

the world trading system are the most immediate, direct and visible and quite possibly the most important. For example, the rapid expansion of international trade was a key component of China's growth model and thus absolutely central to its recent development, and to the aggregate levels of international trade, growth and prosperity elsewhere. China's huge appetite for natural resources, including food and energy, affects prices and availability elsewhere and raises incentives for production and investment in these international industries, regardless of whether they are used to produce goods for its own consumption or that of others.

All international trade has re-distributional effects – this is why it is so contentious – but the introduction of a huge supplier at the labour-intensive end of the spectrum of comparative advantage must have profound effects on other labour abundant countries. As China has developed and increased its capital and skill abundance, these effects are gradually spreading to other segments of the spectrum of comparative advantage, so that even though we have data on it only for labour abundant manufacturers, it is of a wider generic interest. On the other hand, while China's growth has posed questions of producers, it has also driven down prices for consumers, especially poorer ones who purchase cheaper varieties and less sophisticated goods (Broda and Weinstein, 2009).

The trade link also has institutional form in the shape of the WTO. The existence of the WTO helps China's integration into the world, but it may well mean that stresses are more visible than they otherwise would be and that any collapse of trading relations would affect not only China and its specific partners but spill over to undermine relations between other pairs of countries as the WTO became discredited. Moreover, even though other aspects of China's international economic relations are contentious – for example, its aid and investment policies and its huge levels of reserves and consequent role in international finance – they all arise from its trading success and even today largely depend upon it continuing.

Finally, the changes in China's international trade are proportionately even larger than those in aggregate income contained in table 2. Table 3 shows the growth of Chinese exports exceeding 15% p.a. for over a quarter of a century and of reserves by over 20%. Moreover, China has shifted from being a net exporter of industrial raw materials to being a massive net importer.

Table 3 China's Changing International Trade

		1982	2009	growth pa
Exports $ billions		24	1333	16.0%
Fuels and ores as percentage of:				
	Imports	6.0	27.0	
	Exports	25.2	2.9	
Reserves $ billions		17	2914	21.0%

Competition

The arrival of China as a fully functioning trading nation has had a dramatic effect on the competition faced by other producers. I consider this here from three separate perspectives. First, Wood and Mayer (2009) consider the effect of China's arrival on global factor endowments and on the resulting changes in other countries' comparative advantage. While China's emergence obviously contributed some land, capital and skilled labour to the world, its principal and disproportionately large contribution has been in unskilled labour. Wood and Mayer estimate that it raised the *global* ratio of labour with basic education to all labour by 7 to 9 percent and reduced the ratio of (land + natural resources) to all labour by 10 to 17 percent[1]. The authors say 'Neither of these is impacts is vast, but nor is either trivial';I would say that both are pretty significant, especially as the shock occurred over perhaps as little as just two decades.

The consequence of these changes in the global aggregates is that many countries that had previously been able to trade as unskilled labour abundant countries now find themselves outside that class and having to behave rather as abundant in (middle-level) skills or in natural resources. The resulting adjustments, compressed into so short a period, are potentially quite dramatic. Applying a Heckscher-Ohlin model of world trade in which physical capital flows freely and hence may be ignored, Wood and Mayer calculate that these changes in endowments have meant that *on average* other countries have reduced the ratio of labour-intensive manufactures to primary production by 7 to 10 percent for output and 10 to 15 percent for exports. In East Asia, which had long-appeared to be the labour abundant region, these developments were a material cause of de-industrialisation. Elsewhere, Wood and Mayer argue, they were quantitatively less significant, although, as we see next, they did still have an effect.

The second and third exercises to identify competitive pressure concern competition between Mexican and Chinese producers, at least part of which takes place in the US market. As a middle income producer of relatively labour-intensive manufactures Mexico might be thought to be particularly vulnerable to competition from China, especially given that, within the preferential trade bloc NAFTA, Mexico has a specific comparative advantage in such sectors. Moreover the focus on third country markets as the locus of competition provides an important policy perspective: even if Mexico chose to protect its own market from Chinese competition, it cannot unilaterally do so in the third markets in which the two suppliers meet.

The second exercise, reported fully in Iacovone, Rauch and Winters (2012), looks at the effect of Chinese competition on the survival chances and sales of Mexican firms both at home and in the USA. The almost uniquely detailed sample, compiled by Leonardo Iacovone, comprises plant-level data for nearly all Mexican manufacturers (data on some small firms are missing) over the period 1994-2004. Over six thousand plants are covered and nearly

[1] The differences reflect different ways of aggregating across countries. The smaller estimates weight countries' endowments together by their shares of world trade, the larger ones by shares of world labour force.

three thousand individual products. As well as considering competition in a third market, the other innovation of this work is to take seriously the fact that firms are different. We allow the effects of competition to vary over plants – in most cases with plant-size – and within the plant, over products–with the importance of a product in its plant's total output.

We define competition from China as being the share of China in total imports at the detailed product level, aggregated up to plant level when required using each plant's own mix of production. Thus it is not import competition *per se* that produces our effects, but competition specifically from China. In examining Mexican plants' domestic sales we use imports into Mexico and when looking at exports we use imports into the USA. (Around 85% of Mexican exports go to the USA.) We make allowance for possibly endogeneity by instrumenting China's share of these markets by its share in other markets in which Mexico barely sells anything.

The results are stark and consistent. A small sample is given in table 4 referring to the probability that a product exits a market – the domestic market in columns 2 and 3 and the export market in columns 4 and 5. All are estimated by instrumental variables over 1994-2004 on data from plants that sell at least two products to the relevant market. Columns 2 and 4 consider the effect of Chinese competition alone. (The final term in column 4 – plant exit from exporting – identifies products produced by plants that exited export markets altogether, so that the estimated effects refer only to products that were dropped by plants that continued to export something.) In the domestic market, the effect is positive – competition increases the chance of exit – whereas for exports the effect is not at all significant. Columns 3 and 5 allow this effect to vary by product in proportion to the product's share of the plant's total gross sales. In both cases the simple competition effect, which refers to products with very small shares of plant sales becomes more positive, but the interaction with product share is well determined and strongly negative. Thus as a product becomes more important in the plant's output, the chances of it exiting in response to Chinese competition declines and eventually becomes negative: that is, for 'major' products there is evidence that competition reduces the chance of their leaving the market, essentially by 'killing off' minor products so that the plant focuses on its areas of strength.

Table 4 Market Exit as a Result of Chinese Competition

	Product Exit, 1994-2004			
	Domestic		Export	
Chinese competition	0.328	0.499	-0.053	0.140
	(0.122)	(0.161)	(0.098)	(0.126)
Product share		0.076		-0.031
		(0.14)		(0.023)
Prod shr * China comp		-0.690		-0.630
		(0.261)		(0.170)
Plant exit from exporting			0.881	0.884
			(0.013)	(0.013)

Source: Iacovone, Rauch and Winters (2012)

Figure 1 summarises the results, along with related ones on products' sales. The horizontal axis reports product share in ordinal form (position in the ranking of product shares over all our observations – centiles) and the vertical axis the marginal effect of an increase in Chinese competition on plant sales in Mexico (domestic) and the USA (exports) in the left-hand block and the marginal effect on the probability of the products being withdrawn from sale completely (exit) in the right-hand block. For small products (where, say, they are at the tenth centile of the share distribution) the effect on sales is strongly negative – a 1percent increase in competition leading to a 0.4% decline in Mexican sales, whereas for products at the 90th centile, the effect on sales is positive - approximately 0.1% for export sales and approximately 0.3% for domestic sales. The broken lines are 95% confidence intervals and so one can see that the latter effect is significantly positive. Turning to exit on the right, the story is the same. For small products (10th centile) the effect of a 1 percent increase in Chinese competition is to increase the probability of exit from the export market by about 0.1 percent and from the home market by about 0.5 percent. For large plants competition reduces the probability of exit – i.e. is associated with an increase in the chances of survival[2].

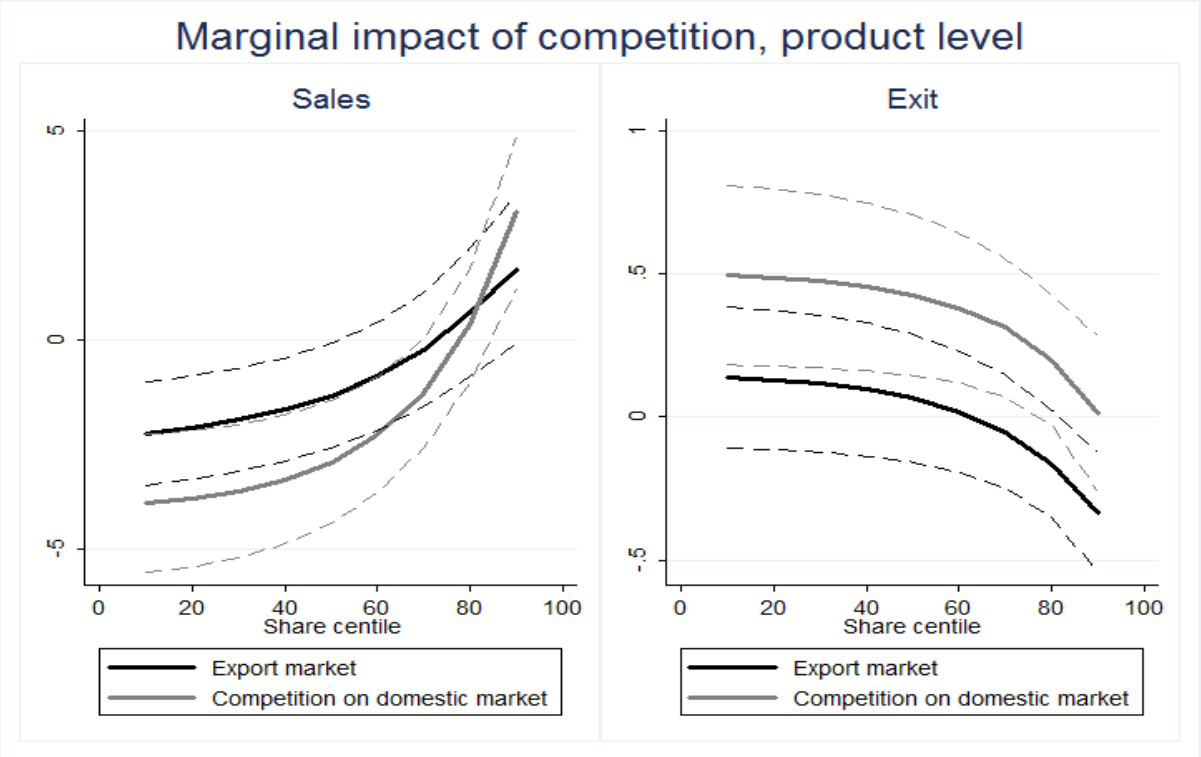
These results are replicated for plant exit and plant sales and in a wide variety of different estimation exercises. While competition from China seems to hit smaller plants and minor products quite hard, it has relatively little or even a beneficial impact on plants' main products or on the largest of plants. In line with the literature on firms one can take size as a good proxy for productivity, so that competition plays a strongly Schumperterian role. Competition tends to drive weaker plants and products either out of business or to contract while leaving stronger ones either unaffected or even able to expand a bit. In this way it increases average productivity and thus incomes among survivors, and provided that factor markets are flexible enough to re-absorb the factors released in a reasonable time, it has the same effect overall. The proviso is a big one, but it also suggests something about the appropriate policy response to competition – not a defensive hunkering down, but encouraging conditions in which the economy can take advantage of both the cheaper goods offered by China and the stimulus to efficiency.

The challenge here is plain. While Chinese competition may be quite a constructive force for the long-run growth of productivity and incomes – it helps to eliminate the weak and boost the strong – it is a political nightmare in distributional terms in most countries and is likely to raise serious calls for the management or even curtailment of trade. Giving in to this, however, will mean benefits foregone in both in the importing country and in China.

The third perspective on Chinese competition switches to the price dimension and asks how Chinese competition constrains the export prices of Mexican producers in the US market. In one sense it is the same phenomenon as the previous exercise because falling sales might reflect falling prices and exit from a market reflects an inability to charge prices high enough to break even. Pang and Winters (2012) use data at the 6-digit level of the

[2] In additional tests we show that skill-intensive firms fare better than less skill-intensive ones and that larger firms and products appear to be better placed to take advantage of the improved and cheaper flow of intermediate inputs that Chinese expansion entails.

Figure 1 The effect of Chinese competition on product sales and exit



Source: Iacovone, Rauch and Winters (2012)

Harmonised System classification between 1992 and 2008 to show that *on average* changes in Chinese prices on the US market induce changes in Mexican prices in the same direction and of a little under half the size[3]. Chinese pricing has been very competitive over this period driven by China's strongly increasing productivity: for example, Hsieh and Ossa (2011) suggest that productivity growth in Chinese manufacturing sectors ranged from 7.4 percent to 24.3 percent and averaged 13.8 percent over 1995-2007. Thus while Chinese producers have been able keep prices down because their costs are falling, Mexican producers have felt obliged to try to follow suit; however, with weaker productivity growth, they have seen their margins squeezed.

Competition and Pakistan[4]

The results just discussed refer to Mexico but they are probably of some relevance to Pakistan. Without data (and a good deal of time!) one cannot be sure that the effects of China on Pakistan are similar, but it seems at least a good starting point for thinking about the matter. In terms of manufacturing activity in Pakistan, China appears to be a major force in several important sectors: textiles, certain food stuffs and electrical machinery. The extent of

[3] The model is based loosely on a Bertrand model of duopolistic interaction with differentiated products, whereby producers compete via prices, as used, for example, in Chang and Winters (2002).

[4] I am grateful to Sarah Ollerenshaw of TradeSift for help with the data in this section.

the overlap between Chinese exports and Pakistani output is not something on which I have data, but it seems likely that there is at least some and that consequently there is at least some competitive pressure. As noted above, the appropriate response is not to seek to block it by protection but to accommodate to it by allowing markets to work.

Turning to world markets we have rather better data. Using data from WITS (via the software developed in Sussex, TradeSift) figure 2 below examines the similarity of the Chinese and Pakistani export bundles as captured by the Finger-Kreinin similarity index[5].

Figure 2 Export Similarity – China and Pakistan 1990-2011

At 2-digit level of SITC(R2)

At 5-digit level of SITC(R2)

Note: Similarity as defined by the Finger-Kreinin index:$\Sigma_i \min([X_{iat}/\Sigma_i X_{iat}], [X_{ibt}/\Sigma_i X_{ibt}])$, where i = denotes commodities, a and b countries and t years.

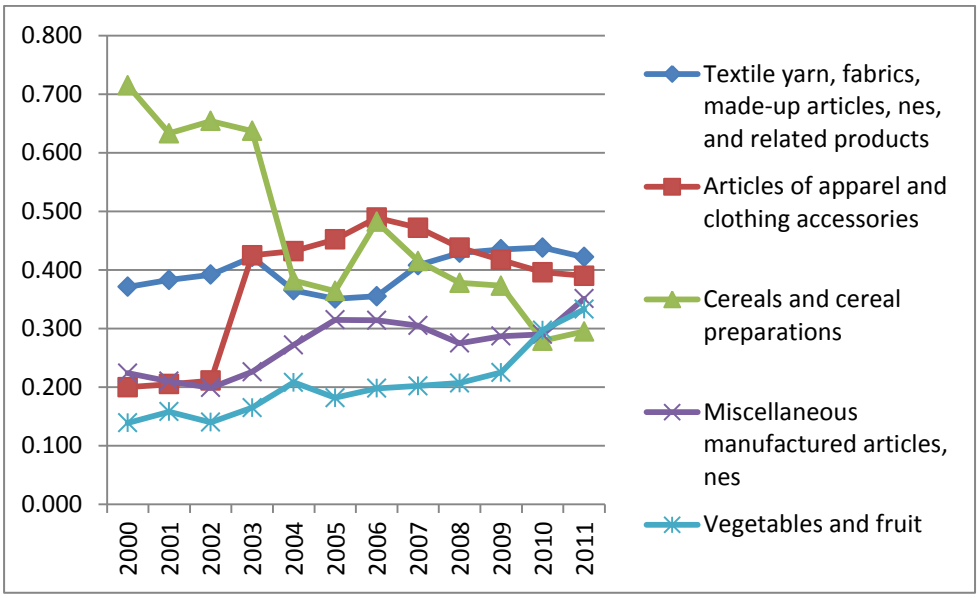
At the 2-digit level – broad sectors - trade similarity is pretty high but declining, suggesting that while China's rise might initially have hit Pakistan's export markets, over time Pakistan might be facing declining levels of competition from China. The story at 5-digits (of which there are about 1300 headings in the SITC(R2), however, does not suggest decline; while the degree of overlap is lower when measured at this level (which is still more aggregated than the terms in which actual exporters think) it is not abating at all. Thus while at a broad level Pakistan's and China's exports are diverging, at something closer to product

[5]The Finger-Kreinin index is defined as $\Sigma_i \min([X_{iat}/\Sigma_i X_{iat}], [X_{ibt}/\Sigma_i X_{ibt}])$, where i = denotes commodities, a and b countries and t years.

level they are converging – i.e. to the extent that 2 digit categories overlap, similarity is increasing.

This is at least partly evident in figure 3 below which reports the similarity indices calculated at 5-digit level of the SITC(R2) for the five largest 2-digit sectors in Pakistan's export bundle in 2011. The similarity for cereals has fallen considerably but the other four (manufactured) sectors all show increases in similarity since 2000, in three cases strong ones.

Figure 3 Export Similarity between China and Pakistan in Pakistan's Main Export Sectors



The principal export sector for Pakistan is textiles etc. (SITC 65) which accounted for 38% of Pakistan's exports and 4.4% of China's exports in 2011. One might be tempted to conclude that, because this sector is not so large for China, it does not impose much competitive pressure on Pakistani exports. But in absolute terms, China exports eight times more textiles etc. than does Pakistan, so that it is perfectly capable of dominating any market which they both supply. Thus, the shares used in the Finger-Kreinin index are not all that one might need to know to assess competitive pressure.

On the other hand, it is important to note that China exports a good deal of textiles to Pakistan – over 15% of the total China to Pakistan flow. Given the breadth of the 2-digit classification the most likely explanation of this is that a significant part of China's exports comprises inputs into the Pakistan textiles industry and thus, far from harming producers, they are actually helping. Iacovone, Rauch and Winters (2012) found that the availability of Chinese inputs was a considerable benefit to the Mexican firms – see footnote 2 above – but that, like the competitive effect, it helped larger more efficient firms and products more than less efficient ones. Again, then, maybe China is aiding efficiency in Pakistan by encouraging activity to move from smaller (less efficient) to larger (more efficient) firms.

Exporting Deflation?

The results from Pang and Winters (2012) not only inform about competitive pressure, but also cast light on a further cause of concern that has been expressed about China – 'exporting deflation'. Much of this argument is of a macro nature, which I will deal with later, but if it is to be taken literally as placing downward pressure on prices, the mechanism must be as we have described here. A number of scholars have tried to identify the effect of Chinese growth on aggregate prices by relating prices in the USA or other developed countries to the quantity of Chinese exports e.g. Kamin, Marazzi and Schindler (2006) or Braoda and Weinstein (2010). Such attempts have largely failed and led to the conclusion that China is not exporting deflation. Part of the problem is that despite China's large size and openness, goods from China still only account for around 3% US GDP, and hence can have only a tiny direct influence on US aggregate price indices. If China is to have a discernible effect on price indices elsewhere, it *has to be* by influencing the prices at which other producers sell, and this is the issue that Pang and Winters tackle directly.

Pang and Winters' results do indeed suggest that China has contributed to the 'Great Moderation' whereby western economies seemed more or less to have abolished inflation, despite operating at high levels of capacity utilisation and stoking up a huge credit boom. They also suggest, however, that this benefit is likely to erode in the near future. Chinese export prices are almost certain to rise quite fast in dollar terms in future as productivity growth slows (as the technologies used get closer to the technological frontier), domestic demand is expanded and the exchange rate appreciates. Then, our results predict, other exporters will breathe a sigh of relief and start to ease up their prices.

Moreover, pushing in the same direction is the inexorable pressure that Chinese consumption will put on global commodity markets. Of course there will be fluctuations in commodity prices, but, as we argued in Winters and Yusuf (2007), the demand for industrial inputs, fuel and food generated by expanding Chinese domestic consumption is likely to drive relative commodity prices higher. Thus overall, the downward pressure on manufactures prices seems likely to abate somewhat and primary prices seem likely rise relative to them. That is, as China settles into its leading global role, inflation seems more likely to be a worry than deflation.

China and the WTO

The World Trade Organisation has rightly sought to become truly global in terms of membership and welcoming China in late 2001 was perhaps the biggest and most natural recent step towards that goal. China's accession has been analysed extensively and I shall make only a couple of points concerning China's integration and the Doha Round.

There was some interest – and concern in some quarters – as to how China would settle into the WTO institutionally. China has not had a great enthusiasm for joining organisations in which it played no formative role and the question arose of whether China

would behave as 'regular club member', be disruptive or just maintain aloof. After ten years we can say with some confidence that China has become a 'regular guy' pursuing, like other members, what it perceives as its own interests within the context of existing WTO rules and practices. Of course this has been uncomfortable for others at times and some issues have proved more important to China than to other members, but there is no hint of behavioural differences.

China has played a pretty active role in the achievement of transparency within the WTO. As Collins-Williams and Wolfe (2010) have observed, China has made over 500 notifications of TBT standards, has been active in the Subsidies and Countervailing Measures Committee of the WTO and even participated in the Agriculture Committee. China has also been heavily involved in the Dispute Settlement Procedure. It has more often been respondent than plaintiff but the surprising figure is the frequency with which it has had third-party status – observing and making minor contributions to cases primarily involving other members. Most commentators see this as a conscious learning strategy as China seeks to develop the skills and experience to handle its own cases better. Hsieh (2010) makes a strong case that China's lack of legal capacity has been a major constraint on its ability to pursue WTO disputes independently and may have led it to fare less well in the cases it has been involved in.

Kennedy (2012) offers a detailed account of China's engagement in disputes. He concludes that China is playing the role of a "system-maintainer" by conforming to the practices of WTO dispute settlement, even as those practices develop. China has mainly used the system to challenge the differentiated treatment of its exports meted out by its two largest trading partners, the USA and the EU, at least some of which stems from what the Chinese consider to be an asymmetric and unfair Protocol of Accession. The cases they have initiated – six against the USA and two against the EU (although two others were settled by consultations) – show signs of being retaliatory, when the partner initiated 'too many' cases in the other direction, and hence perhaps of being 'warning shots' as to the problems that an unco-operative China could cause. Such behaviour is by no means unique to China. Moreover, China has never initiated a case against a developing country, even among those that have participated in cases against China. Hence, overall, fears that China would disrupt the enforcement component of WTO membership seem not to have materialised.

One specific asymmetry that irks the Chinese is the continuing failure to treat China as market economy in anti-dumping cases, with the result that both the USA and the EU find it even easier to hit China with heavy anti-dumping duties than they do for other countries. China sees this as unfair and offensive – and I sympathise – but I do not believe it is worth to worrying about it too much: non-market treatment will cease in 2016 at the latest according the Protocol, only a fraction of trade is subject to anti-dumping action and if the proponents of non-market treatment did not have this tool, they could probably find another – e.g. the double jeopardy of simultaneous anti-dumping and anti-subsidy action – see Gatta and Vermhulst (2012). Thus in the grand scheme of integrating into the world economy, China has, in my opinion, much bigger issues to worry about.

A second friction associated with Chinese integration into the WTO is the Doha Round, which some, particularly in the USA, hold to be stalled because China is offering too little. That China should offer a good deal of liberalisation is accepted by everyone, including the Chinese, but here I think other countries are making a mountain out of a molehill. China's accession process was long-lived and entailed a huge amount of reform and liberalisation. The Doha Round was initiated as that process drew to a close; it was billed to last three or four years (!) and to be substantially about continuing the business of the Uruguay Round. No-one expected China to play an active role. Now eleven years on, the Doha Round is still underway and China has more than doubled the size of its economy. Clearly something might be contributed – and has been offered – but the demands made of China for deep cuts in tariffs in non-agricultural tariffs and trade barriers from the levels agreed at accession seem quite misplaced to me. For sure, apparent exceptions for China from the general liberalisation poses a political challenge for the US body-politic, but to be unwilling to grasp it and explain what is happening to their electorate seem to me most unfortunate.

Global Imbalances, the Financial Crisis and Exchange Rate Undervaluation

Perhaps the biggest complaint against China at present arises from its huge current account surplus and massive levels of reserves. The corresponding deficits are held to drain demand out of partner countries (exporting deflation from a different perspective) and the imbalances are frequently named as a major cause of the financial crisis of 2007 onwards. There is truth to both statements, but they are far from being comprehensive explanations of our current economic woes. Moreover, the implication that some draw that the imbalances reflect exchange rate undervaluation and that this can be cured by pressure from the west, via WTO or otherwise, is, to my mind, seriously alarming.

Macro-economically the imbalances reflected and permitted the boom over 2002-2007, with the surplus countries able to increase their output and employment strongly and the deficit countries able to maintain high levels of consumption and demand. Of course, we can now see that such growth was unsustainable and that adjustment must occur, but absent the financial crisis it is not clear that aggregate welfare was seriously reduced by a bit of over-heating over this period. It is clear, however, that in the adjustment that is now inevitable, the burden cannot be borne by the deficit countries alone; any attempt to take such a route is bound to lead to a collapse in demand and a Keynesian recession. Thus China must now be prepared to make fundamental structural changes to increase not only its national absorption, but specifically its national consumption, because further the expansion of investment will exacerbate the current over-investment and increase the associated waste and/or excess capacity. China is taking steps in this direction but not very confidently or effectively, and so is in danger of imposing a chill on the global economy.

The financial crisis of 2007 was certainly not solely a macro-economic issue. It also had independent financial causes arising from the way in which policy-makers and regulators reacted (or didn't react) to the crisis. Rajan (2009) has argued that partly because competitive

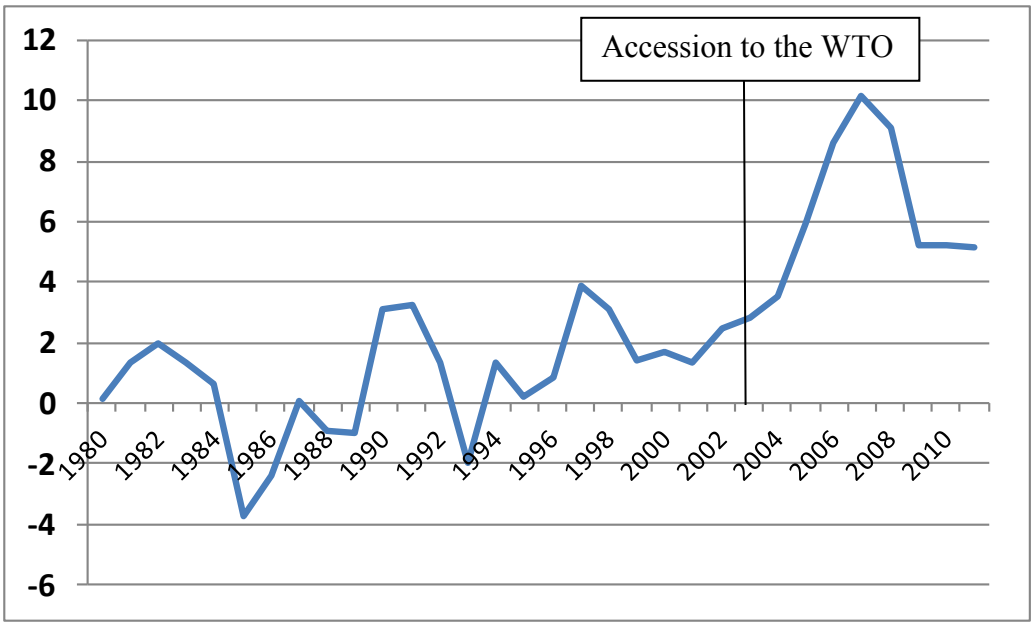
pressures from China and other low-cost producers constrained real wages among less skilled workers, American policy-makers looked to private credit markets to boost their spending power; this, in turn, caused the real estate boom and the stock of toxic mortgages that so burdens the financial system and private portfolios now. On the supply side of the credit market, Rajan and others have argued that the low returns associated with the loose monetary policy behind that policy, and from the great moderation, led banks to adopt far too many risks in the search for profits. It is not appropriate to blame any of this on China, but it is the case that the high level of Chinese reserves and the absence of local instruments with which to absorb high savings granted these mistakes huge space in which to work their mischief. The fact that China deposited its surplus dollars to New York kept the merry-go-round running far longer than it would have done in other circumstances.

An important question is what lay behind the surpluses? Some commentators – e.g. Rodrik (2010) – appeal to something like figure 3 to argue that trade and trade policy lay behind the surplus: crudely the argument is that since the huge growth in the surplus as a percentage of GDP occurred shortly after China's accession to the WTO, the latter must be responsible for it. I will explore Rodrik's view more fully below; here I merely note that macroeconomics is basically the process of unpicking the relationships between many endogenous variables and that, while booming exports and stagnating imports were clearly the proximate causes of the Chinese current account surplus, they were not the ultimate causes. Export growth accelerated from about 2001partly as China's accession to the WTO drew in FDI, especially from Japan, Taiwan and Korea. There was also a significant fall in import growth after 2004 mainly as net trade in heavy industrial products fell. This partly reflected a build-up of the stock of equipment over the preceding few years, but also the shift in Chinese capabilities so that domestic supplies increased strongly. I see these changes as partly exogenous and partly as symptoms of more fundamental forces.

A second causal candidate for the surplus is China's exchange rate policy, which since around 2004 has been associated with moderate undervaluation. Identifying over- or under-valuation is not straight-forward and while some undervaluation of the Renminbi is clear, claims of major undervaluation may well be misplaced; for example, since 2005 real wages in China measured in dollar terms have increased by over 50 percent[6].

[6] Recall, also, that during the Asian crisis of 1998, many commentators feared that China would depreciate along with most of its neighbours in order to limit the increase in the competition that its exporters faced. In the event it did not with the result that it took a major hit to its competitiveness while its neighbours were able to adjust more easily on the back of booming exports. This turn of events, albeit some years ago, tends to refute the notion that China is focussed on the merciless pursuit of competitive advantage at the expense of other countries and the stability of the world monetary system.

Figure 3: China's Current Account Surplus (% of GDP)



That China chose to keep its real exchange rate low stems from three strong policy imperatives. The first was to sustain employment growth in its export industries with the twin related objectives of maintaining its high rate of export-led growth and of preserving 'Social Harmony'. Chinese policy makers are conscious of a trade-off between political reforms and economic returns, which can be crudely characterised as that, for as long as employment and real wages keep growing fast, the population will tolerate the constraints on political freedoms and not seek to disturb the Communist Party's hold on power. Commentators speak of a 7 percent per annum threshold below which social unrest will occur, but I am aware of no analysis that firmly places it at that level. Policy-makers undoubtedly recognise that a slow-down in growth is inevitable at some stage but find it much more comfortable to postpone the difficult adjustment a bit longer.

The second imperative was to self-insure against a repeat of the 1997-8 crisis in which many Asian countries felt abused by the international system and specifically by the International Monetary Fund when they sought emergency borrowing. Quite consciously and at times explicitly they said never again would they risk falling under the influence of the 'Washington consensus'. The result has been a massive accumulation of reserves throughout most of Asia and I believe that China has been part of that movement based on its observation of its neighbours if not its own direct experience. In both of these objectives, past exchange rate policy has been extraordinarily successful and we should appreciate the difficulties that policy-makers face in shifting to a different strategy at the behest of other countries.

The third imperative is that an exchange rate appreciation will create large paper loses in Renminbi for the holders of dollar assets. To the extent that these are the commercial

banks there could easily be a messy banking crisis, for received wisdom is that the banks are already burdened by very high levels of non-performing loans. While the Chinese government has the resources to support and re-capitalise the banks if necessary, it is very nervous about processes which it cannot fully control and dislikes acting under duress. Of course, the nearly three trillion dollars of reserves held by the People's Bank of China will also show large paper losses – inevitably because the appreciation will eventually have to occur – but these are easier to gloss over than those in the commercial sector.[7]

The true cause of China's large current account surplus is macro-economic imbalance – high net savings by the household, corporate and government sectors. Chinese households have high savings relative to those in many developing countries, but, at about 20% of GDP, not unprecedentedly so[8]. Moreover, given the very rapid rate at which China's population is aging with the one child policy and the relative lack of government provided services and pensions, high savings seems rational and likely to persist. Much more unusual are enterprise savings which account for about 20% of GDP. Lane and Schmukler (2007) argue that these reflect the low (zero) dividends paid by private (state) firms coupled with policies that boost enterprise profits strongly – subsidies to inputs such as land and borrowing and low wages supported by rural-urban migration. Until these distortions are addressed and ways found to switch corporate profits into consumption (possibly via the government account with taxes and social expenditure), the imbalances seem likely to persist.

I alluded above to Dani Rodrik's (2010) argument that the Chinese current account surplus is due to accession to WTO[9]. The logic starts with the assertion that economic growth (and certainly China's growth strategy) requires a rapidly growing tradable manufactures sector because this is typically where productivity is highest. Market forces fail to generate the optimal level of activity in this sector because of a variety of market failures – poor property rights protection, unrequited spill-overs between firms, co-ordination failures, etc. Hence activist polices are required and have, says Rodrik, been used in virtually every case of successful growth. Countries have variously used polices like directed credit, production subsidies, export subsidies and protection to achieve tradables growth. Exchange rate undervaluation can also be used, and is historically associated with rapid growth, and its use as a growth policy is attractive because it does not require sector-specific interventions which are both difficult to design and liable to capture.[10]

One of Rodrik's innovations is to stress that growth is related to the production of, rather than to exports of or trade surpluses in, tradables, and he produces some evidence in favour of this view. This means that if a country can simultaneously increase the demand for tradables along with their supply, it can grow rapidly without a large trade surplus. Subsidies, possibly bolstered by protection to prevent demand seeping abroad, are the obvious route to

[7] The losses are just as real, however, and as Larry Summers has observed China is very far from maximising its economic returns by building up such reserves of inevitably depreciating assets.
[8] See Vincelette et al (2010) figure 2 for the data.
[9] He writes 'Is it a coincidence that China's current account imbalance began to widen and its currency undervaluation started to rise just as the country became a member of the trade body? Perhaps not.'
[10] Undervaluation's disadvantage of taxing the consumption of tradables tends to count for rather little with governments focussed on growth.

do this, and traditional industrial policy seeks to do precisely this. Rodrik argues that optimal intervention would see all countries using subsidies to cure their local market failures and that in this case the spill-overs between countries are irrelevant because each country would be at its optimum. According to Rodrik, the problem of the last decade is that WTO membership has prevented China (and other countries) from using subsidies so that governments have turned to exchange rate undervaluation as the tool to boost tradables. But undervaluation must inevitably lead to surpluses, he argues, and that is why the WTO is responsible for the global imbalances. The obvious solution to this in Rodrik's world, hinted at in Rodrik (2010) and explicit in Rodrik (2011), is to restore legitimacy of trade/industrial interventions, in particular subsidies, and to manage exchange rates multilaterally.

As always, Rodrik's writing is seductive, but I believe it to be wrong in several respects. First, there are many ways to boost tradables output that are WTO-consistent – for example, improving logistics, labour training and education, consumption subsidies, regional development subsidies and R&D subsidies. They are arguably more constrained and less immediate and direct than straight production subsidies, but they are not generally ineffective. Second, subsidies/protection are just as dangerous to the world economy as trade surpluses. Consider, for example, the intense reactions of partners' industries to subsidies elsewhere which can easily set off subsidy wars of the sort we saw in the 1930s (which admittedly also saw competitive devaluations as well). The idea that the optimal intervention offers a stable solution to the global policy game is a chimera – almost certainly this situation is characterised by a prisoners' dilemma in which country A is pushed towards subsidising its own producers because country B has done so and threatens to steal their markets. There is a strong likelihood that a subsidy-permissive regime would degenerate into a subsidy free-for-all with massive intervention.

Third, it is hard to manage exchange rates. The global community has many times called for exchange rates to be managed by the IMF and this has always failed; efforts through other groups such as the Group of 7 have only rarely succeeded. The USA has no intention of surrendering its exchange rate sovereignty to the IMF or equivalent and so no WTO-like enforcement mechanism for exchange rates is imminent. There is just no evidence that countries that compete in subsidy space as Rodrik would allow would willingly surrender their weapons in exchange rate space. I am not arguing that exchange rates co-ordination is not desirable, but that it is foolish to believe that we can rely on it.

If Rodrik's idea to ditch the subsidies code of WTO and replace it with an exchange rate code seems dangerous, the pressure from some commentators to take exchange rates into the WTO, and hence to make them subject to the Dispute Settlement Procedure, seems equally so. (Mattoo and Subramanian, 2009, make the case and it has been taken up by several US Congressmen and European politicians). The complexity of measuring undervaluation is great and so the whole basis of a dispute will be contentious, and still more so will be the identification of the government manipulation that is alleged to cause it. Mattoo and Subramanian say these calculations should be done by the IMF and that their doing it on behalf of the WTO will somehow make it politically less contentious than doing it on their own behalf, which to date they have been unable to do. I do not see why transferring

responsibility will solve the political problem. Part of the way in which WTO's codification of trade interventions is effective is because it replaces political pressures with technical definitions with a very narrow focus. The process is not perfect, but it tends to draw the political poison. There seems little chance that with something as complicated as macro-economic outcomes and management, the same trick will work.

Suppose we accepted the logic that exchange rate undervaluation has been induced by 'unfair' government intervention and that the resulting benefits to the perpetrator are as large as Rodrik argues. The WTO's standard that sanctions should be equivalent to the costs borne by other countries would imply a massive level of trade restriction on both sides of the trading relations that were sanctioned. The costs to the trading system would be similarly huge, since many products would have to be brought under such sanctions and the mere possibility that they could be involved would undermine producers' confidence that markets will remain accessible – the very essence of the GATT/WTO magic that has been so beneficial in the last 50 years.

More likely, in fact, is that trying to use sanctions in this way will inflict major damage on the WTO as an institution; that by giving it an impossible brief we will destroy the value that we currently reap form the WTO and take for granted. The WTO has neither the structure (all decision-taking is in Committees of members, none is by the Secretariat which might be better able to maintain a technical view), nor the institutional robustness to be able survive the sort of contentious and high-stakes decisions that panels and the Appellate Body would have to take in exchange rate cases. Having failed in such cases, the implicit pressures that currently lead to high degrees of compliance with WTO decisions would be destroyed and we would be left with little leverage against 'regular' violations. And once this happened the chances of cooperation in Committees on other business would also disappear. In other words, I fear that hanging the exchange rate mill-stone round the WTO's neck would destroy the whole edifice.

If we cannot give the exchange rate mandate to the WTO, what should we do? Here is not the place for a macro-economic plan, but basically we need to rely on patience and non-coercive discussions and analysis which will eventually lead the Chinese to undertake the adjustments we need in their own interests. The next few years may well be disappointing economically but we should not be panicked into destroying an institution that does its limited job reasonably well.

Export Restrictions

Finally let me highlight one other area in which the integration of China and some other emerging markets threatens the fabric of the world trading system – the growing tendency to restrict exports. Within the mercantilist mind set, which conditions the structure of the WTO, such behaviour is almost inconceivable and as a result it is treated only very lightly within WTO. But refusing to sell is every bit as much a threat to the trading system as

refusing to buy, and so if export restrictions are becoming more frequent, we have a potential problem.

Export restrictions have been imposed in the past for various combinations of five broad sets of overlapping reasons: as political sanctions, to raise tax revenues via export taxes, to raise prices abroad (the exploitation of market power), to reduce prices at home either to stabilise prices for consumers in times of shortage (food) or to improve the competitiveness of domestic users of raw materials, and to curtail output, e.g. for environmental reasons. The current threat is basically driven by a combination of the third and fourth of these – to manipulate relative prices.

The use of export restrictions to keep domestic prices for consumers down became quite widespread during the food price hike of 2005-08, but as is well understood such behaviour typically increases prices for everyone else. Sharma (2011) states that 31 out of 105 countries covered in an FAO survey imposed food export restrictions between 2007 and 2010 and Anderson and Martin (2011) estimate that 45 percent of the increase in world rice prices in2006-08, and 30 percent of the increase in world wheat prices, was due to insulating behaviour, which included export restrictions and the relaxation of import restrictions. The immediate distributional effects of these restrictions are clear enough, but more worrying for the long term is what the possibility of such behaviour does to the case for relying on international markets for critical products. If the cost of adjustment to supply (or demand) shocks is to be borne solely by food importers, the price volatility which their citizens face will be great, and many governments will be tempted to forego the benefits of the international division of labour in order to avoid accusations of putting their citizens at risk of food shortages. That is, by refusing to sell, exporters are in danger of destroying their markets in the long run, to the cost of both exporters and importers.

Similar issues are starting arise in the case of industrial materials. In fact every past GATT/WTO dispute concerning export restrictions has revolved around reducing the price of an input to downstream producers and so enhancing their competitiveness unfairly (a mercantilist argument). And, at least in some cases, there has been a sub-theme that the policy involved has increased prices abroad. China has now been involved in two such cases – a dispute brought in 2009 over export taxes and quantitative restrictions on exports of bauxite, coke, fluorspar, magnesium, manganese, phosphate(yellow phosphorus), silicon (metal and carbide), and zinc, and one brought in 2012 on exports of so-called rare earths, tungsten and molybdenum. The former has concluded with a ruling rejecting just about every argument put forth by the Chinese. In particular it rejected claims that restrictions were necessary in order to prevent environmental damage and to preserve resources, both of which are recognised under GATT Article XX as reasons to exempt countries from the ban on quantitative restrictions(paragraphs (b) and (g) respectively). The problem for the Chinese in making that case was that domestic use of the minerals in question was increased at the same time as exports were curtailed[11].

[11]Karapinar (2011) offers a good discussion of this case.

The rare earths case, which is in an earlier stage, is probably less black and white, but it is simultaneously more sensitive. Rare earths are nearly essential to several new technologies – especially 'green' ones such as wind turbines, electric and hybrid vehicles, and device display screens. China, while having about 30-35% of world reserves in rare earths, accounts for 90-95% of actual production. Thus the exploitation of market power seems a potential issue. The world prices of rare earths tripled over 2007 to mid-2011, while export restrictions appear to have been tightened, although they have fallen since. Most products use only small amounts of rare earth and so a price hike is manageable, but users have become nervous that export restrictions might lead to severe supply disruptions outside China and have, in several cases, relocated their rare-earth-using operations into China. Worries about losing the supposed technological spill-overs generated by such activities to China have prompted great concern in the west. China, for its part, has a somewhat stronger environmental case than previously, because rare earth mining and treatment has been quite damaging in the past and there have been some efforts to manage the industry in a more environmentally friendly way. However, it will still need to show that its environmental goals cannot be achieved more efficiently (e.g. by better management of pollution or by cleaning up past pollution).

Export restrictions are a particular challenge to WTO because there are virtually no restraints on export taxes provided that they are not so high as to constitute export bans and even the restraints on quantitative controls allow for environmental exceptions, which might weaken them. For China an added sensitivity is that China's Protocol of Accession *does* restrain the use of export taxes which causes some resentment. Whether this will result in the Chinese using export restraints aggressively or be the starting point for a negotiation in which restraint is agreed for other members I do not know, but the former outcome would represent a major challenge. China and other emerging economies have benefited enormously from the liberal trading order and if they undermined it by refusing to sell what others consider to be critical products, resentment at their 'not playing the game' will be great.

Conclusion

China's economic rise has been faster and larger than we have ever seen before or could even have dreamt of three decades ago. The benefits in terms of increased global output are large: to the extent that these are manifest in rising commodity prices, they are shared with some of the poorest countries in the world; to the extent that they have driven down consumer prices for simple products they have been shared with poor consumers in other countries; and the flow of cheaper inputs has encouraged the profits and growth of firms in many countries. Adjustment to such a shock is inevitably painful at times and in places, and we can identify a number of such instances – some of which may pertain in Pakistan. Hence the successful integration of China requires some willingness to help the affected parties cope with their adjustment stresses and some patience because doing so will take some time. The important thing is to keep calm – not to let the strains of adjustment to China's success spill over into negative over-reactions. There is much at stake in several dimensions, but I have argued that

preserving the world trading system – which has played a key role in China's rise as well as in other countries' prosperity – deserves special care.

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