

## Food Price Transmission in South Asia

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The current food price surge is raising the spectre of a renewed and possible even more ferocious global food crisis, with significant increases in food insecurity in the poorest countries. But this time, there are some dissenting voices, including those who argue that possibly the earlier recent bout of food price increases (which occurred over 2006-08) did not have as bad an impact on hunger and undernutrition as was earlier believed. Indeed, it is being argued by some that in fact the extent of hunger in the developing world may actually have come down significantly even during that period of dramatic food price increase.

Most estimates of increasing hunger are based on simulation exercises that take note of global food price increases and assume that these will lead to domestic increases in food price which will in turn affect food consumption, especially of poorer families. Against this, it is argued that such exercises do not take account of increasing money incomes and people's choices about what to consume.

A recent paper by Derek Headey ("Was the global food crisis really a crisis? Simulations versus self-reporting", IFPRI Working Paper No 1087, 2011, available at <http://www.ifpri.org/publication/was-global-food-crisis-really-crisis>) argues that global self-reported food insecurity fell from 2005 to 2008, with the number ranging anywhere between 60 million to 250 million. This is based on calculations using a Gallup World Poll of self-reported food insecurity. According to Headey, "These results are clearly driven by rapid economic growth and very limited food price inflation in the world's most populous countries, particularly China and India." This idea has also been taken up by others such as Dani Rodrik.

Of course, there are significant problems with using self-reporting of hunger at the best of times. The Gallup Poll asks the question: "Have you or your family had any trouble affording sufficient food in the last 12 months?" The percentage of respondents who answer yes to this question is taken as a measure of national food insecurity.

It is worth looking carefully at the Gallup Poll methodology before we decide to jump to hard conclusions, though. The Gallup report on its food security survey notes that it is based on telephone and face-to-face interviews conducted throughout 2005, 2006, 2007, and 2008, with randomly selected sample sizes (typically around 1,000 residents) in 134 countries – so a total of less than 140,000 people across the world, and only 1000 respondents even in huge countries like India. The distribution of the samples across urban and rural locations or by income category is not clear at all, nor is the proportion that was

contacted by telephone. This is not exactly a solid basis on which to draw major conclusions on the extent of global hunger.

The Gallup Poll people themselves do not seem to think they can make intertemporal comparisons based on these data: their own conclusion is that “even before the crisis, affording food was a challenge for many”. Basing a major conclusion on this rather weak “self-perception” data, as Headey does, is really not justifiable.

Of course, Headey is quite right to point out that there may be differences in the impact of global food prices upon consumers in developing countries, depending on the extent to which such prices are transmitted to domestic retail food prices, as well as the opportunities of earning incomes that allow more expensive food to be purchased. It is certainly also the case that the negative effect of food prices can be mitigated by other factors and policies such as employment schemes, subsidised food distribution and so on.

Even so, it is indisputable that the main mechanism through which higher global food prices affect people remains domestic food prices. Here, the bad news is that the international transmission of increases in food prices has generally been rapid (and is getting faster and more complete) while the downward movements have not been transmitted so much.

What may be even more significant is that even in India, which is taken (along with China) by Headey and others to be a major part of the explanation of the supposedly surprising result about reduced food insecurity, food prices have risen sharply over the past few years. The more disturbing feature is that domestic prices have increased along with international prices, but there has been little transmission of downward price trends, indicating some kind of ratchet effect in domestic prices.

These tendencies are evident from a consideration of South Asian countries. The accompanying charts are all based on data from the FAO GIEWS (Global Information and Early Warning System) online database. Chart 1 provides information on wheat prices in global trade as well as retail prices of wheat flour in domestic markets of four South Asian countries, all in US \$ per kg.

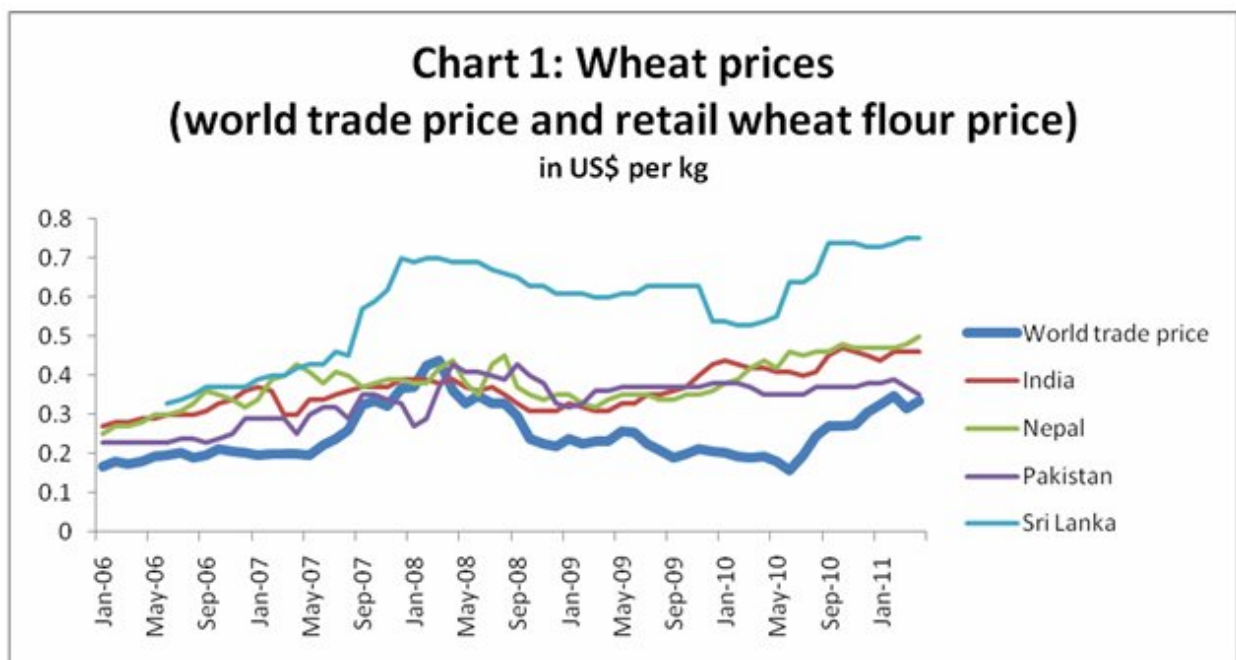
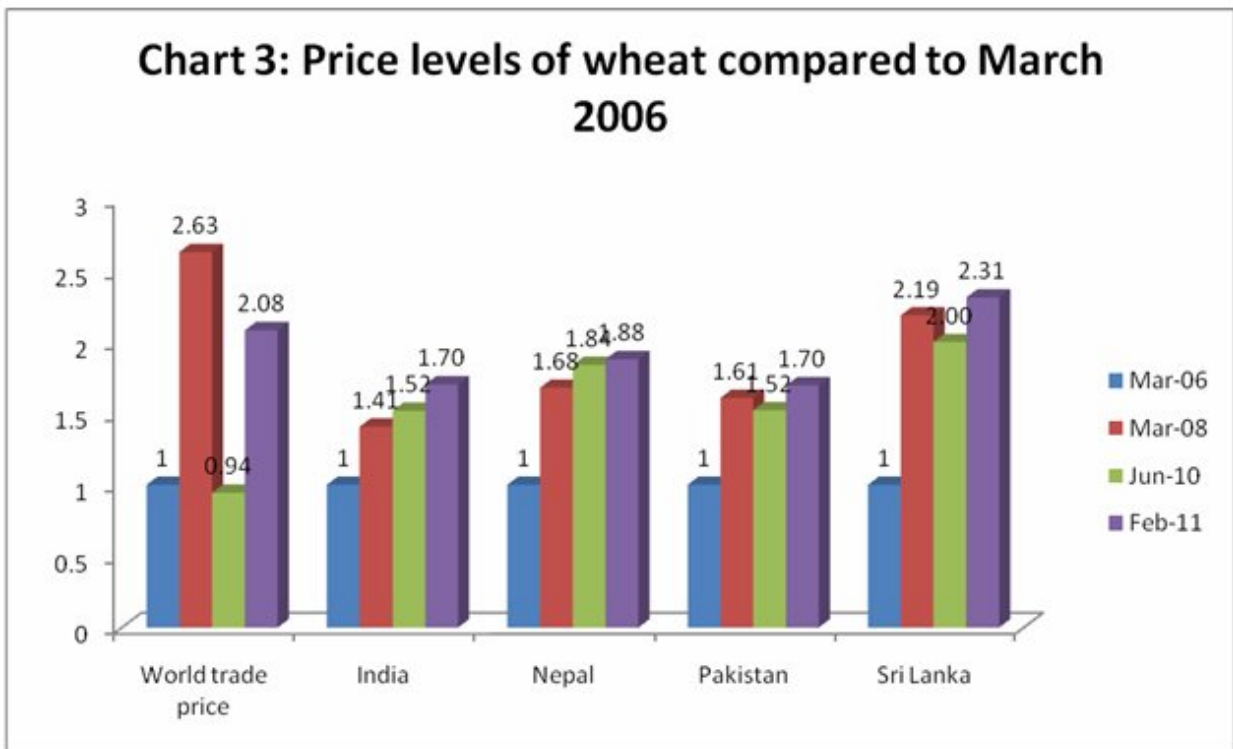
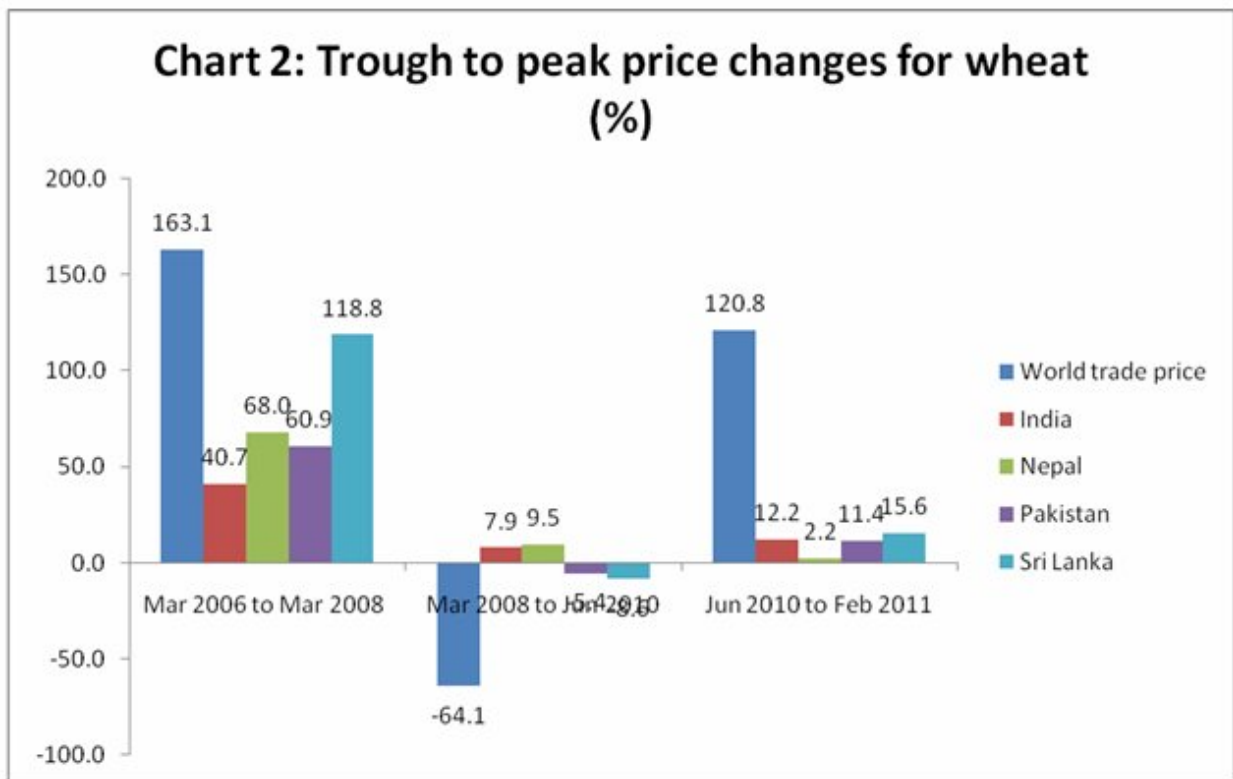


Chart 2 elaborates on the evidence in Chart 1 by noting the extent of trough to peak and peak to trough changes in wheat/wheat flour prices, both internationally and in these domestic markets. The dramatic price increase in global wheat prices, more than doubling, was met by sharp price increases also in South Asian countries. The increase in prices was indeed lowest in India, which has a greater degree of self-sufficiency, but even in India wheat flour prices rose by 40 per cent over the first period of price rise between March 2006 and June 2008. This is a very significant increase in a country where around 95 per cent of workers' incomes are not indexed to inflation.

Further, when global wheat prices fell, domestic retail wheat flour prices continued to increase in India and Nepal, and fell only marginally in Pakistan and Sri Lanka. So the force of downward international price transmission is much weaker if not non-existent.

The implication comes out even more sharply from Chart 3, which show the change in price levels for wheat compared to March 2006. By June 2010, wheat prices in global trade were down to *lower* than the level of March 2006, despite having increased so dramatically in between. But in all the South Asian countries considered here, prices in June 2010 were still significantly higher than they had been in March 2006. And of course, they continued to rise in the subsequent period, when global prices also rose once again.



However, the recent very sharp rise in global wheat prices, since June 2010, has clearly not yet filtered into changes in retail prices in South Asia. To some extent this may be because good *rabi* harvests in the region have ensured that domestic supplies are adequate.

However, the impact of expectations – and the associated role of financial players – is now growing even in these markets, especially in India where wheat futures markets have been allowed to function once again. Therefore it is likely that the near future will once again see some further international price transmission even in these markets.

Similar patterns are evident in rice, even though this is a grain which has a relatively small and shallow global trade market (for example, India's annual rice output is more than six times total world trade in volume terms).

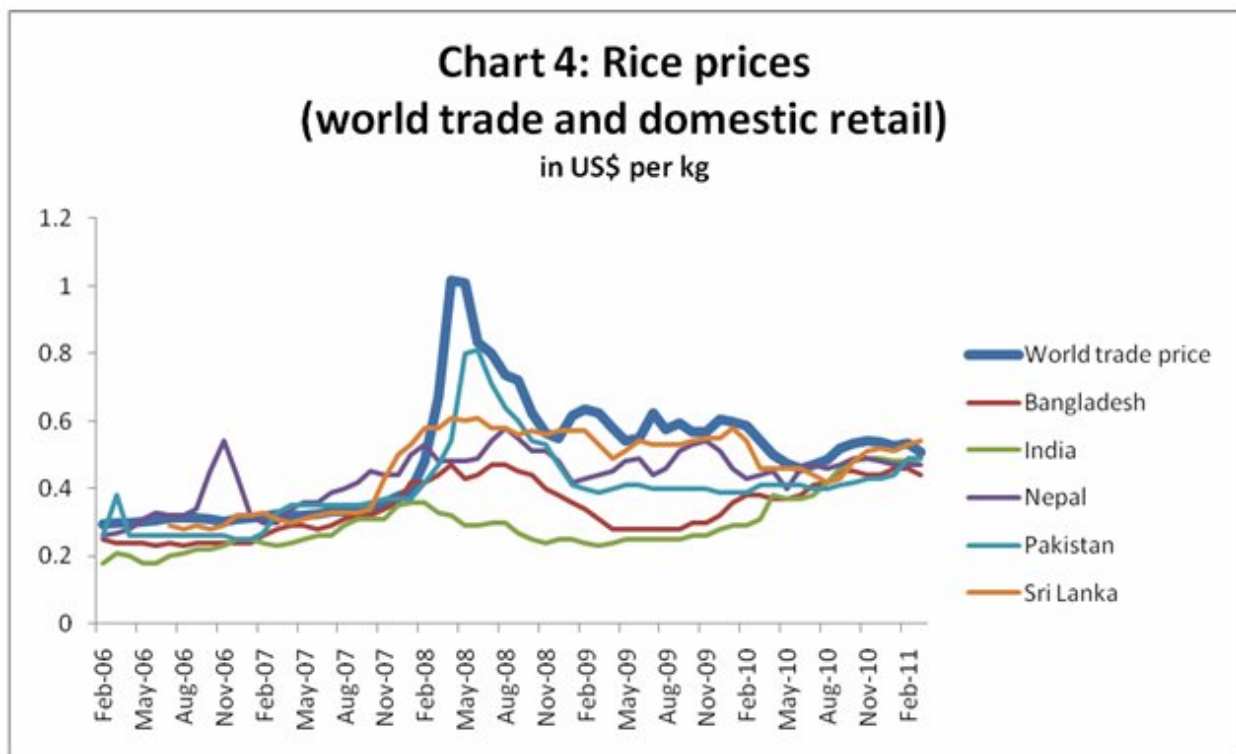
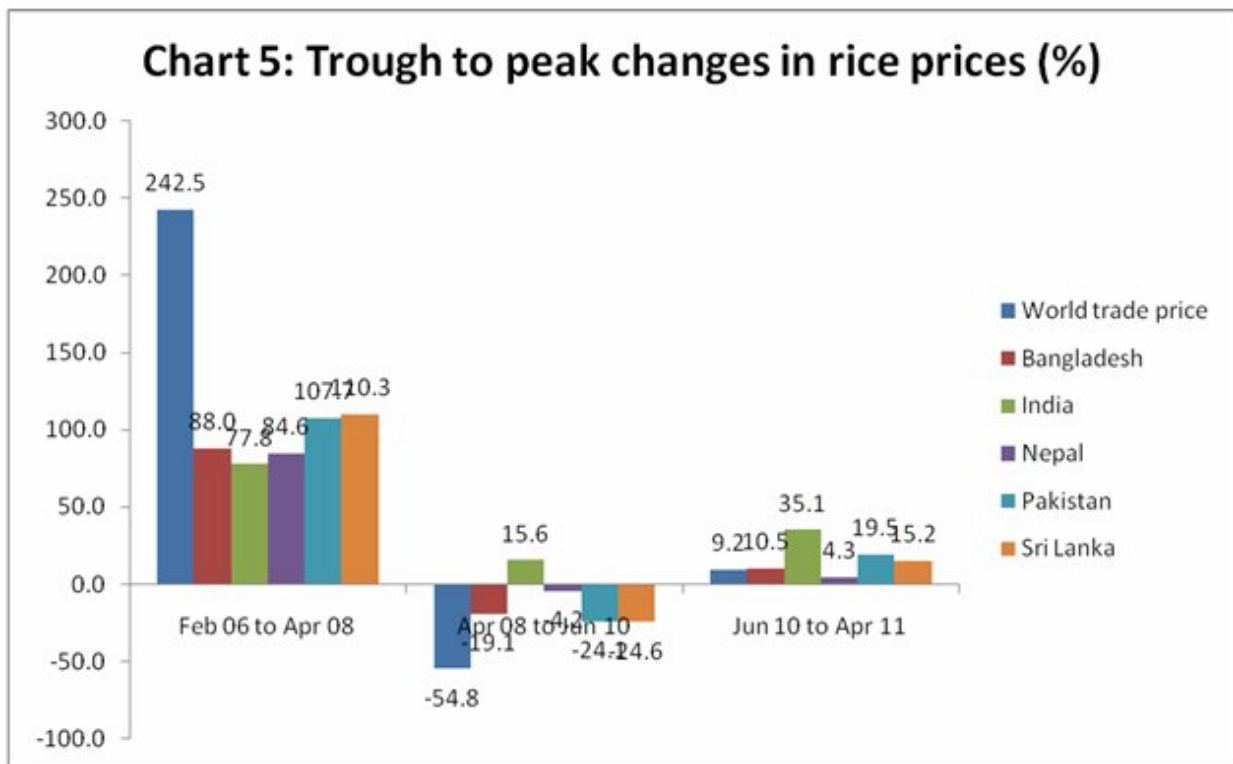


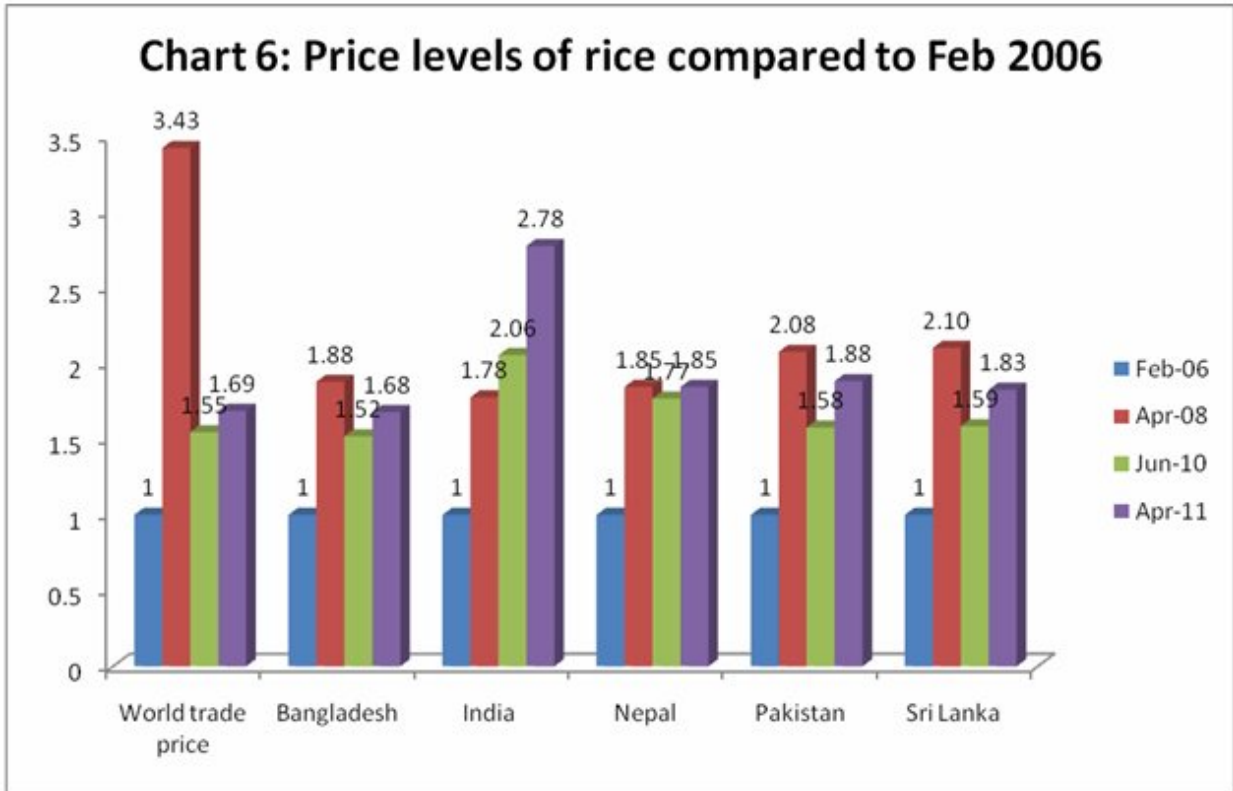
Chart 4 shows the monthly behaviour of rice export prices as well as domestic retail prices of rice in five South Asian countries. The transmission of rising global rice prices appears to be especially acute in Pakistan and Sri Lanka, both of which import rice to the extent of around one-third of domestic consumption. But in the case of these countries, as Chart 5 shows, the downward transmission of falling prices also occurred to some extent – although once again to a lesser extent. It is worth noting that in India retail prices of rice kept rising through all phases, and indeed in the most recent phase have risen faster than global prices.



As a result, as evident from Chart 6, Indian rice prices are now nearly three times higher than they were in February 2006, even though global rice prices are now only 69 per cent higher. In fact, other than Bangladesh, the current level of rice prices is higher in all the South Asian countries than in February 2006, in comparison to world prices.

So domestic factors clearly do play a role in the international transmission of food grain prices, especially at the retail level. However, this analysis also shows that global prices do put upward pressure on domestic prices when they are rising, even though downward movements are less rapidly or effectively transmitted and often do not have any such impact.

This clearly calls for more detailed investigation into the factors operating at different levels in various countries, and particularly the policy mix that will enable countries with large hungry populations to withstand the current global volatility in food prices.



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