

Some policy implications of movements in commodity prices

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1. Introduction

Since 2003, there has been a sharp rise in commodity prices with record highs in real terms being registered in many instances. In addition, the price boom has been broad-based and spread across metals, energy and agricultural commodities. For example, the real prices of energy and metals doubled over the past five years, while the real prices of food commodities have increased by over 75 per cent in recent years (World Bank, 2008).¹

In the main, the rapid rise in prices has been primarily driven by sharp rises in demand as a result of strong global growth. Some attention has also been given to the role of speculative influences on commodity price developments. On the one hand, Krugman (2008) and the International Monetary Fund (IMF) (2006) find little evidence of speculative influences on commodity prices. Calvo (2008), on the other hand, argues that portfolio shifts by investors – partly triggered by lax monetary policy – have increased the demand and hence price of commodities. In essence, according to Calvo, there has been a move away from highly liquid low return assets to investments in commodities, which in general are more risky in nature. This has been borne out in the recent rapid decline in commodity prices as a result of the slowdown in the world economy.

The next section provides a brief analysis of commodity prices as economic indicators. A short review of South African commodity price movements and production volumes is undertaken in section 3. Some policy implications of the movements in commodity prices are highlighted in section 4. The last section concludes.

2. Usefulness of commodity prices as economic indicators

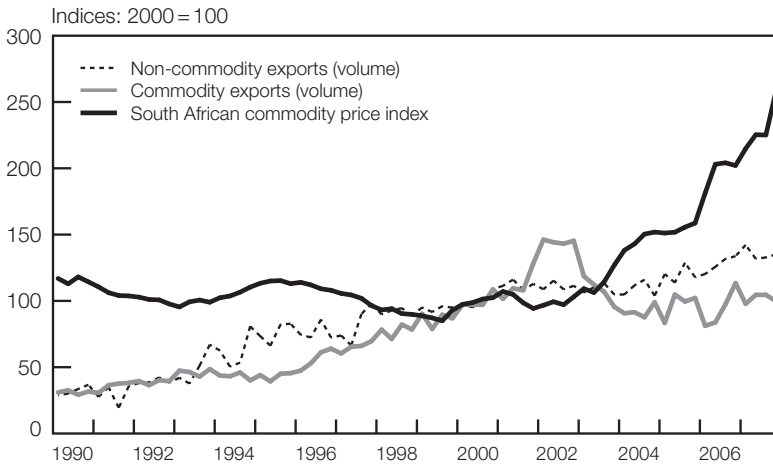
Commodity prices are considered useful economic indicators since they possess some leading indicator properties. For example, they can provide a useful indication of likely future price or cost pressures in the economy. In addition, commodity price movements provide a good indication of the nature of shocks facing an economy; since commodity prices are determined on the international market, commodity price shocks are considered to be exogenous in nature. Probably the biggest benefit of commodity prices is that they are readily available with little

controversy surrounding their measurement in practice. It is therefore not surprising that commodity prices play an important role in policy formulation as is evident by, for example, a mention in almost all monetary policy statements over the past year or so.

3. South African commodity price movements and production volumes

Figure 1 captures the movements in South Africa's commodity price index and export volumes.²

Figure 1: South African commodity export prices and volumes



Source: South African Reserve Bank

South African export prices increased by over 150 per cent between 2000 and 2007. It is, however, interesting to note that commodity export volumes, in general, remained fairly stagnant, while non-commodity export volumes increased by around 35 per cent over this period. There are two points worth noting in this regard. First, the fact that export volumes have not increased may be rational in the sense that the rise in prices may have facilitated higher marginal-cost mining production, which would otherwise not have been possible. Second, while the stagnation in production volumes may be justified on economic grounds, there is little doubt that the recent decline in commodity prices (coupled with the announcement by some of the major mining houses of a cut in mining production) would have an adverse impact on South Africa's growth prospects.

4. Commodity price: Some policy implications

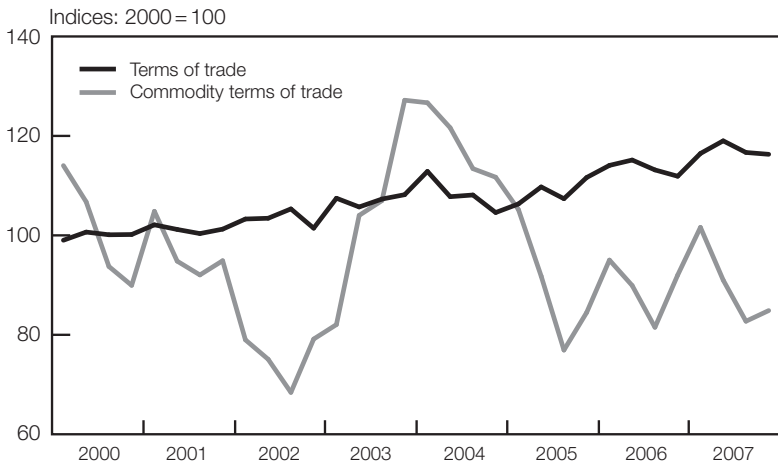
The policy implications of commodity price movements depend on whether a country is a net commodity exporter or importer. In the case of a net importer, commodity price rises serve as tax, while the impact is expansionary in the case of a net exporter.³

4.1 Commodity price rises and terms-of-trade effects

In the case of net commodity exporters, there is a positive terms-of-trade shock that stimulates economic growth, real income, employment, and so on.⁴ However, in the case of South Africa, the positive benefits from rising commodity export prices have been offset by rising oil prices.

As is depicted in Figure 2, South Africa's terms of trade increased by 20 per cent between 2000 and 2007. However, the commodity terms of trade have been very volatile.⁵ In fact, the commodity terms of trade have been below the 2003 level for most of the period between 2000 and 2007.

Figure 2: Terms of trade and commodity terms of trade – South Africa



Source: South African Reserve Bank

4.2 Commodity prices and inflation

As far as inflation is concerned, the positive income effect from increases in the terms of trade, coupled with rising oil prices, adds to inflationary pressures. In addition, the distributional impacts of movements in prices

differ across the commodity groups. For example, oil and food price movements have a larger and more direct impact on the welfare of the poor, since they have a higher weight in the consumer price index. However, it is also important to note that there will also be a positive impact on welfare by virtue of the employment of a large number of workers in mining.

4.3 Commodity prices and the exchange rate

Like the other commodity-producing countries, South Africa has a floating exchange rate. One of the 'stylised facts' emanating from empirical work on commodity country currencies is the influence of commodity prices on movements in the real exchange rate. However, other factors such as investor perceptions about economic policy also have a bearing on exchange rate movements. South African policy-makers have chosen not to intervene in the foreign-exchange market, but have opted to rely on the commitment to macroeconomic fundamentals as a means of securing the best outcomes. While the South African currency has been volatile, the evidence seems to support the authority's stance of not intervening in the foreign-exchange market.⁶

4.4 Commodity prices and relative price effect

The recent commodity price boom has resulted in significant relative price changes across the globe. The relative price shift of food and energy has been particularly evident in emerging and developing countries. In the case of South Africa, the domestic price movements have been magnified by exchange rate movements.

How should the economy adjust to a change in relative prices? Theory suggests that if the change is temporary, policy should accommodate the relative price shift, that is, there is no need for structural changes in the economy. Conversely, if the change is permanent, then macroeconomic policy in general should facilitate or accommodate a structural change in the economy. However, in practice, it is extremely difficult to determine if the change is temporary or permanent.

Price signals in well-functioning markets should facilitate the optimal resource location effects. The question then is: to what extent have the commodity price movements South Africa has experienced been the outcome of well-functioning markets? In some regard, within an inflation-targeting regime, the problem could be reduced to one of accommodating relative price changes as long as long-term inflationary expectations are well anchored. In other words, the main monetary policy challenge is to prevent second-round price effects from taking hold.

5. Conclusion

There is little doubt that commodity price movements have had an important bearing on economic growth and inflation trends in South Africa. The recent decline in world economic activity has resulted in a significant decline in commodity prices. Commodity prices are likely to remain at subdued levels in the foreseeable future, given the recession in many of the advanced economies and projected slowdown in economic growth in developing countries. Against this background, declining economic growth and inflation rates will be firmly entrenched on the radar screens of South African policy-makers in the immediate future.

Notes

¹ In part, the rise in food prices has been caused by a diversion of agricultural commodities towards biofuel production.

² The index is a weighted average of South Africa's agricultural and mining exports.

³ However, it is important to bear in mind that the impact of an import commodity (e.g. oil) may have important implications for a non-oil commodity exporter such as South Africa (see Figure 3).

⁴ In order to prevent overheating in the economy, many commodity-producing countries have established stabilisation funds.

⁵ 'Commodity terms of trade' is defined as the commodity export price deflated by the oil price, both in rand terms.

⁶ While the South African exchange rate has been volatile, it has in general not been much more volatile than other emerging economies.

References

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