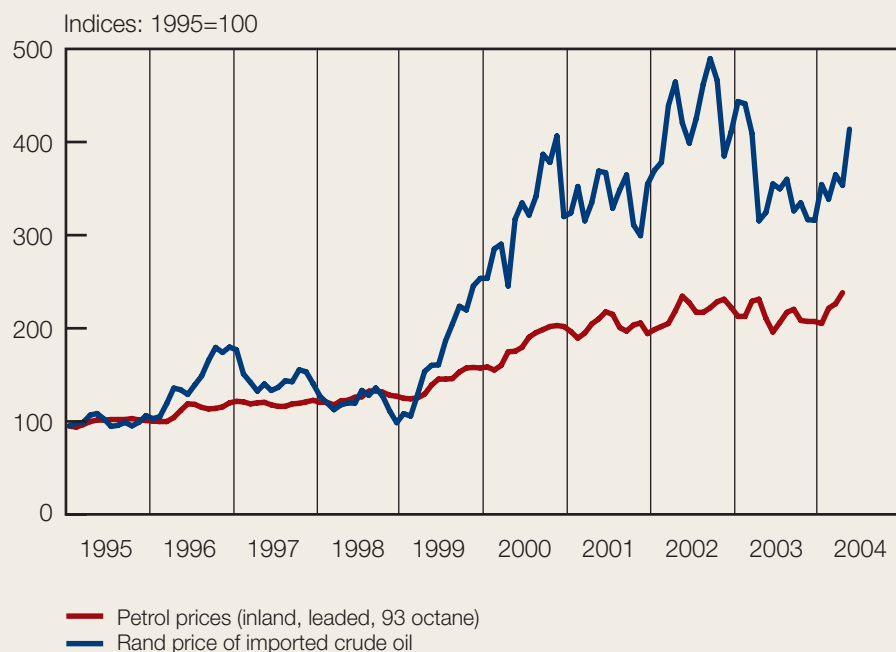


The effect of changes in international crude oil prices on the domestic price of petrol and diesel

Changes in international crude oil prices influence the domestic consumer prices of petrol and diesel. The changes in consumer prices of petrol and diesel are, however, not proportionate to the changes in international crude oil prices, as indirect taxes and distribution margins drive a wedge between the price of crude petroleum and the pump price of petrol and diesel. All the taxes and distribution margins levied on petrol and diesel are specified as fixed amounts that do not change in accordance with the changes in the international crude oil price. The higher these taxes and margins as a ratio of the final price of petrol and diesel, the smaller will be the percentage increase in the petrol and diesel price for a given increase in the international oil price. In June 2004, indirect taxes accounted for roughly 33 per cent of the retail price of a litre of petrol. When the wholesale and retail margins are added, roughly 50 per cent of the retail price of a litre of petrol is insulated from direct changes in crude oil prices.

The calculation of domestic fuel prices is based on what is termed the “basic fuel price” (BFP) mechanism. The *international component* of domestic fuel prices is based on the import parity principle and is meant to subject local refineries to the same levels of efficiency as those of their international counterparts. The BFP is an import-parity pricing formula based exclusively on spot (cash) prices reported daily by international fuel price reporting agencies. The basic price of *petrol* is based on the *average* of Platt’s (a price reporting agency’s) spot price assessment in the Mediterranean refining area and of Platt’s spot price assessment in Singapore. The basic price of *diesel* and *illuminating paraffin* is, however, based on the *average* of Platt’s spot price assessment in the Arab Gulf and of Platt’s spot price assessment in the Mediterranean refining area. The domestic component of the BFP formula includes freight cost, wharfage, ocean loss and insurance costs. In addition, certain costs such as demurrage, coastal storage and stock financing to cover the cost of providing storage and handling are also included in the formula.

Crude oil and domestic petrol prices



The *domestic price* of petrol includes a fuel tax, wholesale and retail margins, zone differentials, delivery costs, road accident fund levy, slate levy, equalisation fund levy and customs and excise duties. As it would be cumbersome to adjust pump prices daily, the average price ruling during a preceding month is used as the price for the following month, with the actual price change taking place on the first Wednesday of each month.

As indicated in the accompanying graph, changes in the prices of crude oil are substantially more volatile than those in the domestic prices of petrol and diesel due to the insulating effect of indirect taxes and other margins which do not change in tandem with oil prices. In fact, during the period January 1996 to April 2004, the average month-to-month rate of *change* in the rand price of crude oil amounted to 7,4 per cent, while the domestic price of petrol changed by only 2,6 per cent. The volatility in the retail price of petrol was therefore only about a third of that of the price of crude oil. Stated differently, if the rand price of crude oil should increase by 10 per cent, the price of petrol and diesel can be expected to increase by around 3,5 per cent. The administered component of the price of petrol and diesel therefore has a stabilising effect on the magnitude of petrol and diesel price changes, even though it raises the absolute level thereof.

Given the typical relationship between crude oil prices and ex-refinery prices of petrol and diesel, an increase of US\$10 per barrel in crude oil prices can be expected to raise liquid fuel prices by approximately 60 South African cents per litre. From current levels in June 2004, this would be an increase of roughly 13 per cent. Given the 5,08 per cent weight of petrol in the CPIX basket, it would therefore *directly* add some 0,7 per cent to the level of CPIX through the consumer's own expenditure on liquid fuels. However, indirect effects are likely to be equally important.

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