

EXPLOIT FALLING MARKETS – a contribution to the debate on fuel pricing mechanisms

By Armin Wagner, GTZ

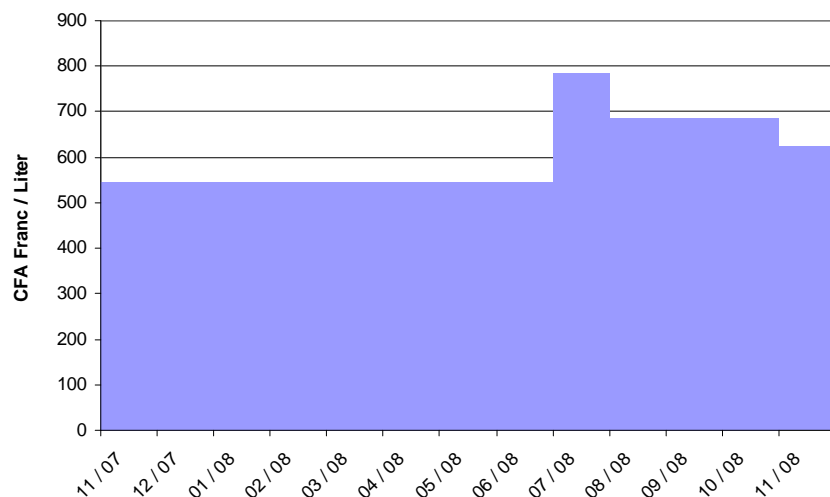
The current phase of sharply declining crude oil and petroleum product prices offers an opportunity for a critical investigation of the absolute level of pump prices for fuel and the nature and manner of adjustment of the price level. This includes the opportunity to move from ad hoc pricing towards formula-based automatic pricing at relatively low political cost. The same applies to the elimination of direct and indirect subsidies which should continue in parallel, and to the imposition of (possibly earmarked) tax on fuel. The following discussion paper provides an overview of forms of fuel pricing in the transport sector.



Globally, three basic forms of fuel pricing are apparent: **ad hoc pricing**, formula-based **automatic price adjustment**, and **liberalised markets**.

Ad hoc pricing is when prices are set at irregular (mostly long) intervals, and components of prices and adjustments are not (fully) public information. In states with ad hoc pricing (including Egypt, Algeria, Indonesia, Bangladesh, PR China, Côte d'Ivoire), fuel pricing is generally highly politicised, i.e. price adjustment decisions are made with at least the involvement of political structures, up to the highest levels. Long-term price setting is politically attractive, and even acceptable in budgetary terms (so long as the purchase price is covered) in times of relative calm on the commodities markets, (or domestic oil resource and refinery capacities). This political appeal increases if international purchase prices rise, as domestic consumers can be protected against the rigours of world markets – although at the price of increasing impact on the budget as soon as the purchase price rises above domestic sales prices. There is a budgetary impact if the government or subordinate institutions fail to pass on increased prices on international markets to national consumers, and the resulting difference has to be met from general funds or the state budget. Considered in terms of resource efficiency, ad hoc pricing is counterproductive, as it prevents adjustment of use to higher prices in the long term.

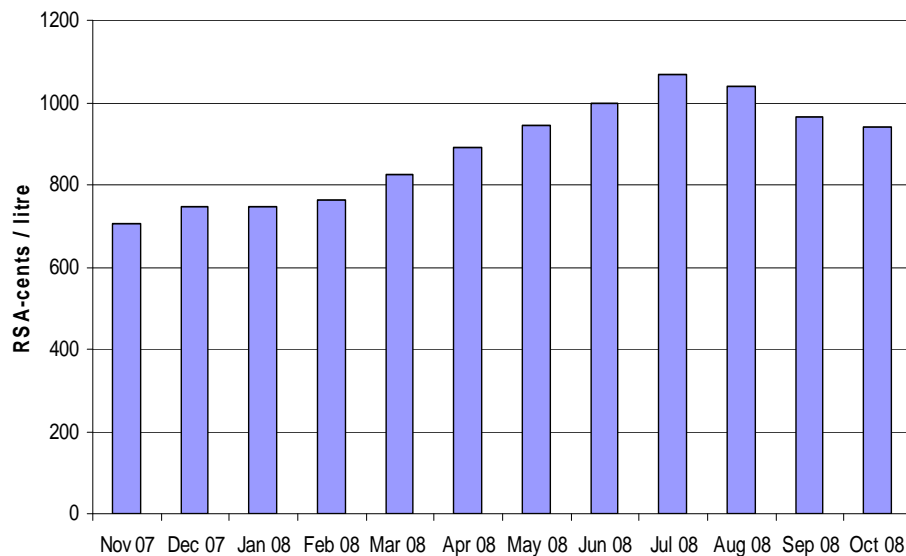
*Ad hoc pricing:
the Côte d'Ivoire
(diesel price);
Source: Irinnews*



Price adjustments inevitable in the face of lasting price increases can – as international examples show – amount to 30-50%, and involve considerable political cost, particularly in situations where the population is not accustomed to price changes. The example of the Côte d'Ivoire shows that price increases (in June 2008) of 44% for diesel and 29% for petrol quickly lead to public expressions of discontent (street blockades, closures) and a (partial) retreat from increases (two weeks after their announcement) involves political costs and budgetary effects (increase in the transport allowance for civil servants, shortfalls in revenue). The budgetary implications of delayed price increases can be considerable: the delay in fuel price adjustments between January and July 2008 cost the Ethiopian government around USD 200 million¹. Extreme examples of ad hoc pricing are countries with prices which have not been changed for years, such as many states in the Gulf – where the focus is less on the political and budgetary issues than on the long-term effects of lower energy prices on resource utilisation efficiency.

The sharp price hikes in recent months have led in some developing and emerging nations (including Vietnam and Malaysia) to a reorientation towards **automatic price adjustments** based on predetermined formulae and at defined intervals. The components of the price, the factors underlying the price increase and the adjustment intervals are all generally set by statute, and a state institution or panel of experts is assigned to monitor prevailing regulations.

Automatic price adjustments – the example of South Africa (95 octane petrol, Gauteng Province), Source: www.sasol.com



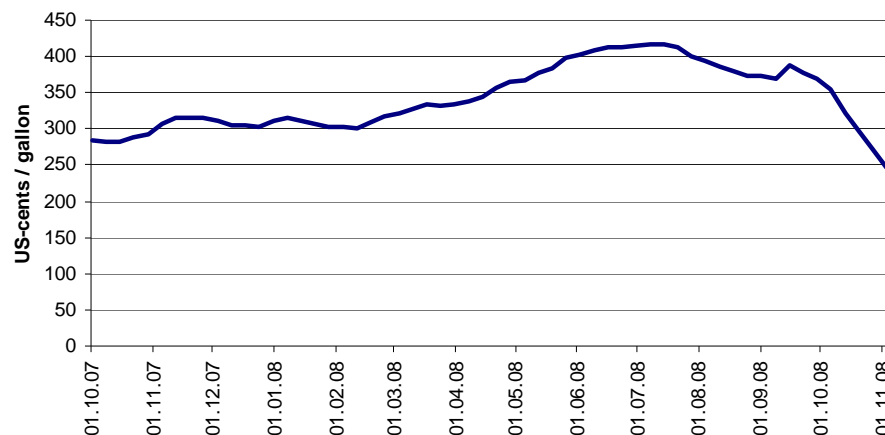
The size and frequency of price adjustments are largely depoliticised here, and are verifiable by all due to the rational basis for decisions. Price adjustments are generally moderate. Even so, where prices generally are rising, noticeable public resistance cannot be excluded even here – up to the point of temporary suspension of the adjustment mechanism (cf. Mozambique), so that this concept also requires active measures to reduce social hardship. In the case of falling markets, a switch to pricing formulae and particularly the introduction or consolidation of adjustment steps are politically entirely sensible. In the case of Malaysia, for example, a transition from monthly to fortnightly (or even weekly) intervals is currently under discussion. The graph for South Africa shows that the price formula is doing a good job in tracking current price declines.

¹ Source: RAPID ASSESSMENT: Impact of Rising Energy Prices on the Ethiopian Economy (Draft Report for GTZ)

Besides de-politicisation based on greater rationality of price adjustment, price formulae can help minimise budgetary impacts. Price rises are passed on relatively quickly – although price formulae can also be defined so that price changes are only implemented after increases or decreases exceed certain thresholds. The transparency of the price adjustment process allows consumers to modify their energy and transport use patterns in an ongoing way, in terms of form, efficiency and frequency.

A third variant comprises **liberalised pricing systems** where the state's role is reduced to setting taxes and excise duties. The price to the consumer emerges from the free interplay between the companies involved. Examples include most OECD states, plus, among others, Kenya, Uganda and the Philippines. A prerequisite for this is an adequate number of suppliers (to ensure competition), reliable market supervision in the form of a cartel or pricing authority, and the existence of a correspondingly critical public. As the first criterion in particular is not really satisfied in many states, this form of price adjustment is only evident to a limited extent in developing and emerging nations. The potential of liberalised systems lies in the high degree of depoliticisation of prices and the elimination of direct budgetary impacts.

The USA as an example of liberalised systems – changes in average petrol price; Source: USA – Energy Information Administration



Regardless of the question of price adjustment, the basic requirements for pricing still apply, such as real pricing (i.e. covering purchase costs), a contribution to road maintenance and (at least partial) reflection of external costs (resulting from accidents, emissions etc).

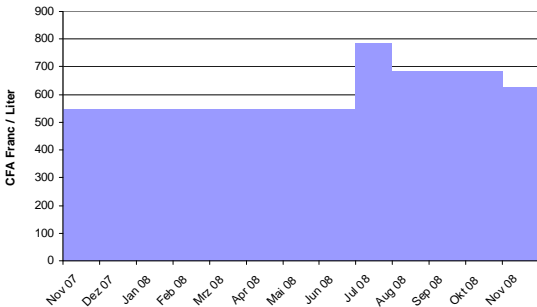
The international discussion of pricing and adjustment mechanisms is significantly hampered by a lack of freely available data and information. Acting on behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ), GTZ will carry out its next fuel prices survey in November 2008 as a contribution towards increasing the transparency of fuel pricing worldwide. Further information is available at www.gtz.de/fuelprices.

Sources:

- GTZ: "International Fuel Prices 2007" – www.gtz.de/fuelprices
- IMF: Domestic Petroleum Price Smoothing, by Federico, Bingham, Daniel, Washington 2001
- IMF: Domestic Petroleum Product Prices and Subsidies: Recent Developments and Reform Strategies, by Taimur Baig, Amine Mati, David Coady, and Joseph Ntamatungiro, Washington 2007

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Ad-hoc pricing is usually associated with delayed and/or partial pass-through

Political costs

Low

High

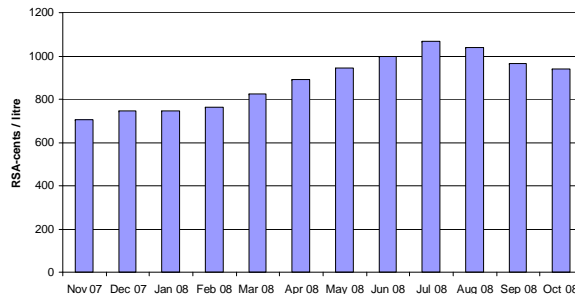
Political interference

High

Fiscal implications

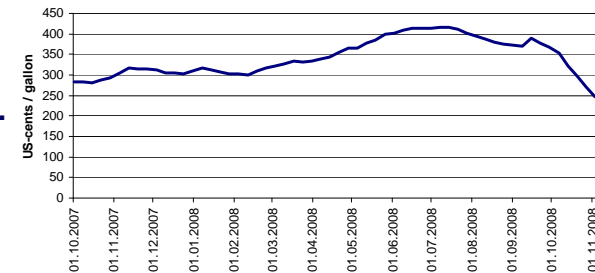
High

vs.



Automatic formulae are usually associated with delayed but in long-term full pass-through

vs.



Liberalized concepts provide full pass through with minor delays

Temporary price shocks

High

Permanent price shocks

Low

High

Low

Permanent price shocks

Low

→ In face of a permanent price shock, the transition from ad-hoc pricing to automatic mechanisms is politically very costly as huge steps are needed to adjust to international price levels as well as previously accumulated fiscal burdens are substantial

→ Decreasing oil prices offer an unique opportunity to move from ad-hoc pricing to automatic mechanisms