Price risk management in an environment of high and volatile prices

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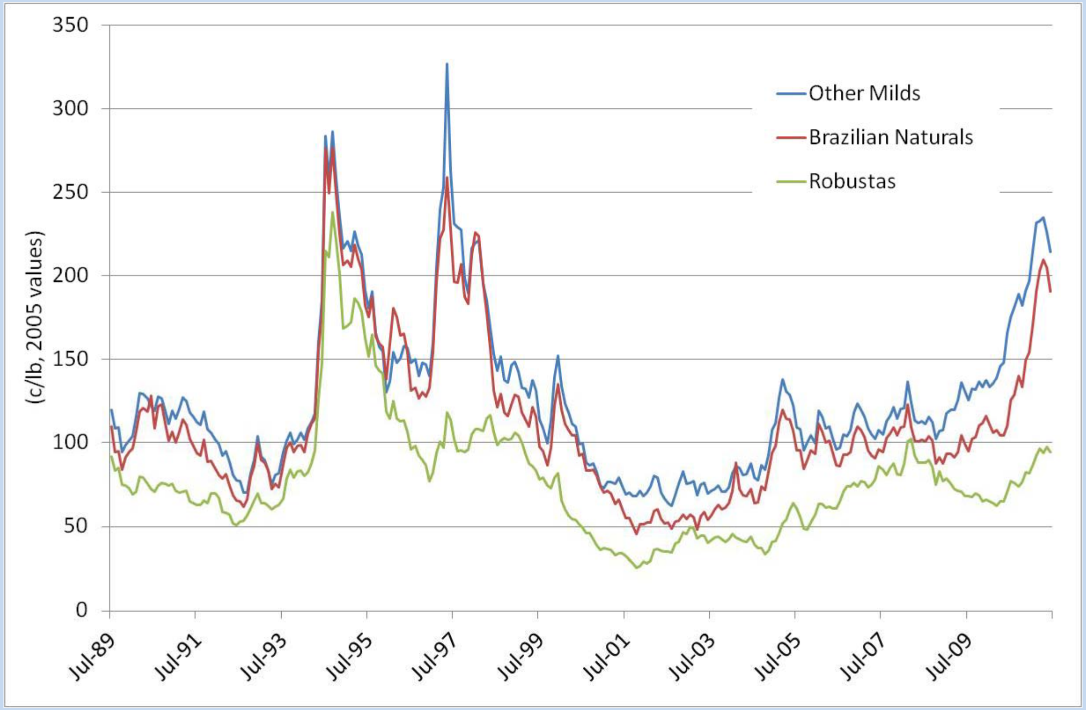
Background - prices

Real prices have risen strongly over the past decade and are now three times their "Coffee Crisis" levels.

Nevertheless, coffee prices are not exceptionally high – in real terms, Arabica prices are around 75% of their 1995 peak levels; real Robusta prices are 40% of 1995 peaks.



Relative to grains and vegetable oils, coffee price rises have been quite modest. Arabica price levels are healthy rather than high; Robusta prices probably remain slightly below long run sustainable levels.

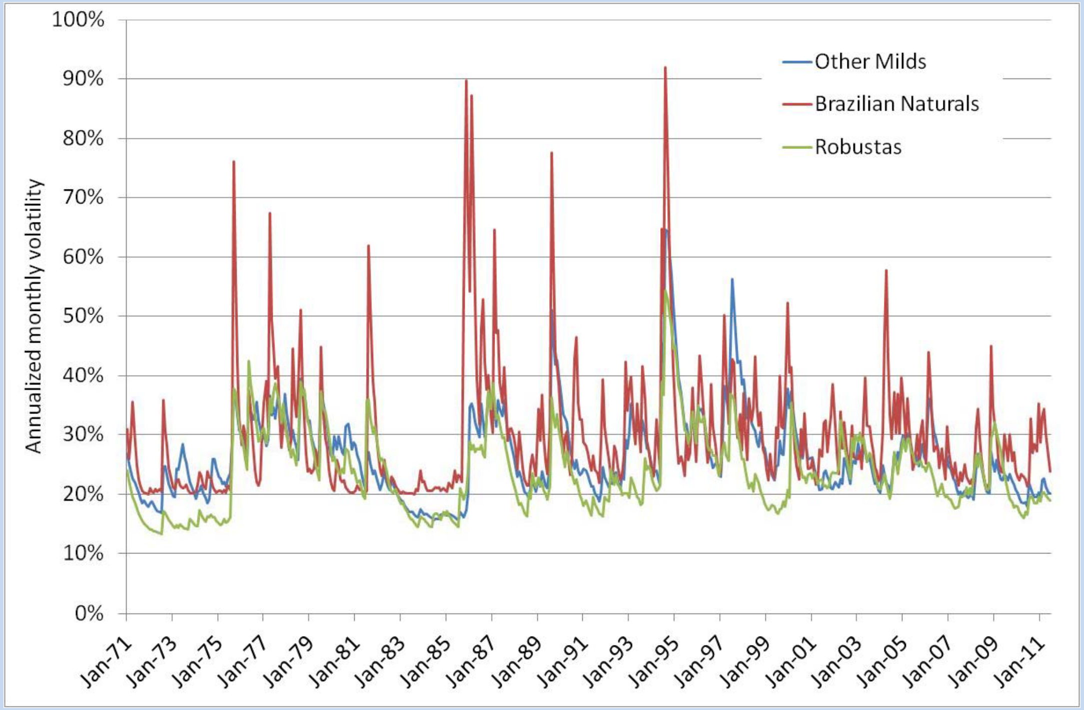
Background - volatilities

Spot coffee volatility has remained in the 20% - 40% range since 1995.

There is no evidence for any recent rise in volatility as in metals, grains and vegetable oils.

The volatility of Brazilian Naturals prices is consistently higher than that of Other Milds and Robustas.

Volatilities estimated from GARCH(1,1) model.



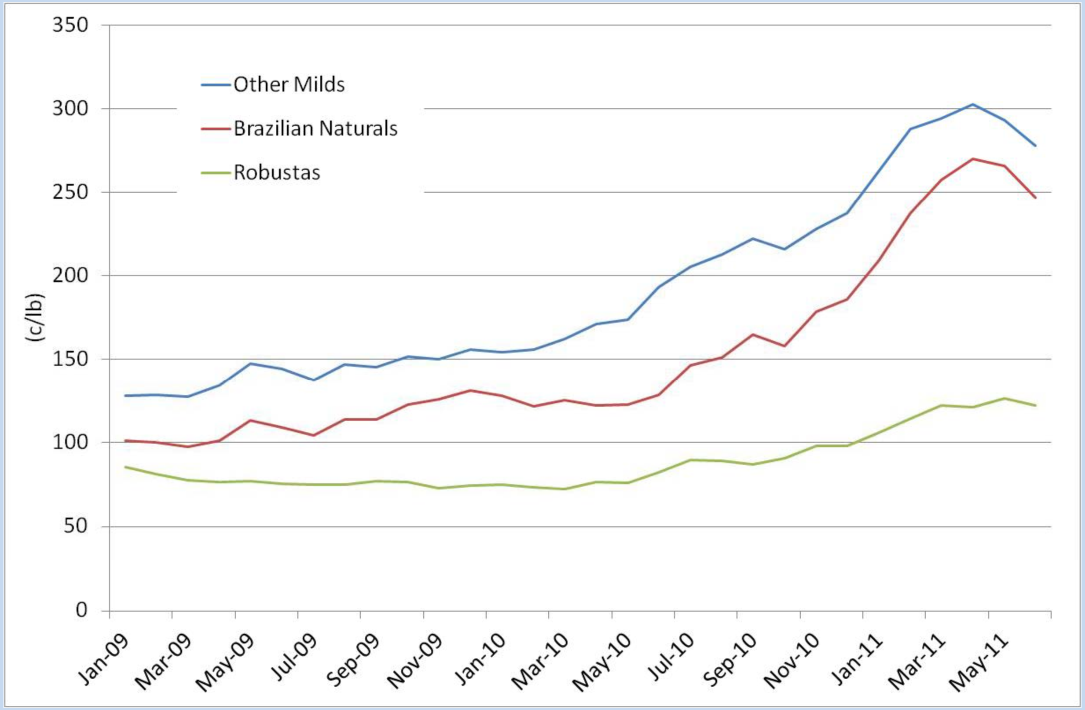
Average Volatility, January 2010 – June 2011	
Other Milds	20.1%
Brazilian naturals	26.9%
Robustas	18.5%

What's the problem in coffee?

Problems have arisen from the steady run-up in Arabica prices through 2010-11.

The change in Robusta prices has been much more modest.

In both cases, the price path has been smooth – this is not a volatility problem but one of rising prices.



High prices (at least moderately high prices) are a benefit to the entire coffee industry. You cannot get higher prices without prices rising. But rising prices result in contracting problems.

Possible modifications of the contracting system

- The problems do not arise from the price-to-be-determined contracts *per se*, but from the exporter's price fixing option.
- This suggests that importers might consider limiting this option, at least for exporters from origins where there is no easy redress for contract default – a move to spot.
- An alternative would be to introduce an element of marking to market for exporters. Contracts could include a clause requiring some advance payment if prices rise after the contractual price has been fixed.
- At the other extreme, if an importer believes that a particular exporter is likely to regard a fixed price forward contract as an option, the importers should hedge his position using a (slightly out-of-the-money) put. This will have a cost, which the exporter would seek to reflect in a reduced differential.

Contracting problems

- Rises in prices result in performance risk on forward delivery contracts in which prices have already been fixed.
- The standard form of contracting in coffee is on a “price to be fixed” basis against the relevant futures market. These contracts generally give a price-fixing option to the exporters and the roasters. Because exporters and roasters will generally fix prices on different dates, the importer covers himself by selling futures when the exporter fixes and buying back his position when the roaster fixes.
- Problems arise in cases in which exporters fix early, roasters fix late and prices rise in the interim. The two main problems are
  a) The importer is required to provide a large amount of margin finance. If his credit lines are constrained, this may limit his ability to undertake other business.
  b) The exporter has an incentive to default. This leaves the importer with a naked loss-making futures position.

Average prices: a very tentative suggestion

- Many LME-based price-to-be-determined contracts in the non-ferrous metals industries contain a clause to the effect that if the purchaser or seller chooses not to fix the contract price prior to delivery, the contract will be priced at the average LME settlement price in the month in which delivery takes place. In my experience, a large proportion of contracts settle on this default average basis.
- Average prices are significantly less variable than daily prices, and are also less easily manipulated.
- This averaging system is well adapted to the peculiar LME contractual system. It would need adaptation for coffee.
  a) Roasters might be happy to accept pricing on the basis of the average of the second position over the month in which delivery takes place.
  b) For exporters, one might look for a move to an average of the third position over the month in which coffee is shipped.

Margin finance problems

- Margin finance is always a problem when prices rise significantly.
- The problem interacts with perceived performance problems since banks will be cautious in providing finance to importers is they see a potential exporter default problem. Improved contracting can therefore provide partial relief for margin finance.
- Margin finance requirements shift the balance of competitive advantage away from small niche players and towards the large multinationals. I expect to see a continued tendency towards consolidation and increased concentration in the coffee sector.

The current situation

- Prices have been falling quite sharply over the past two weeks as concerns grow for the futures of the eurozone and as the prospect of second recessionary dip increase.
- In my view it is likely that prices will fall further over the coming weeks. 2011-12 is likely to be much less prosperous for coffee than has been 2001-11.
- In this new context of falling and perhaps even low prices, problems of default and margin finance become less urgent.
- The important question is whether current price falls are temporary or signal a switch back to the old “normal”.

Thank you for your attention