

US SOYBEAN MARKET: LONG TERM STABILITY, SHORT TERM VOLATILITY

Research note
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Soybean prices represent a key margin driver for the US booming biodiesel industry. The dream of biodiesel refiners and investors consists in price stability. Looking at the market over a number of years shows that prices are stable on average on the long term, but that they are subject to strong fluctuations on the short term. These fluctuations are the consequence of time delays between an ever-adjusting supply and demand.

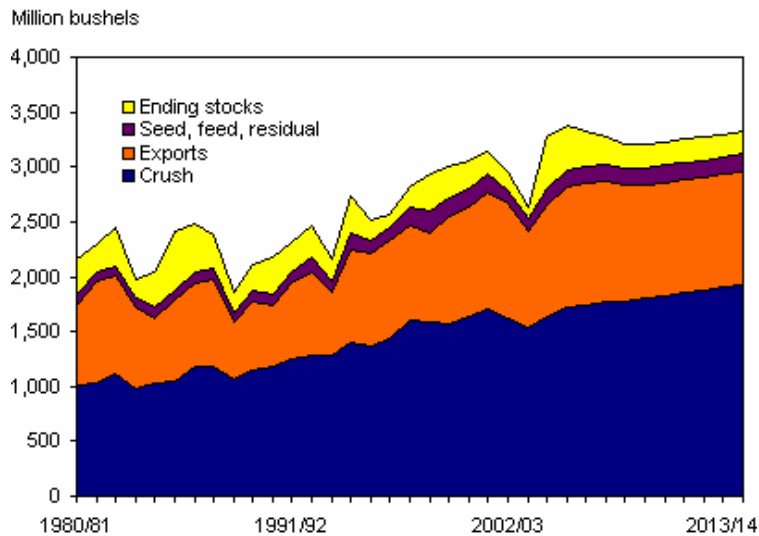
The rapid growth of the biodiesel industry is not likely to change this dynamics and the current increase in price should stabilise or reverse at the end of 2008.

However, a successful biodiesel refining business model should be built to resist short-term margin squeezes.

Soybean production is rapidly increasing to match a growing demand:

Domestic soybean crushing projected to rise steadily

Soybean production is rapidly growing

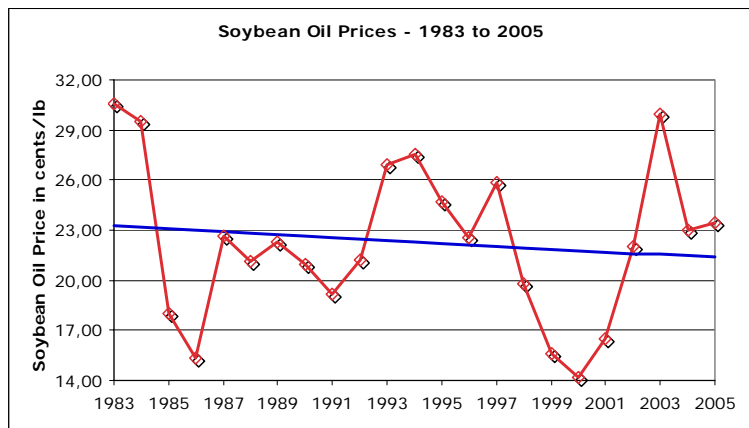


Source: *USDA Agricultural Baseline Projections to 2014* February 2005. Economic Research Service, USDA.

Figure 1

The quick development of the biodiesel industry is mainly responsible for this increase. Indeed, almost all US biodiesel is made from soybean oil. The consequence of this increasing demand is a surge increase in soybean prices, as we have been observing since 2004, as shown in Figure 2.

Spot prices are subject to heavy fluctuations...



Source: *USDA*

Figure 2

There have been strong fluctuations on soybean prices, with for example a 100% increase between 2000 and 2003. Interestingly enough, the long term price average (blue line) remains rather flat.

The structural reason for this apparent contradiction is the opportunistic behaviour of US farmers switching crops according to market conditions, with a steady increase in the soybean acreage, as shown in Figure 3.

... whereas average prices remain stable in the long run

The soybean acreage has increased

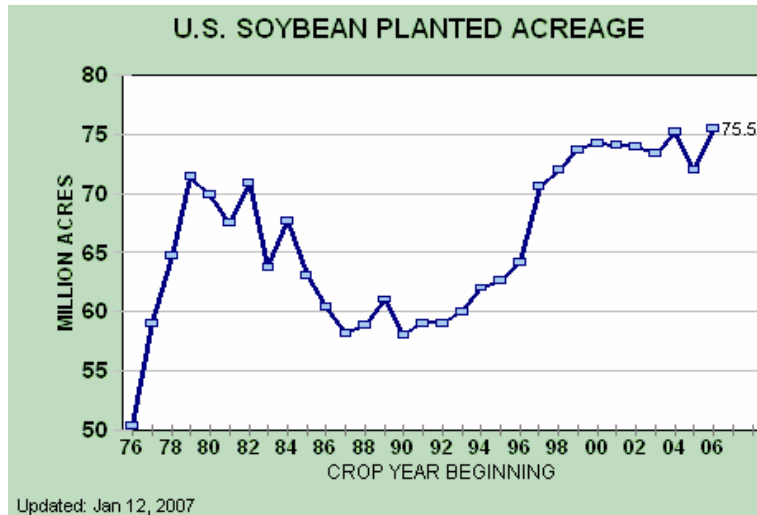


Figure 3

The overall trend shows an increase in the soybean acreage since 1990. Variations around the trend represent the farmers' opportunistic behaviour. In order to maximise their profits, farmers can switch part of their production to crops in strong demand. When demand increases, prices go up and farmers are likely to sow more soybeans. Because almost all farmers do so, there are more soybeans in the market the next year. Therefore, soybean prices tend to decrease, usually with a 1-2 year delay.

Prices tend to decrease in the following one or two years

For instance, in 2003, soybean prices were high: 7.34 \$/bu. In the same year, total soybean acreage was 73,404 thousands acres. In 2004, acreage was 75,208 thousands acres. And eventually, soybean prices fell to 5.74 \$/bu. (Source: USDA). We have to be careful though, it is only a correlation, but it might explain part of the short term price variations observed.

There is still room to increase soybean production in the Midwest

The boom of the biodiesel industry will be fuelled by soy but also by alternative feedstock. There were 32 million acres in conservation reserve in 2002 (year of the last Agricultural Census in the US). And much of this cropland is in key soybean producing states: MN, IA, IL, and IN. Farmers are currently planting soybeans and prices are expected to go down or to stabilize by the end of 2008.

For this reason, we believe that, in the medium term, the strong development of the biodiesel industry is **not likely to change the functioning of the market.**

How to survive short-term margin squeezes?

The right question for biodiesel producers today is not to worry about a long term shortage of soy but rather to find out what strategy should be put in place to make the **business model resilient to short term surge in soy oil prices.**