

# What is Happening in the Vegetable Oil Market Today?



Presentation to POTS Cairo  
8<sup>th</sup> November, 2010

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# Alan Greenspan and Irrational Exuberance



Alan Greenspan, head of the US Federal Reserve, warned of the dangers of the “irrational exuberance” that helped to cause the recession of 2008-2009.

He highlighted something very important, namely the danger that exuberance, fuelled by speculation funded by easy credit at low interest rates, can become irrational and go much too far.

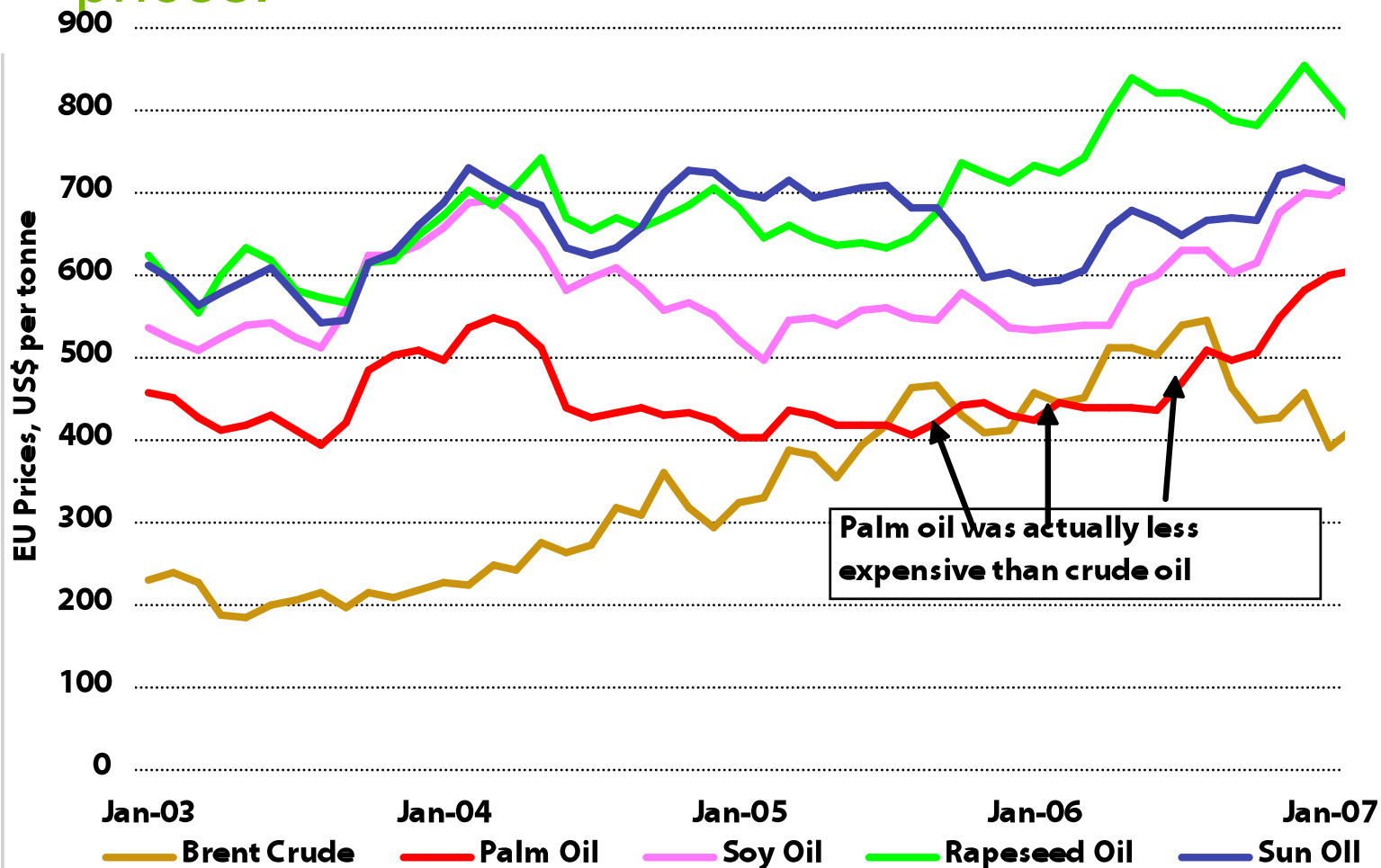
One of the nice features of the vegetable oil sector is that it generates signals that tell us when prices – or price differentials – are too high, or too low.

Today I want to see what these signals tell us about the exuberance we see all around us right now.

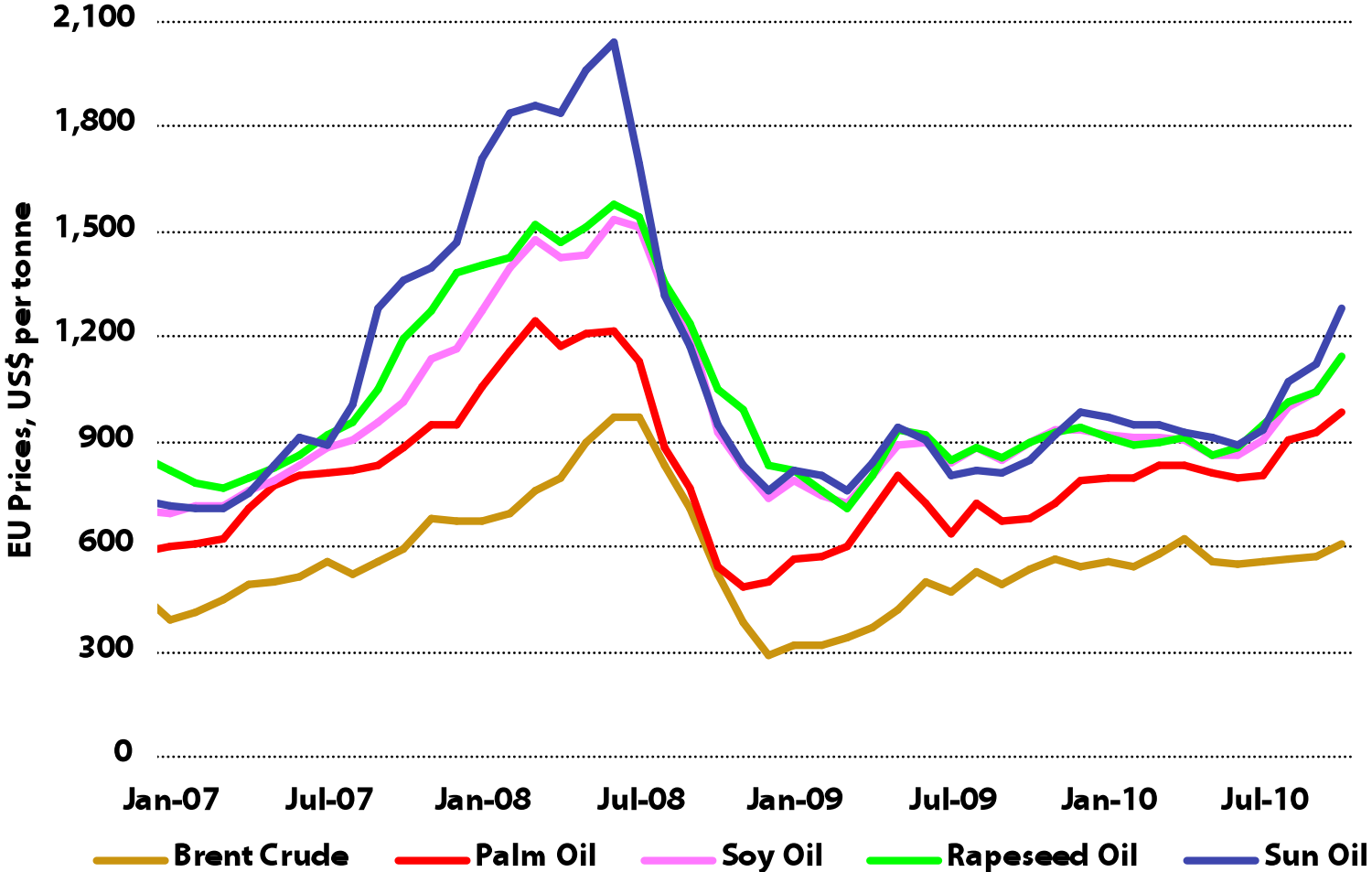
# Understanding vegetable oil prices



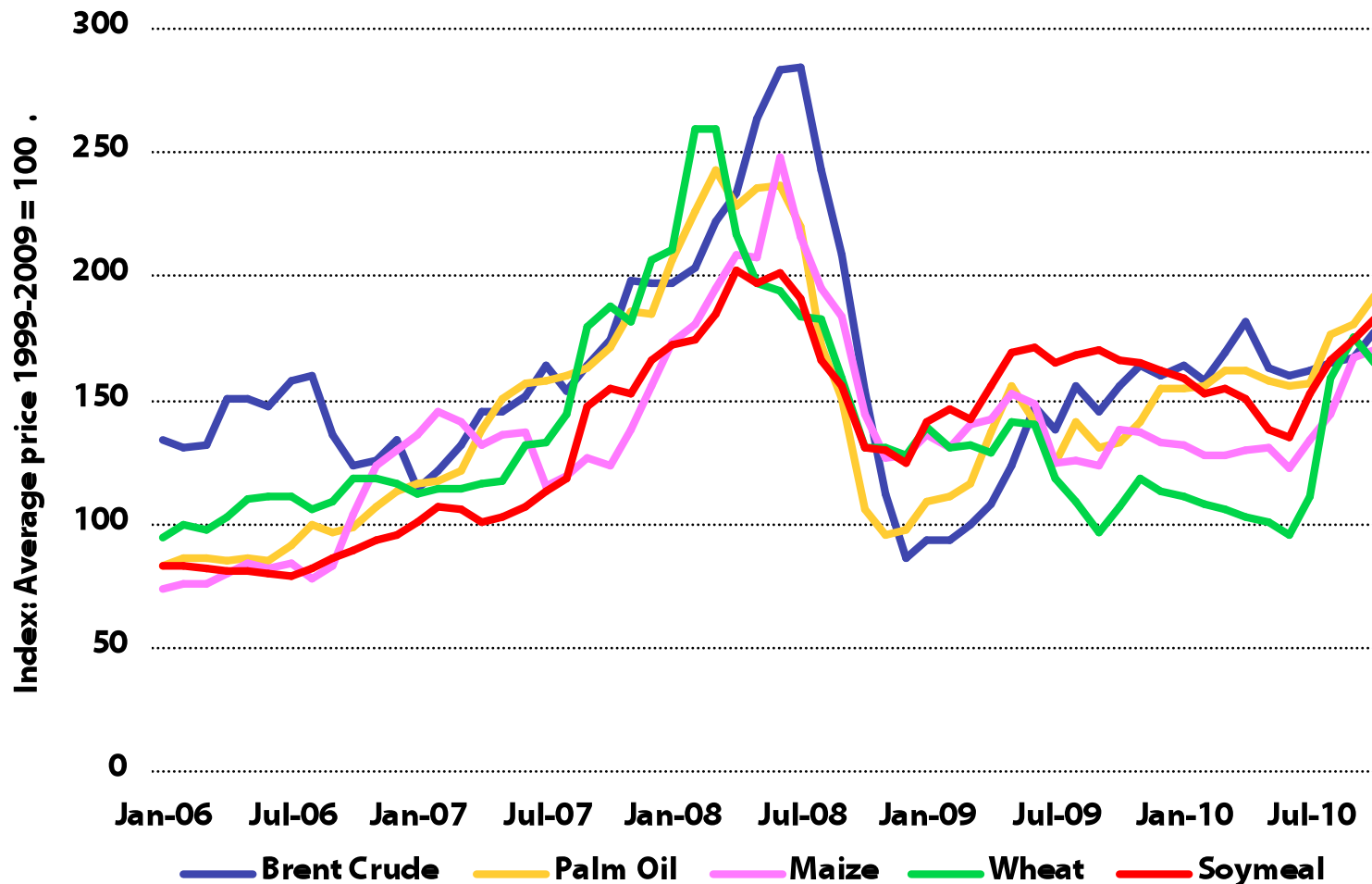
I will start with a reminder of the world before 2007. In this “old” world, there was no link between crude oil and vegetable oil prices.



Since 2007, we have been in the “new” biofuel world, with a price band creating a strong link between vegetable oil and mineral oil prices



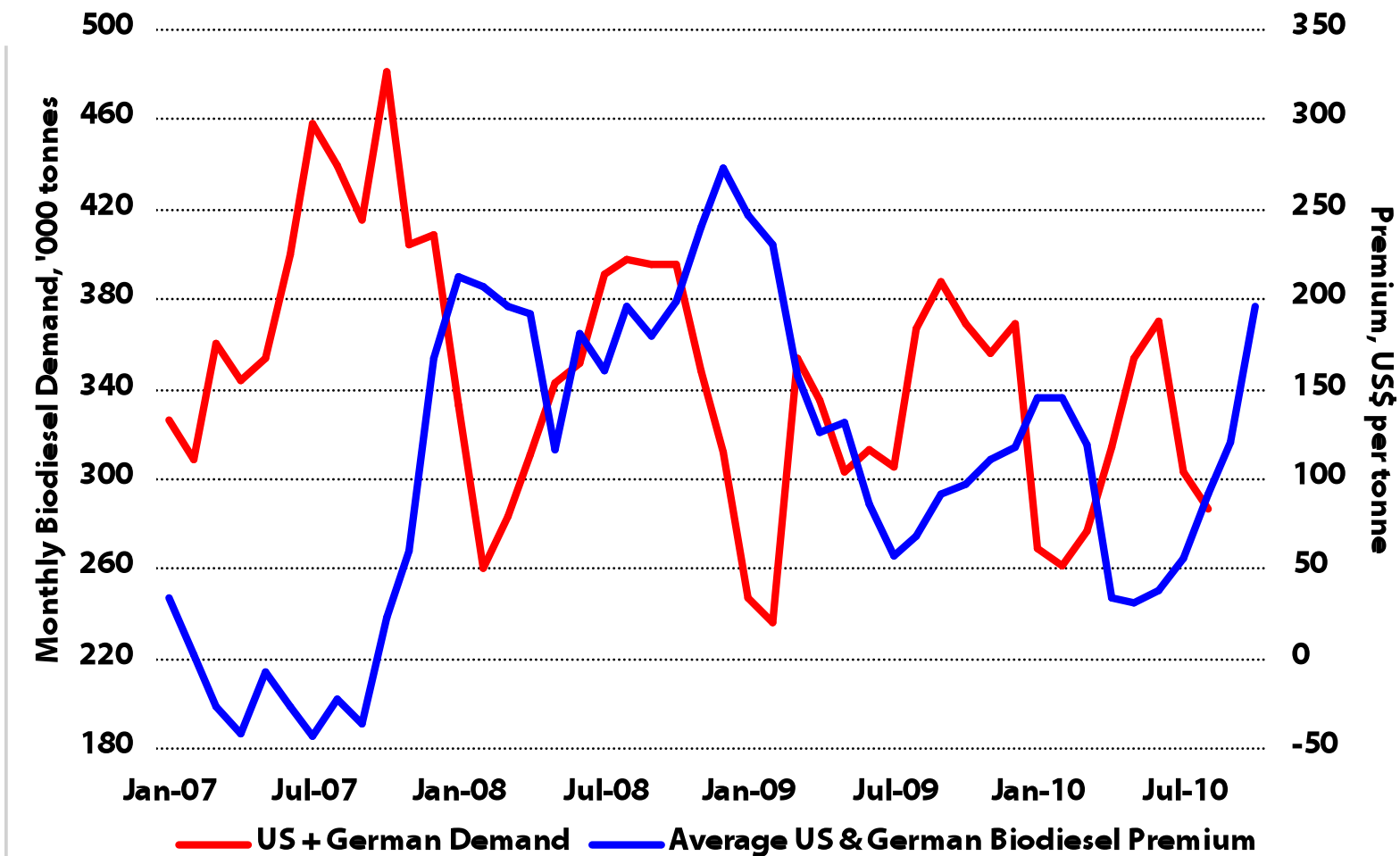
This link has extended beyond vegetable oils, because other crops are major raw materials for biofuel or are substitutes for such crops.



# The reasons why biofuels have this strong impact on vegetable oil prices



Biodiesel use in Germany and the US, the two largest biodiesel users, is sensitive to biodiesel (and thus vegetable oil) price premia vs. diesel.





Biofuel price sensitivity is common. Even where mandates apply, official policies can create a petroleum-vegetable oil link.



We see that German and US policies create a rapid feedback from vegetable oil prices (and the profitability of biodiesel output) to demand for these oils.

You may think that growing biofuel mandates will cut this link between vegetable oil prices and demand for these oils in biofuels; but a new factor is at work.

The application of mandates is reacting to vegetable oil prices. Malaysia and Indonesia have so far failed to apply the mandates they announced, largely because palm biodiesel prices rose unacceptably far above diesel prices. Most recently, the Spanish government has scaled back its mandates for the next three years.

# Understanding vegetable oil prices



# Four forces determine today's vegetable oil prices



Policy is one. Today I will explain the importance of US RINs (*Renewable Identification Numbers*), that are tradeable certificates issued to ensure that US biodiesel mandates are met in full by blenders.

Substitution between oils keeps their prices linked, but EU attitudes to GMOs and biodiesel allow sun and rapeseed oils to move far above soy and palm.

Petroleum prices are another factor. (Diesel prices are the best to use, as it competes with biodiesel.)

Vegetable oil stocks also play a role, but not the dominant role, as was the case prior to 2007.

1. In the US, RINs show what the US fuel sector is willing to pay for biodiesel



In December, blending credits (of \$300/tonne) lapsed. As hopes of renewing them faded, users bid up RINs, but they remain far below \$300.



# Vegetable oil prices are far above levels consistent with US biodiesel economics



In 2009, blending credits and RIN values implied that soy methyl ester (SME) would sell at \$310 per tonne above diesel, and this was true for most of the year.

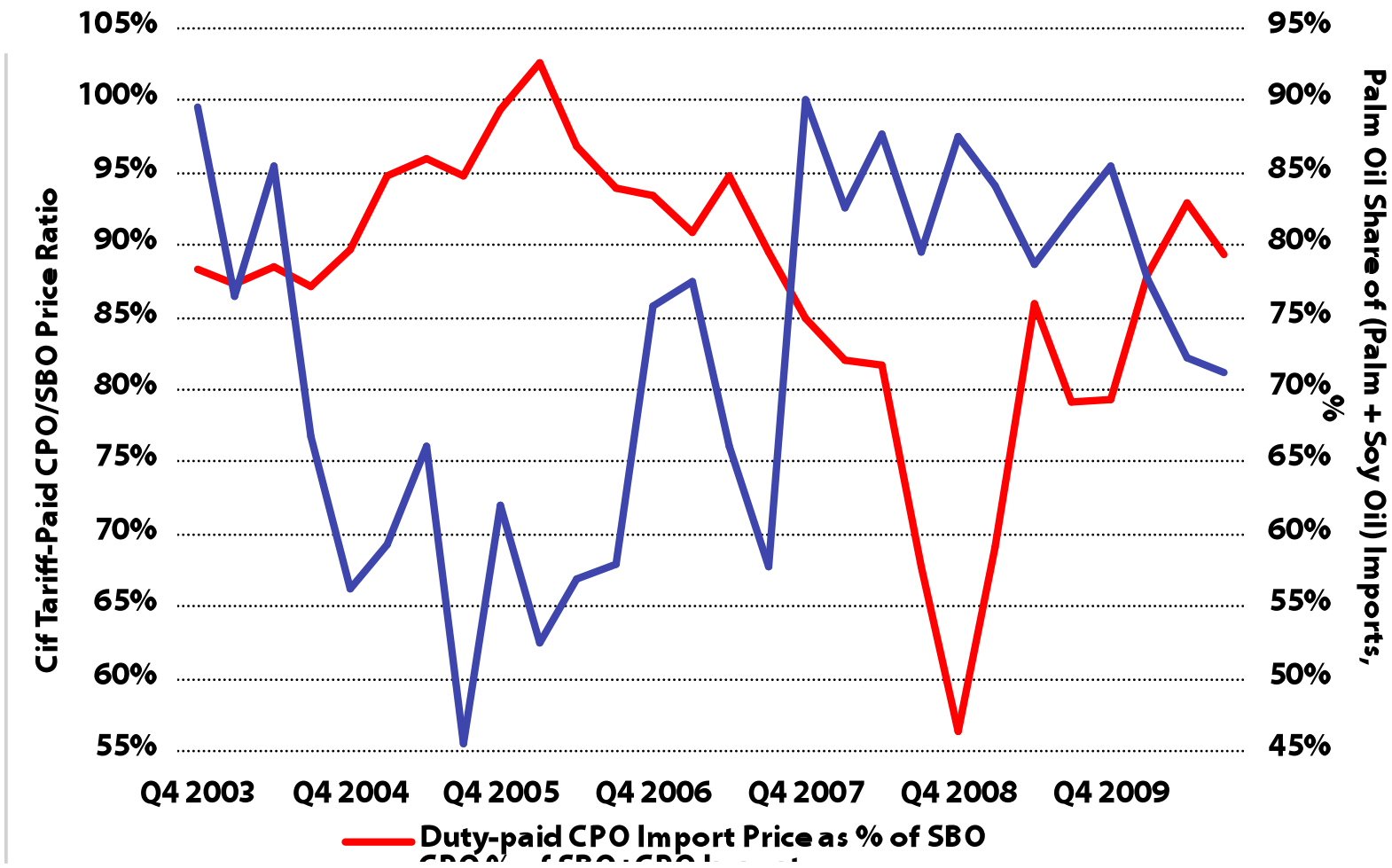
Today, with no tax credits, RINs imply that SME should be priced around \$210 above diesel. Yet, last Friday's SME-diesel premium was \$450, i.e., **\$240 too high**.

Why is anyone in the US buying soy biodiesel today? Some buyers have annual contracts. Some states give extra tax incentives for biodiesel use. Also, there are users such as bus companies, which publicise their green credentials by using biofuels, whatever the price. For most US users, soy oil is now overpriced in biofuel.

## 2. Substitution between vegetable oils



India's soy oil % of combined soy *plus* palm oil imports moves in the opposite direction to soy oil's premium over CPO, including import tariffs.





Even though palm oil is still not much used in biodiesel, substitution in India (and also China) ties its price to that of soybean oil.



Palm oil is unlike other oils, in that plantations always behave rather like distress sellers. Its crop cannot be stored; thus plantations are always under pressure to sell to keep their palm oil tanks from overflowing.

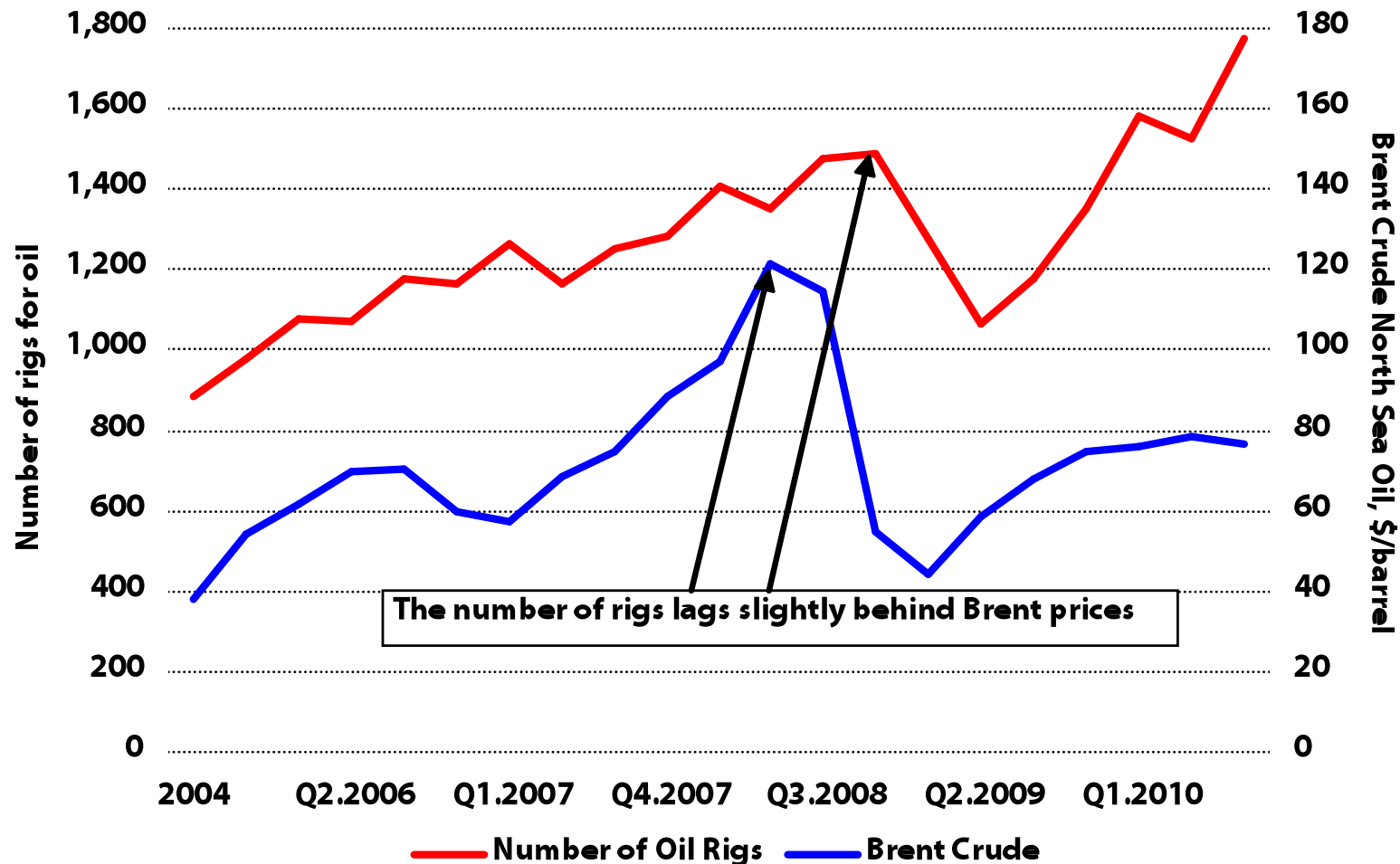
Oilseeds, especially high oil seeds like rapeseed and sunflower, are different. They are crushed only when there is a demand for them. Soybeans lie in between, in that they are crushed more for meal than oil.

When the palm oil discount narrows too much, as it did recently, key importers switch to other oils. The result is rising palm oil stocks, widening the discount.

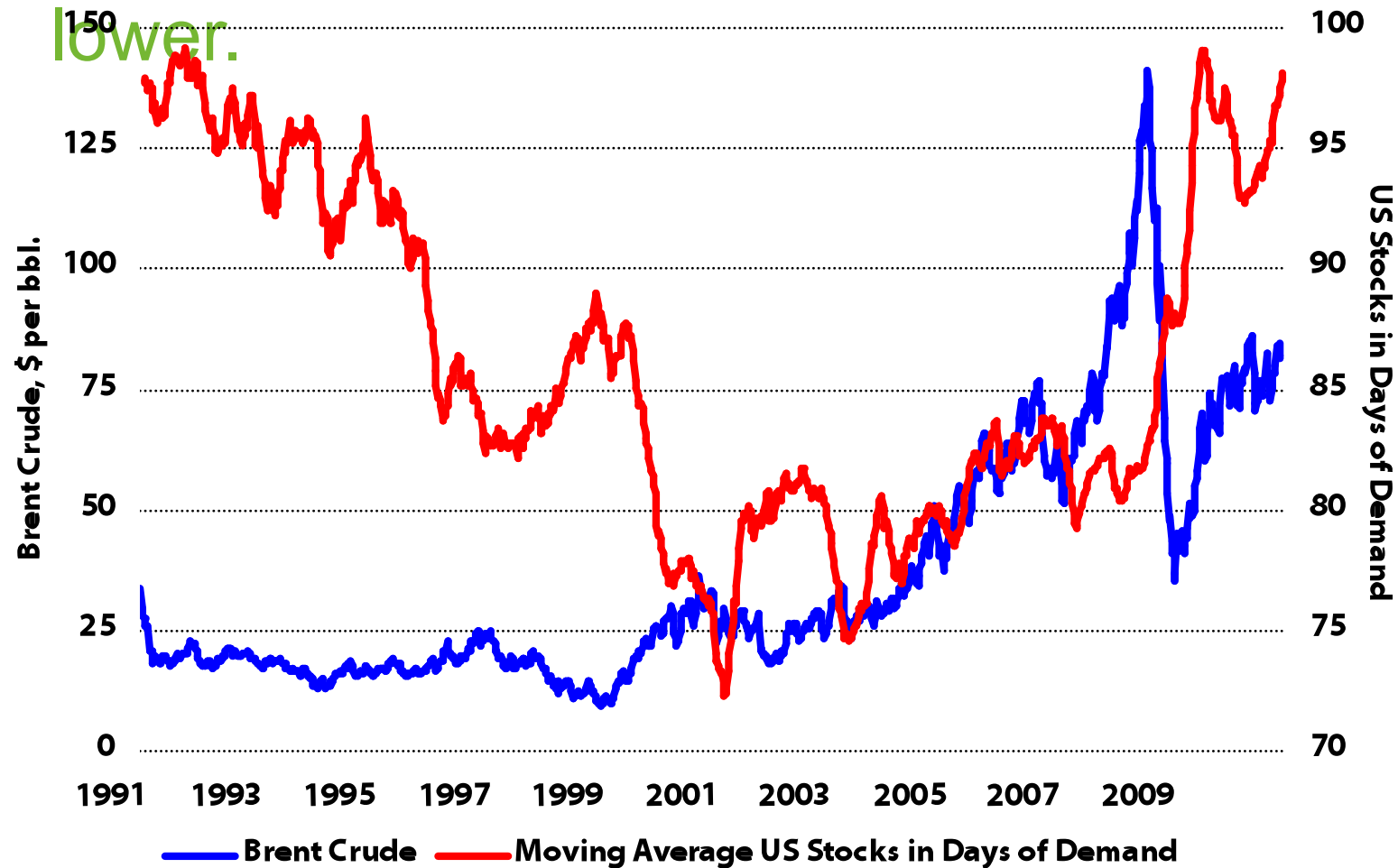
3. Given its key role, we now ask: what is happening in the petroleum market?



From the perspective of short term supply, high prices have encouraged drilling.



US stocks are still high vis-à-vis demand; yet, prices were much lower in the past, when stocks were also much lower.



Petroleum is a normal market: high prices are lifting supply, while slowing demand. Eventually, this will feed through to prices.

The petroleum market behaves laws of supply and demand. In the next 2-3 years, supplies will rise, as major new capacity is being developed, e.g., Brazil. Iraq has contracts to add 12 mn bbl/day to output.

Supplies of other fuels that substitute for petroleum, notably US shale gas, are also increasing rapidly.

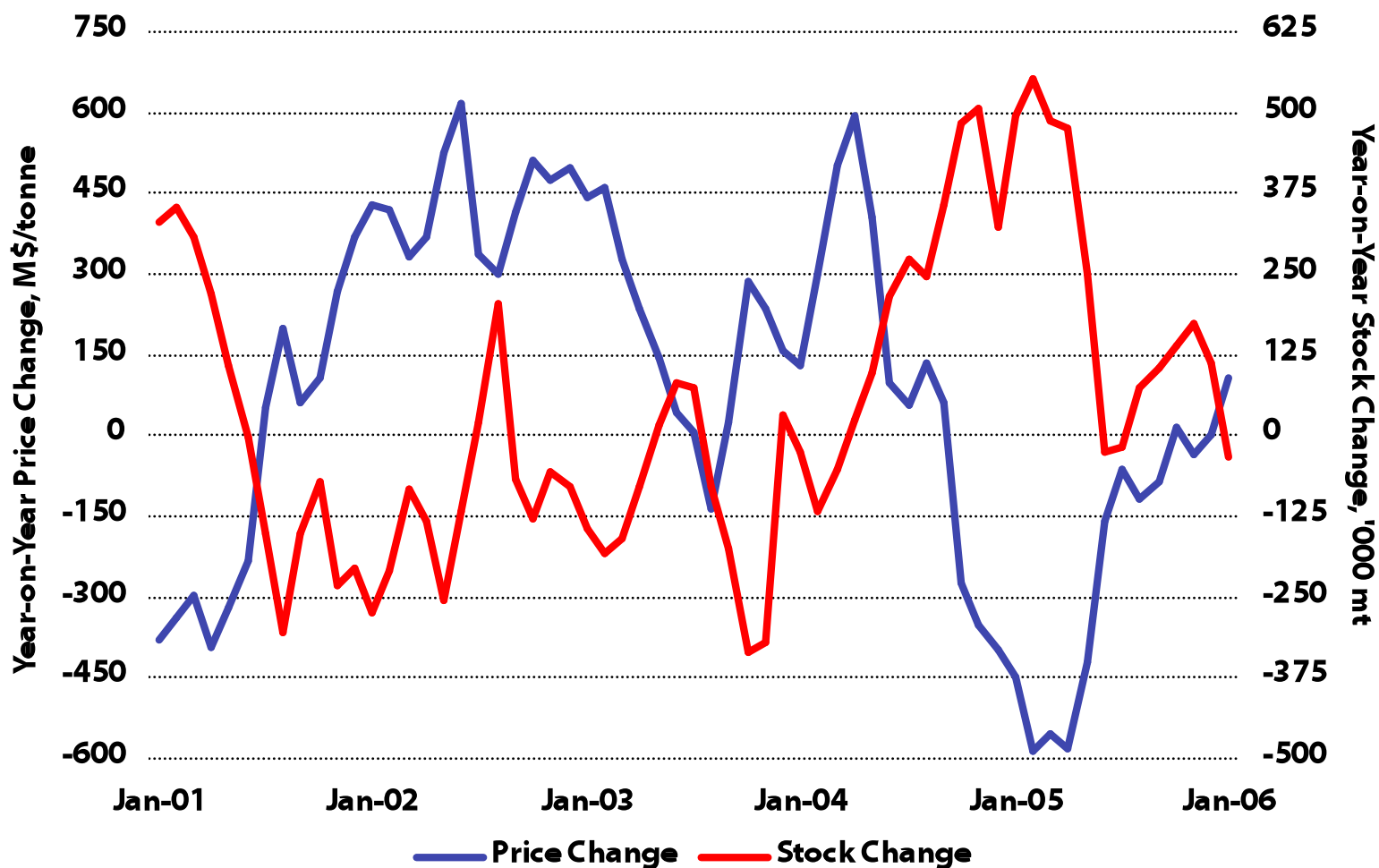
The demand side too is behaving as expected. High petroleum prices slow sales growth. This is reflected in historically very high US stocks.

The longer crude oil prices stay at current levels, the bigger will be the excess capacity, and the sharper the eventual correction in the petroleum market.

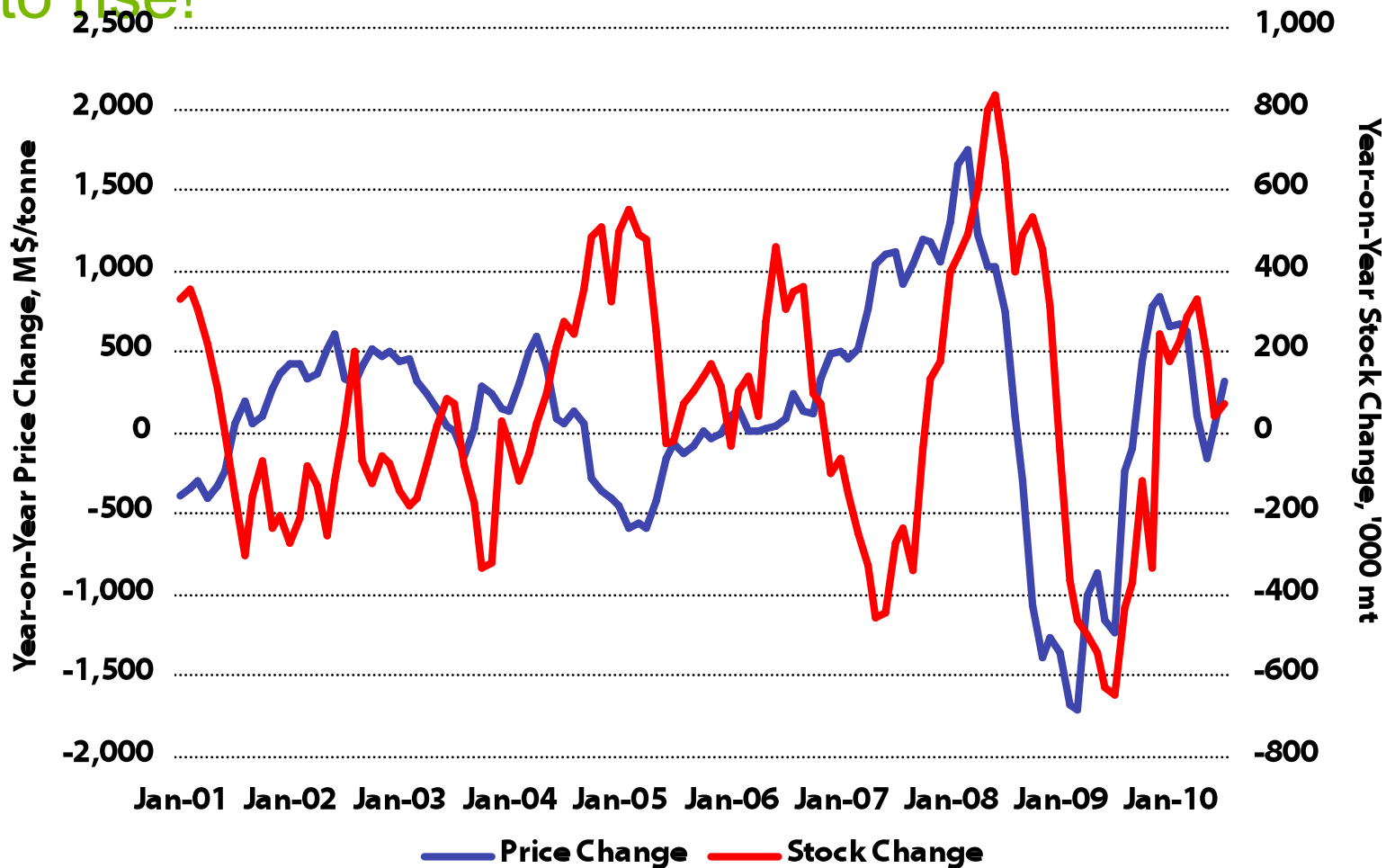
## 4. Vegetable oil stocks



Palm oil stocks are the most important. Until 2006, year-on-year changes in CPO prices were clearly linked to MPOB stock changes.

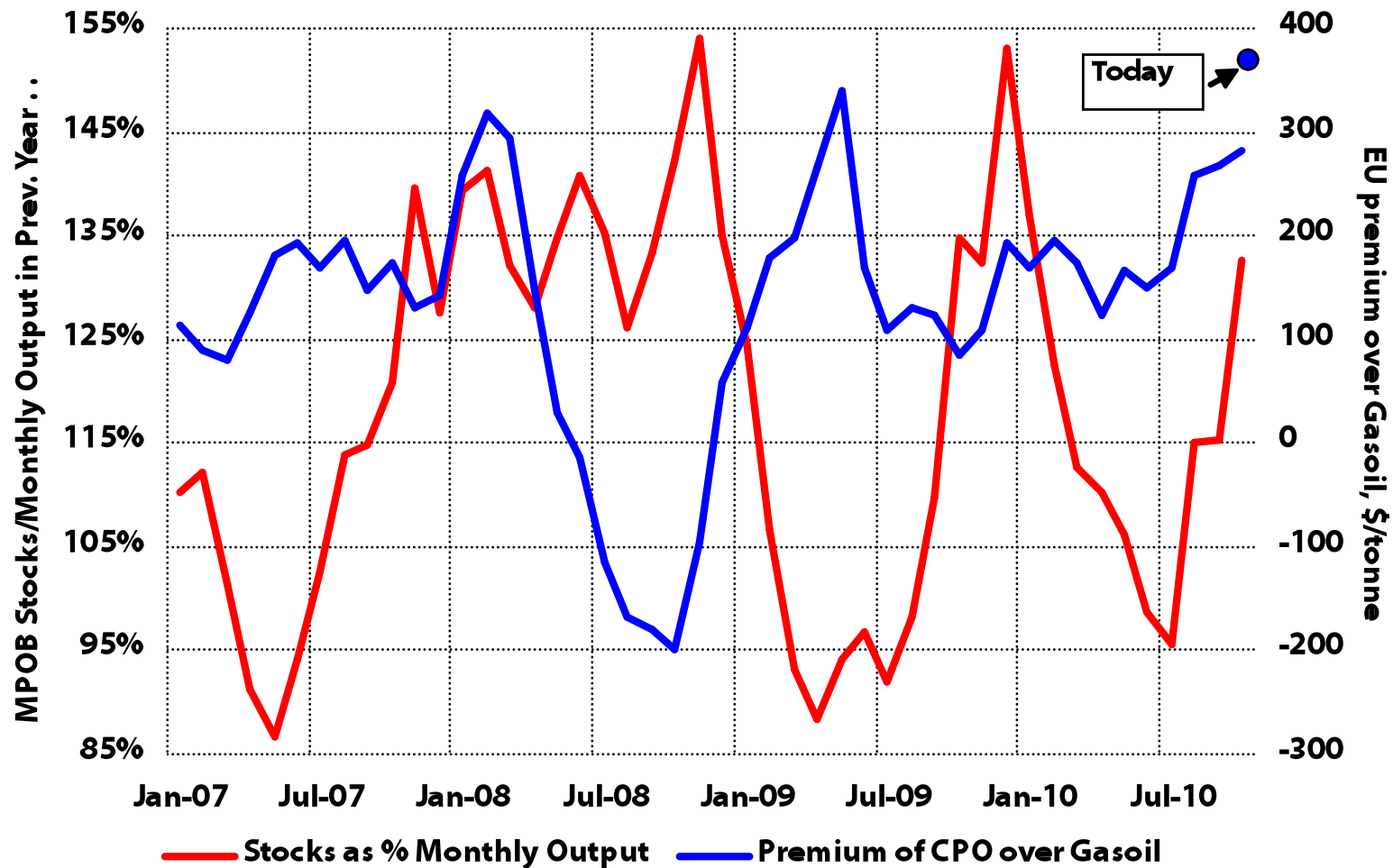


The relationship has broken down. Since mid-2007 stock and price changes move together. Higher stocks seem to cause prices to rise!

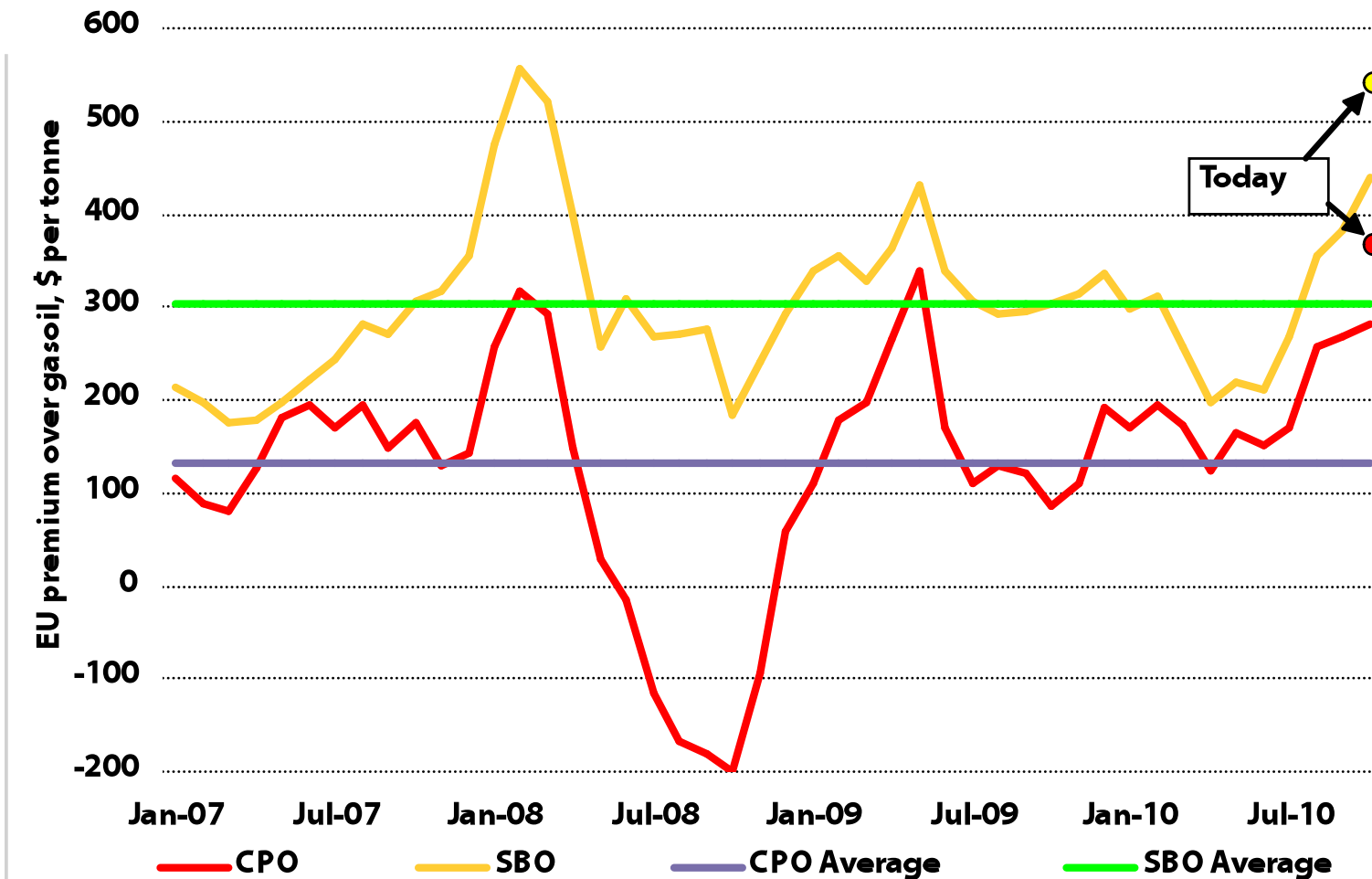




With a price band, stocks might be expected to set CPO's premium over gasoil/diesel. However, the influence of stocks is not yet visible.



Examining the behaviour of price differentials vs. diesel (gasoil) of soy and palm oil, it is evident that they are again becoming exceptionally high.



# Conclusions



## Irrational exuberance is alive and well



- Unless you believe we are about to have a big crop failure somewhere, oilseed stocks are ample for the coming year. In addition, we should have very strong growth in palm oil output in the next year.
- Meanwhile, vegetable oil prices have risen to levels at which they are harming demand, notably the most price-sensitive demand of all, that for biofuels.
- We are again in a bubble; but, with one difference from 2008: petroleum prices have not yet joined in.
- Vegetable oil prices should eventually fall back to earth. Normal price relativities point to palm and soy oil prices \$240 below today's levels, unless crude oil prices rise above \$115/bbl. (which I do not expect!).

# Thank You



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**Acknowledgements: EIA, IMF, Jacobsen, MPOB,  
National Biodiesel Board, Oil World, OPEC, Public Ledger,  
SEA, TNS, UFOP, US Commerce Dept., USDA, World Bank**





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