

**Supply and Demand Outlook for Feedstocks**  
**For the Food and Biofuel Industries**  
**5<sup>th</sup> Global Oils and Fats Forum**  
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There are very dynamic times in the world of fats and oils and palm oil is playing an increasingly important role, never more so than this year. However, our discussion has to start with the world in which we find ourselves currently: Declining stocks of grains and oilseed “borrowing” from the future; fight for acreage; large new use of usage represented by biofuels; new source of demand for futures contracts from asset managers.

# Background Factors Bullish

- **Weak dollar**
- **World grain shortage**
- **Reduced world oilseed production tightening stocks**
- **Growing biodiesel capacity competing with food use**
- **Strong world economies**
- **Fears of food price inflation in largest importers**
- **Investment in commodities as an asset**

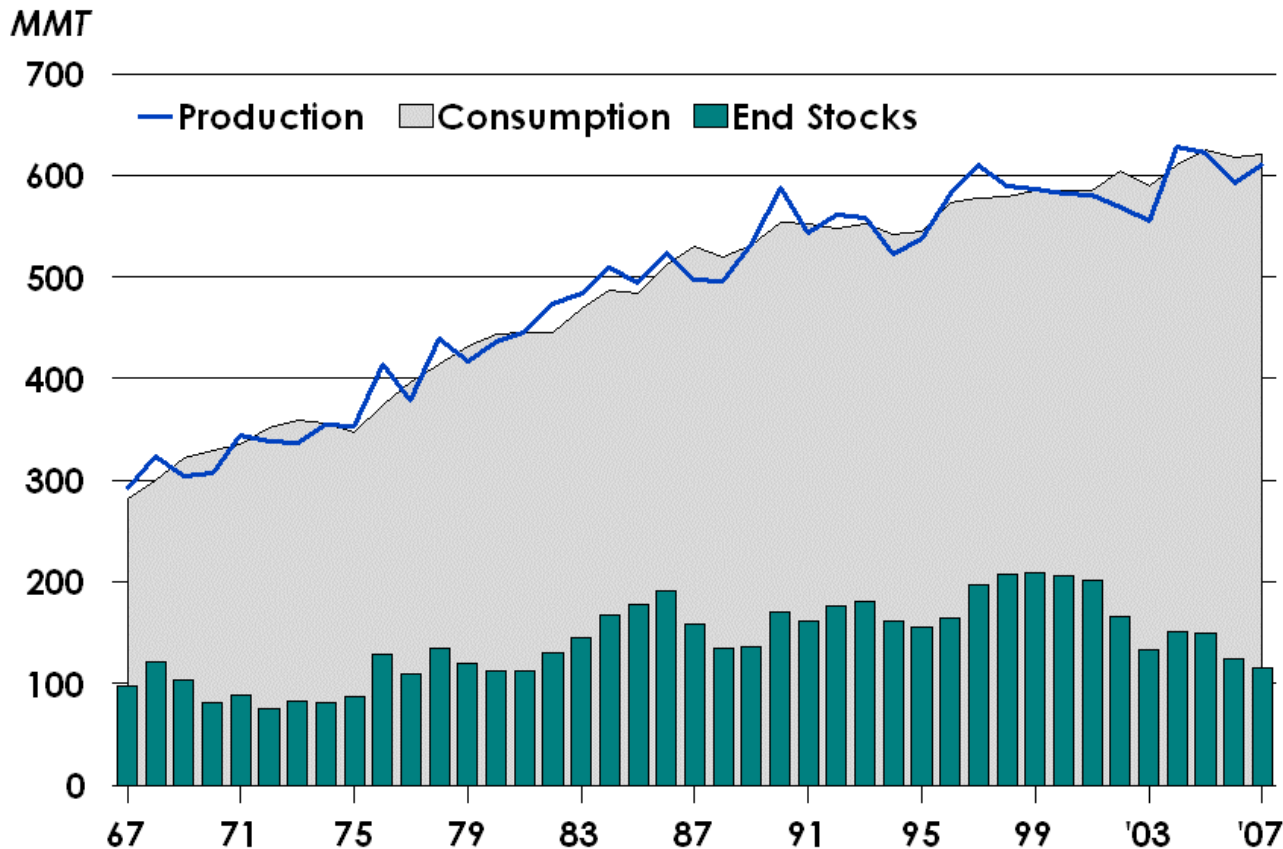
# Supply Highlights

- **Grains won fight for acreage but bad weather hurt output which is falling short of usage**
- **Oilseed output down under lead of U.S. soybeans**
- **World will look for S. hemisphere crops for help**
- **Oilseed stock drawdown will enable larger crush this year but require higher production in 2008**
- **World palm oil output likely to be up in 2007/08**
- **Fight for acreage will continue next year**

We are still assessing world crop prospects for this this season, but some major themes appear clear. Hence, the numbers may vary slightly from those indicated but the direction of change appears less ambiguous than the actual level.



# World wheat consumption above production in 7 of past 8 years



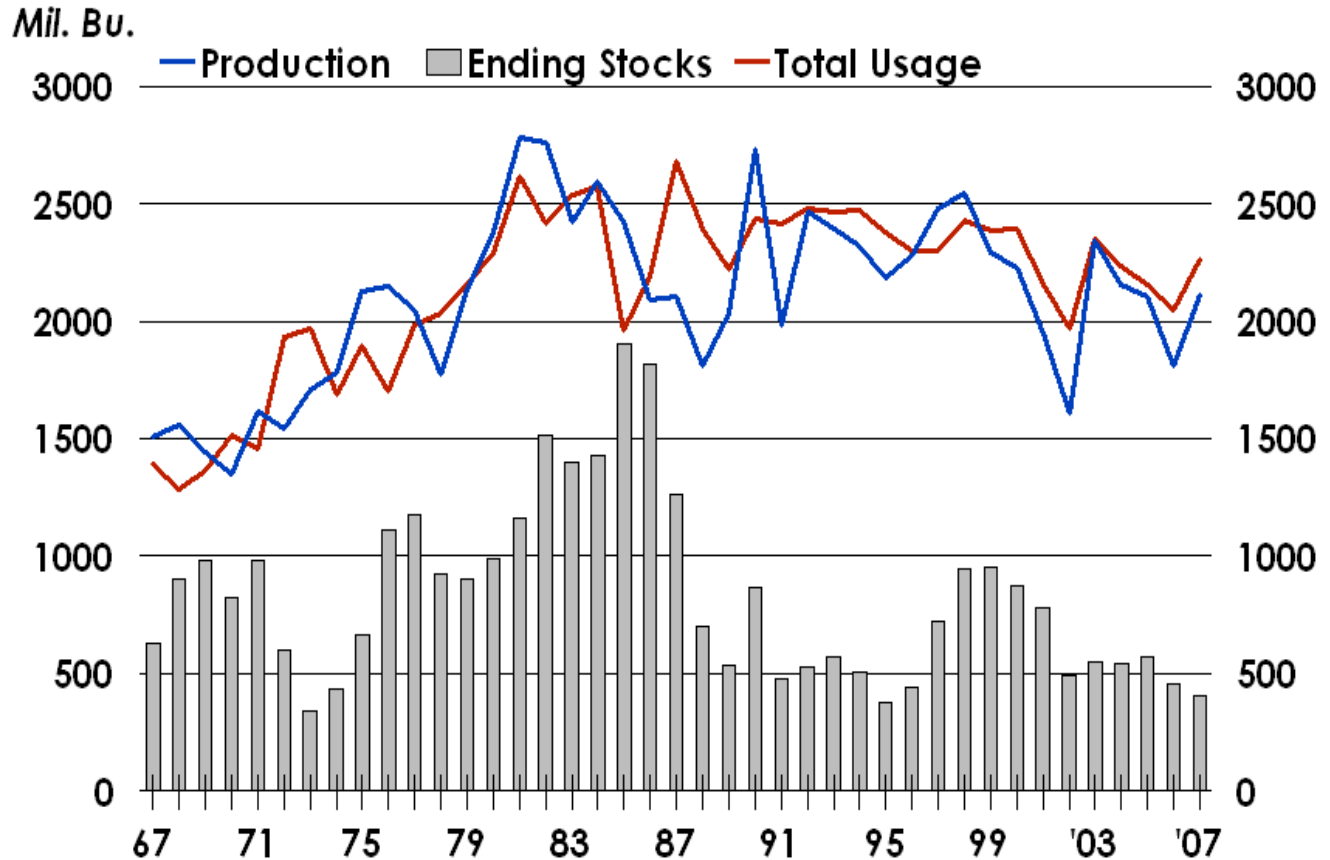
**Stocks/use  
18.5%,  
Lowest of  
past 50  
years**

Source: USDA

Despite higher plantings and production, world wheat stocks are expected to reach critically low levels as a percent of usage. World is counting on a fresh infusion of supplies from the key southern hemisphere crops – Argentina and Australia, but both countries are dry.



# U.S. wheat stocks declining; stocks/use tightest on record



Exports driving use

Stocks/use ratio at lowest in history

Source: USDA

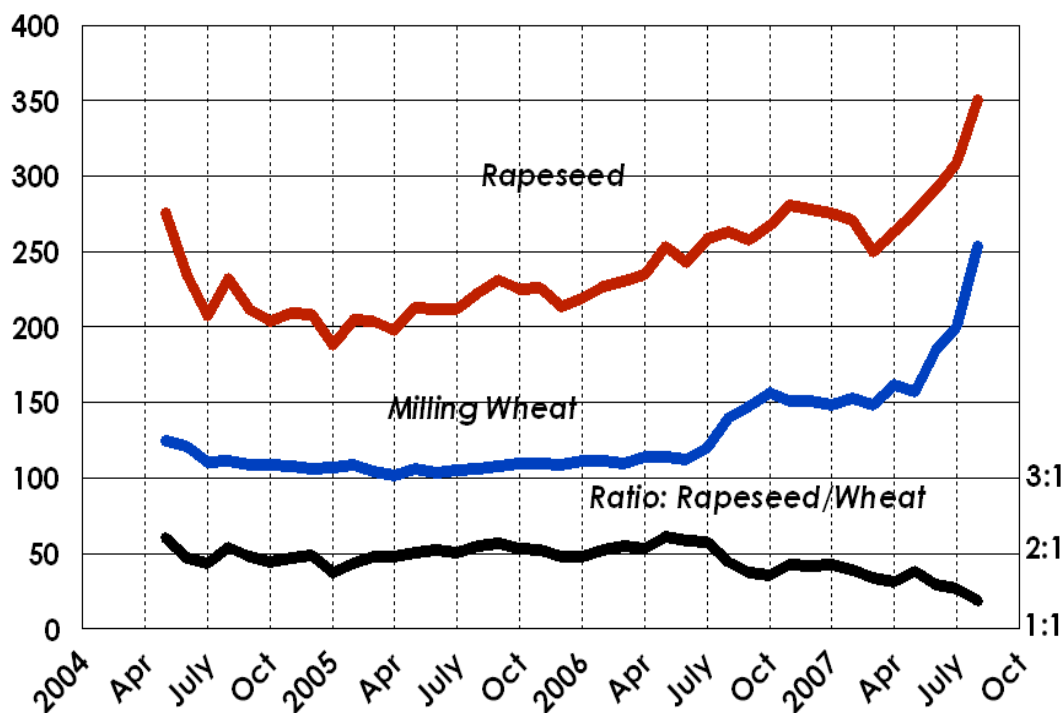
U.S. wheat production is up but so is consumption. Wheat prices have reached record levels this month, exceeding \$8/bu for the first time in history.



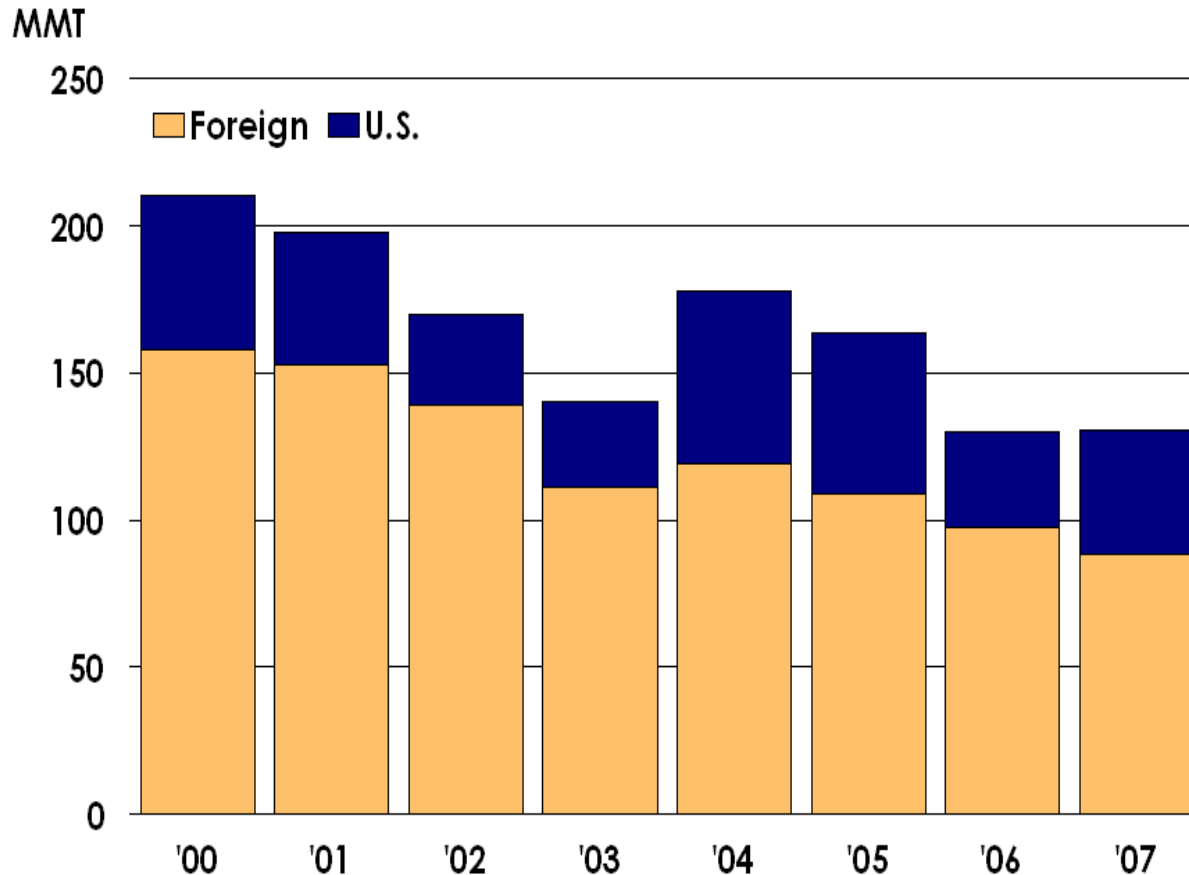
# Wheat likely to take acreage from oilseeds

- Wheat should take acreage from oilseeds in Europe
- \$8.00 + Wheat takes acreage from all in U.S.

Euronext Nearest Futures Prices - End of Month  
Euros/Tonne



# Non-U.S. coarse grain stocks declining



**Non-U.S.  
coarse grain  
stocks/use  
lowest in  
over 3  
decades;**

**World stocks  
up 1 MMT  
due to U.S.**

Source: USDA

Coarse grain stocks outside the U.S. in very tight supply, but offset by an increase in U.S. stocks under the lead of a large corn crop.



# Increase in U.S. corn stocks in 2007/08 may shift some acreage out of corn in 2008/09, depleting stocks

**2007/08**

**Prod + 2.5 bil**

**Beg. Stks -0.8 bil**

**Ethanol + 1.25 bil**

**Exports unch**

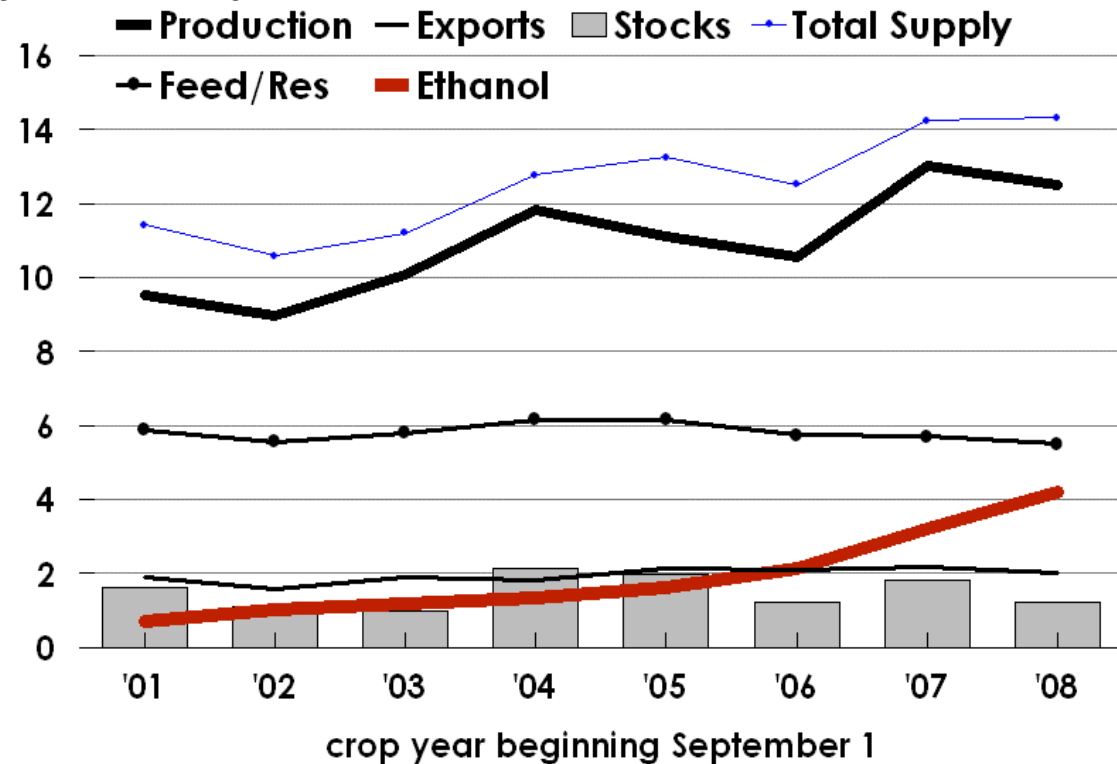
**2008/09**

**Plantings down 4 mil**

**Ethanol +1.0 bil**

**Stks surplus used**

(billion bushels)



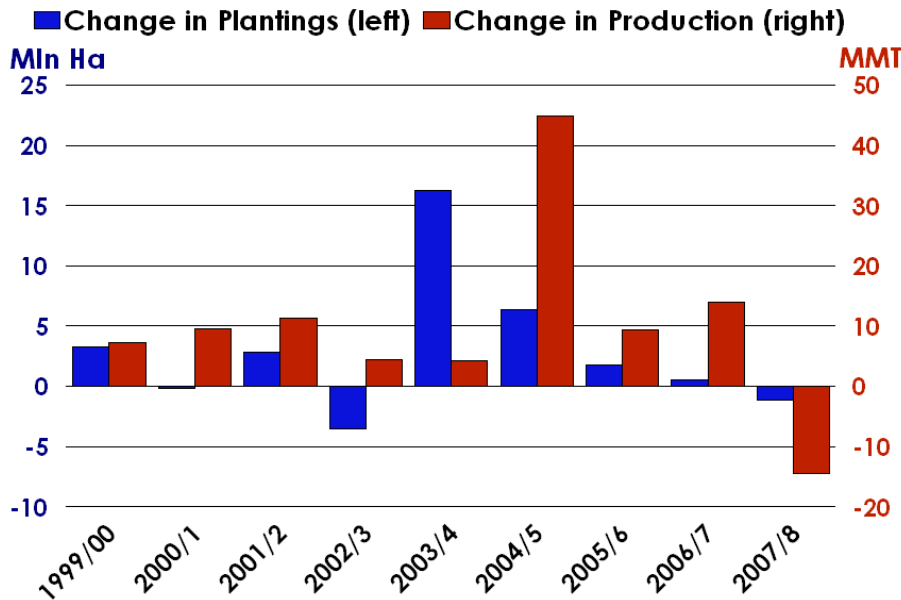
Source: USDA; Prudential Bache Commodities, LLC

U.S. soybean plantings will depend heavily on developments with corn. Corn can give back some acreage in 2008, but a depletion in stocks will require higher plantings in 2009.



# Oilseeds lost last year's fight for acreage, production decline led by U.S. soybeans

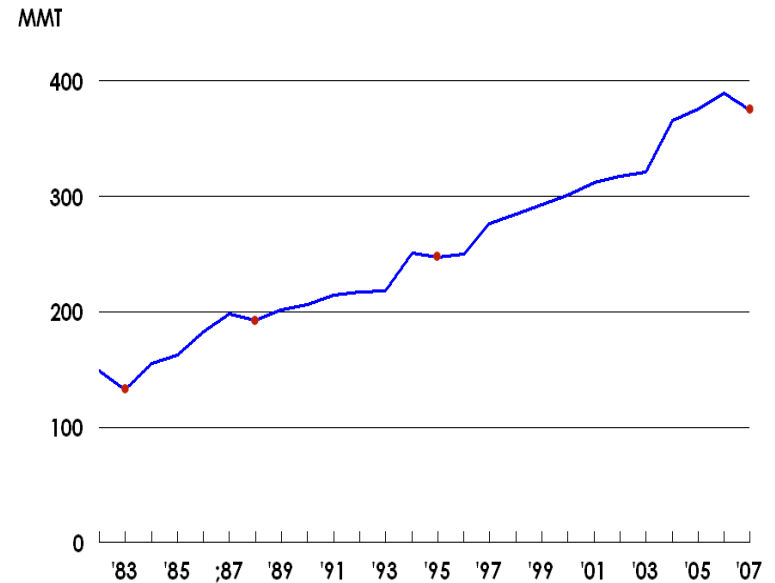
Top 5 Annual World Oilseeds



Source: USDA

Lower production of oilseeds is likely to deplete stocks. It also increases the importance of tree crops such as palm, as well as the importance of the sustainable palm oil initiative to meet the concerns of the environmentalists and consumers.

## World Production Five Annual Oilseeds

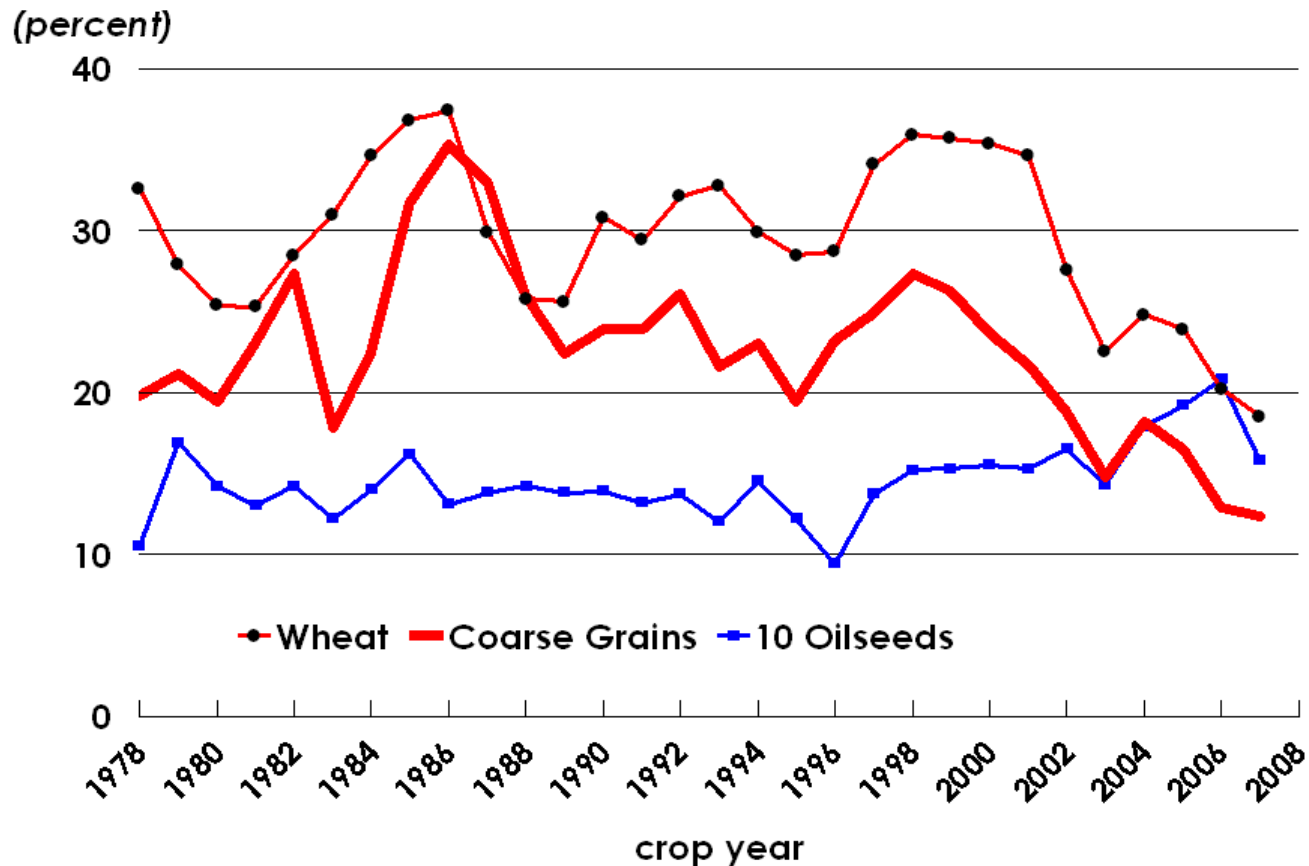


Source: USDA

Oilseed output down for only **4<sup>th</sup>** time in **25 years**



# Stocks/use ratios expected to decline for grains and oilseeds; fight for acreage in 2008

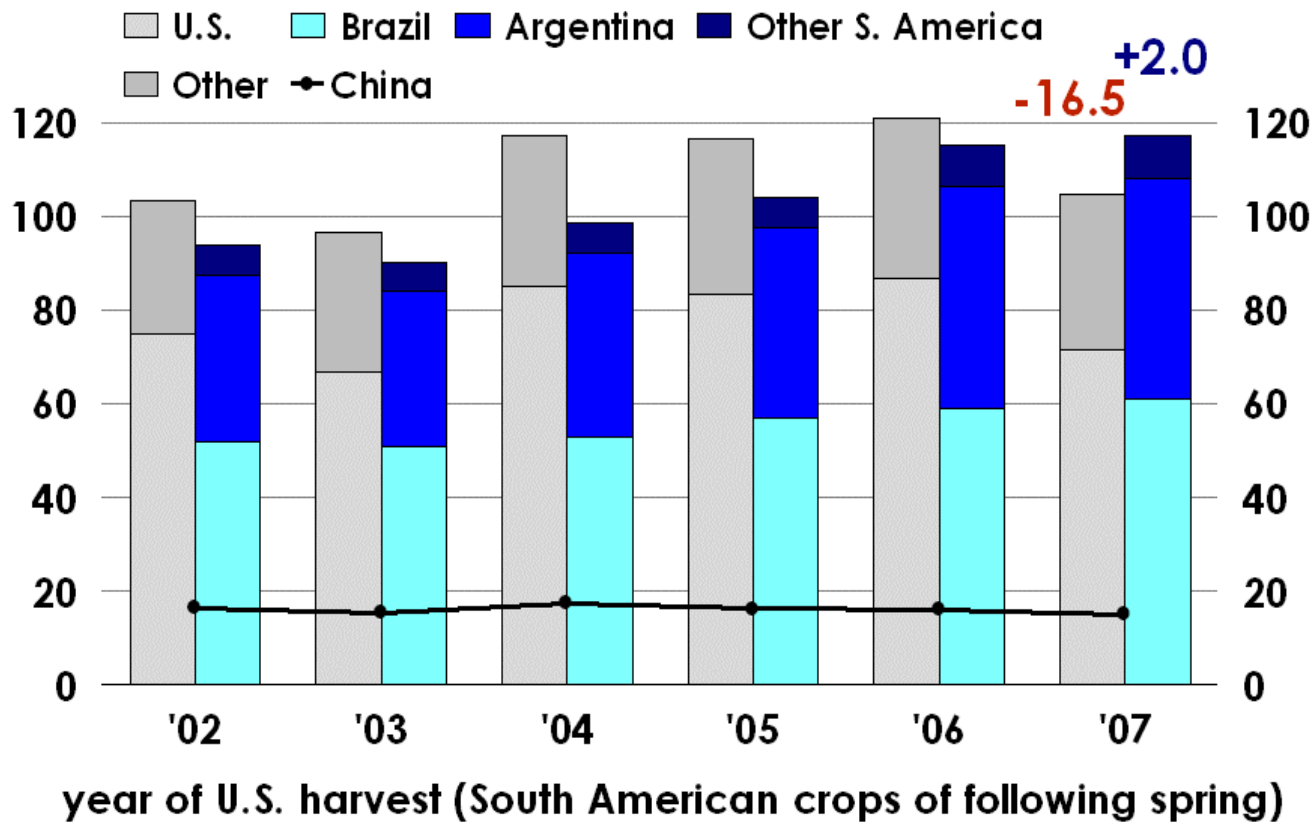


Source: USDA: Wheat and Coarse Grains on campaign year; Oil World Oilseed Stocks

World oilseed stocks are expected to decline and decline as a percent of usage while grain stocks are also declining.

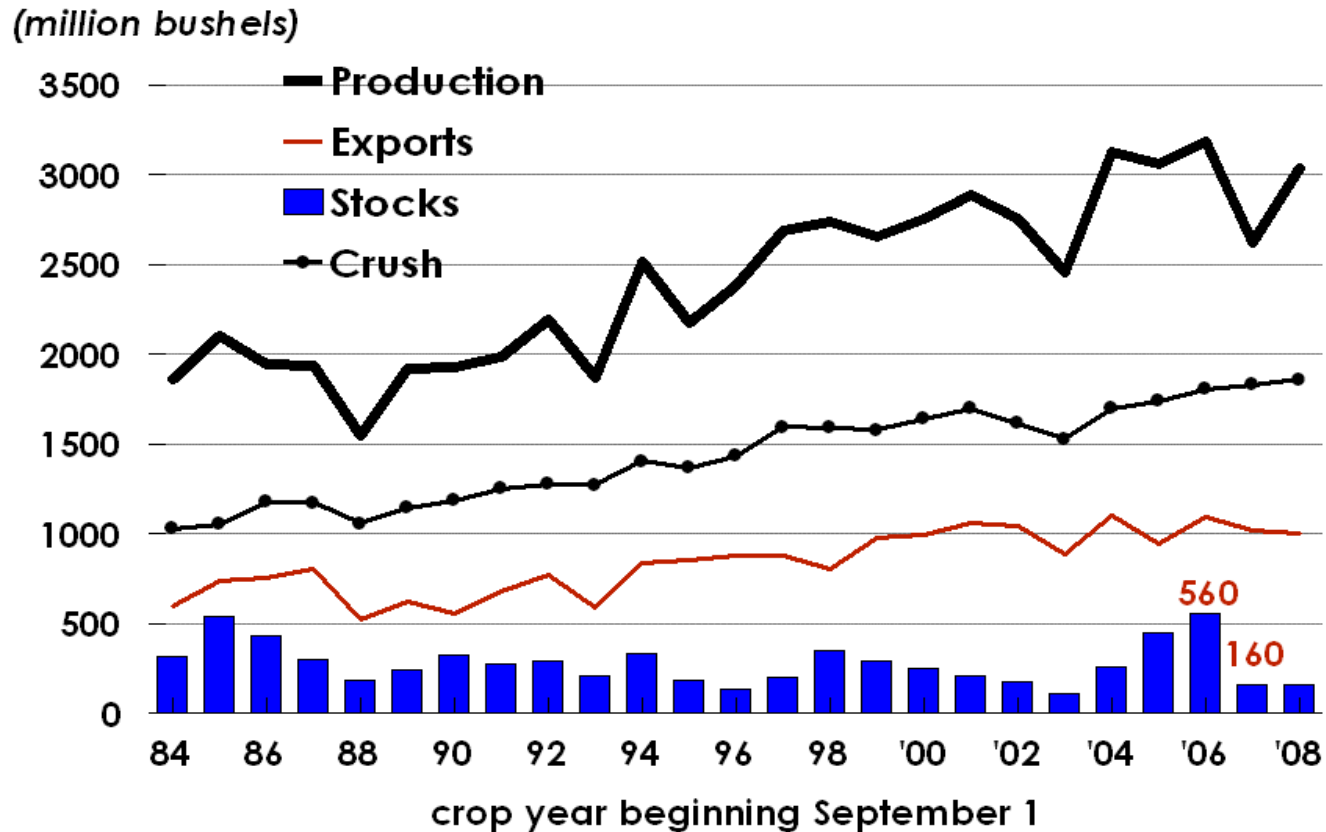


# S. hemisphere soybean production to exceed N. hemisphere for first time



Source: USDA

# U.S. soybean stocks to be depleted in 2007/08; 7.5 mil additional acres needed in 2008/09 to maintain pipeline supply – with no weather problems



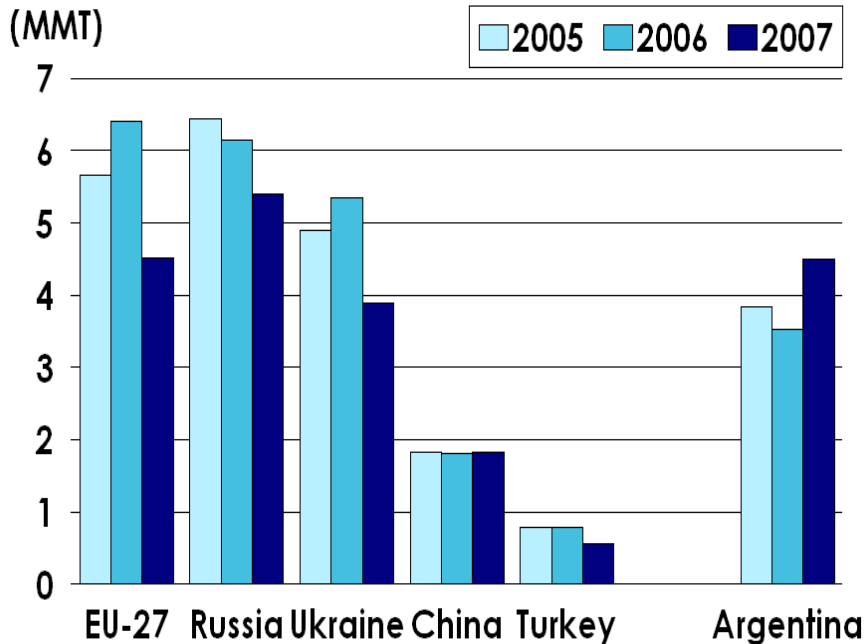
Source: USDA; Prudential Bache Commodities, LLC

Minimum increase in plantings of 12% needed in 2008, largest increase since 1977



# Lower plantings, drought decimate sunflowerseed crop in key N. hemisphere producers

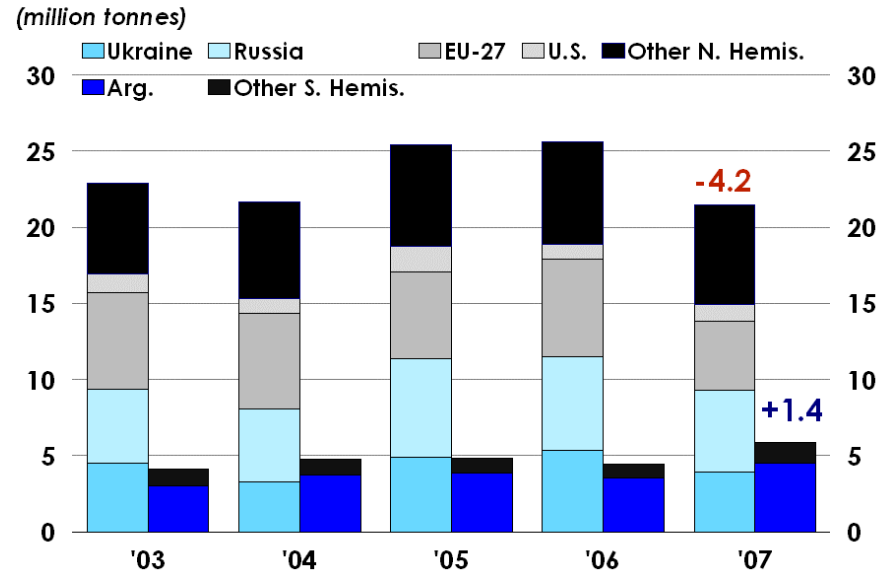
World Sunseed Production -- Key Producers



Source: Oil World; Prudential Bache Commodities, LLC

Drought in E. and S. Europe resulted in sharp decline in world sunseed crop. This will increase consumption of rapeseed oil for food. Sun oil prices have surpassed rapeseed oil prices in Europe on their way to record highs. Plantings in Argentina are off to a slow start.

World Sunflowerseed Production



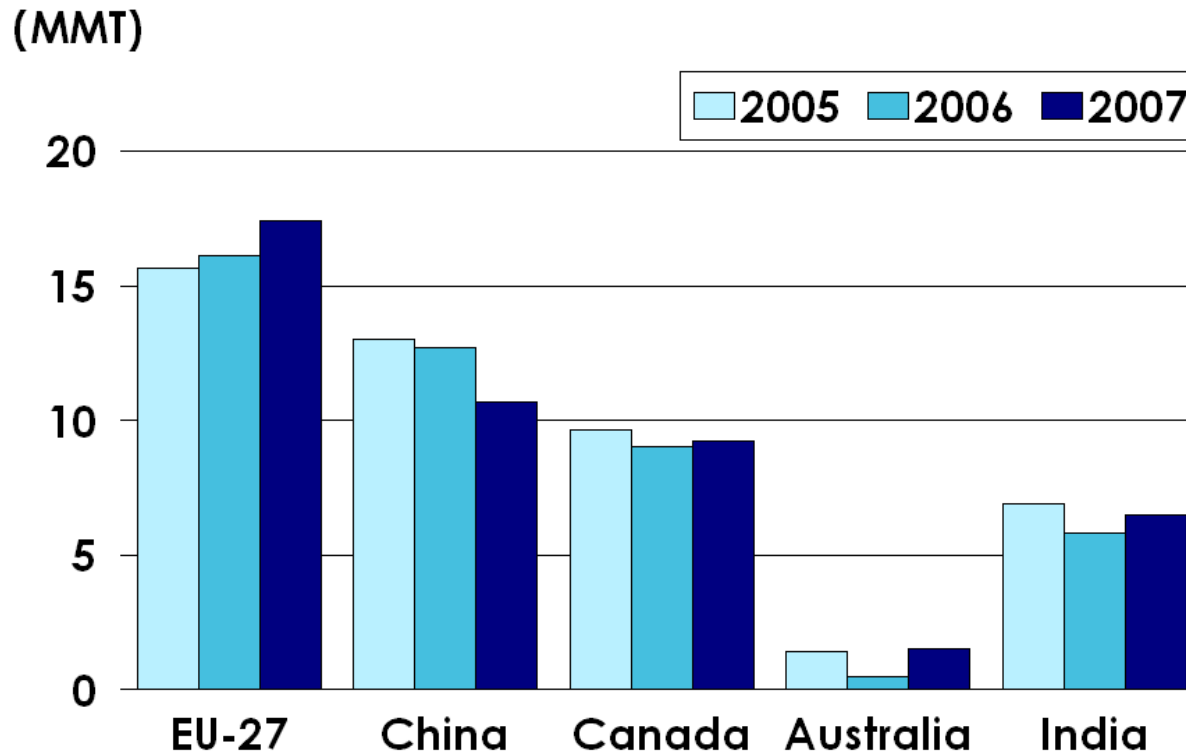
year of U.S. harvest (South American crops of following spring)  
Source: Oil World; Prudential Bache Commodities, LLC

## Decline in fall-harvested crops cannot be offset by spring-harvested crops



# World rapeseed production increasing, but less than earlier expected

## World Rapeseed Production -- Key Producers



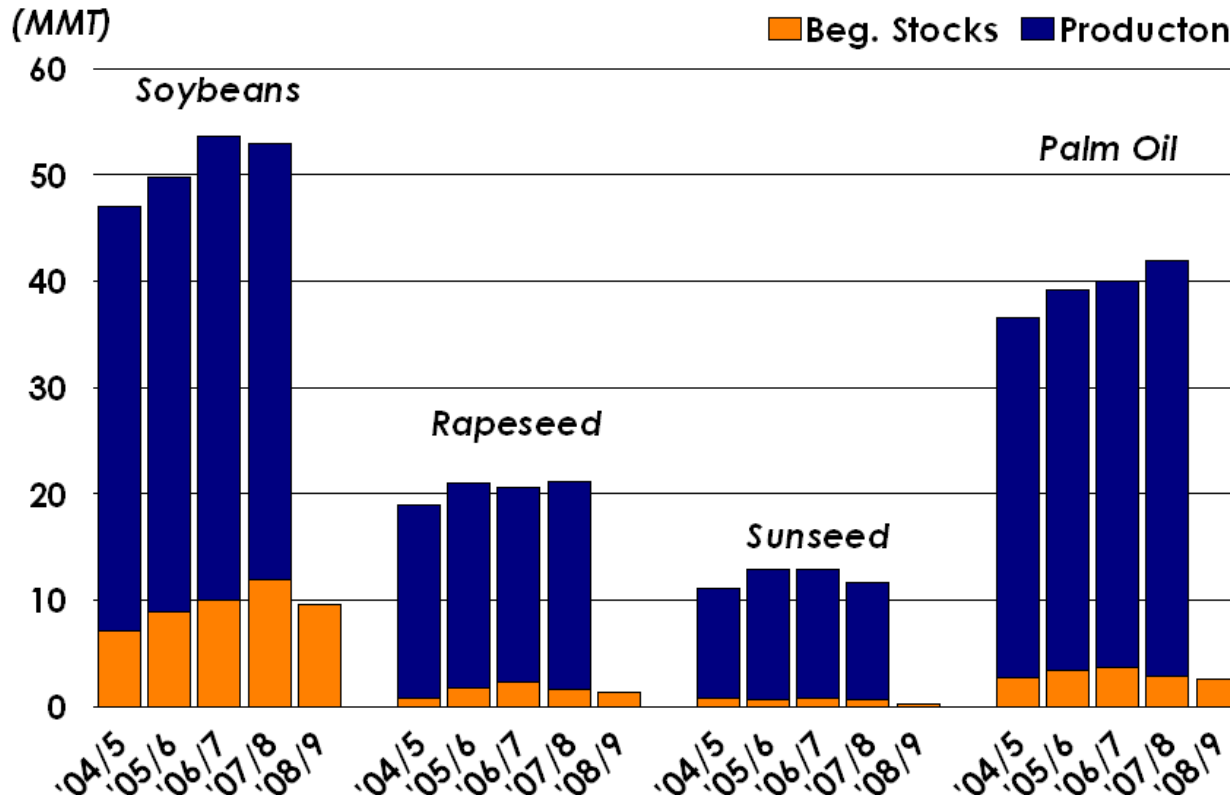
Source: Oil World; Prudential Bache Commodities, LLC

World rapeseed production is expected to increase, but is might be little changed if the low estimates of China's crop are correct.



# Draw down in oilseed stocks will permit larger crush – at expense of next year’s stocks

## Oil Equivalent of World Oilseed Supplies



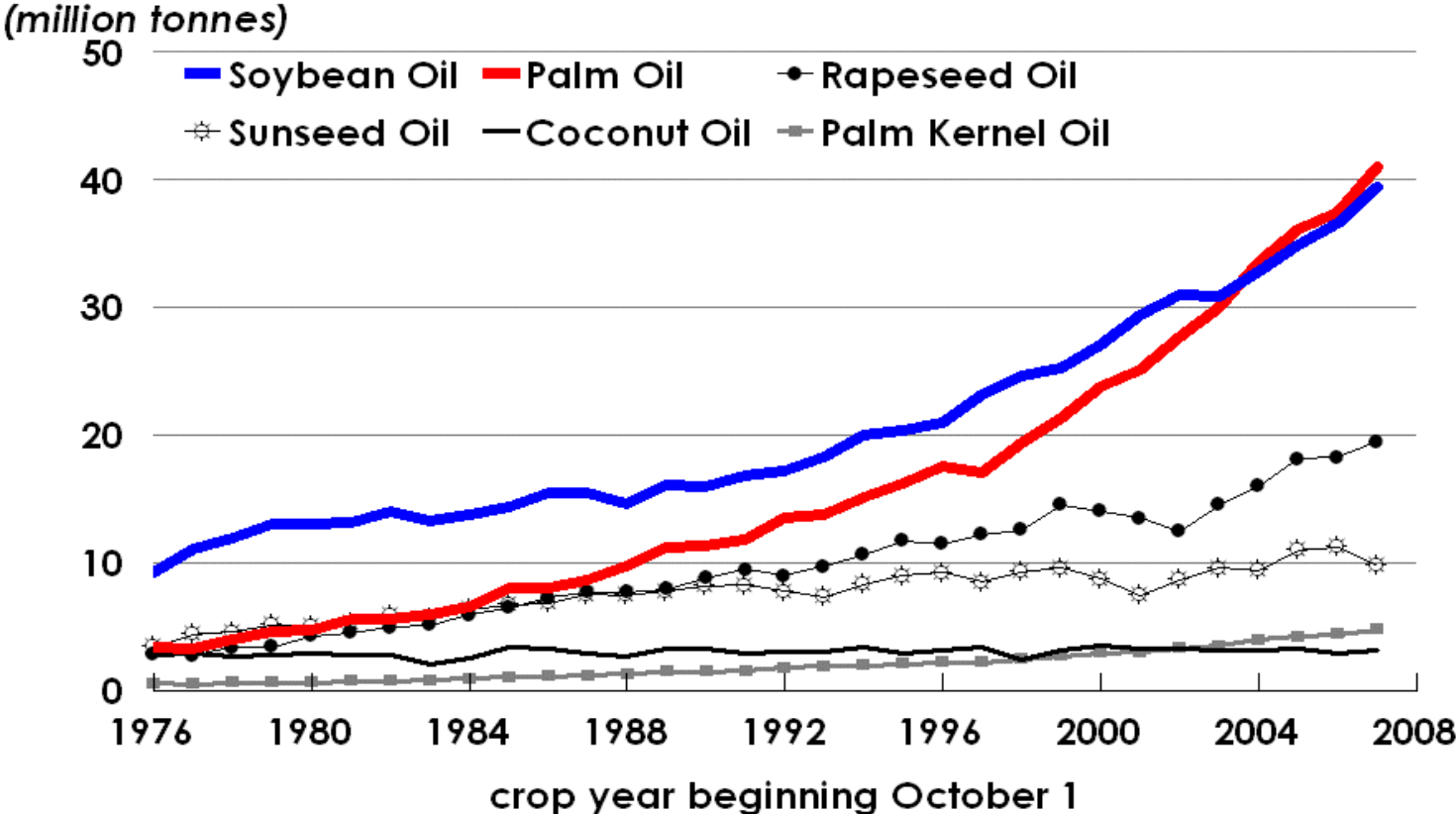
Source: USDA; Prudential Bache Commodities, LLC

conversion factors: soybeans 18.5% oil, rapeseed 39.5% and sunseed 40.5%

Crush will be able to increase this season if oilseed stocks are depleted.



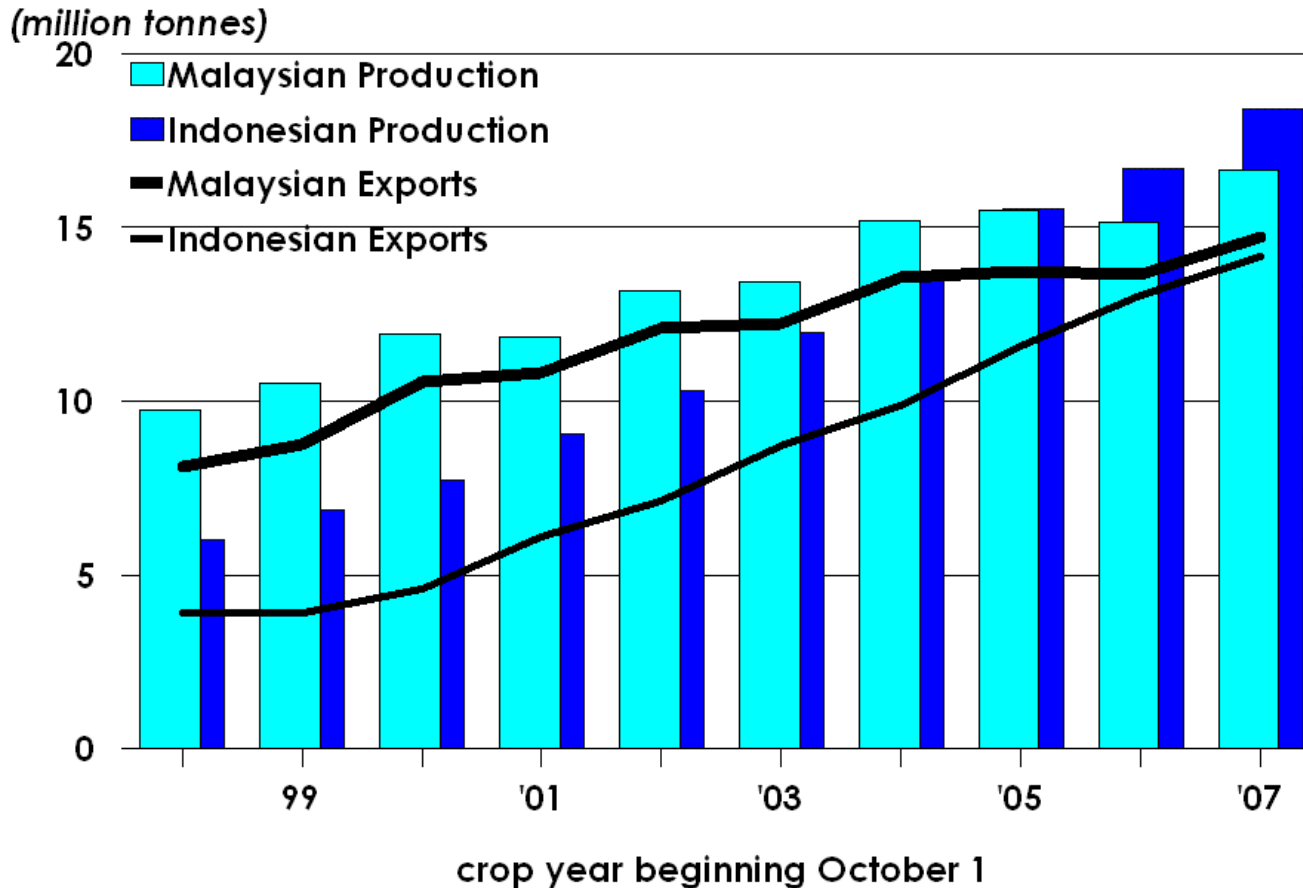
# World vegetable oil production to increase, led by palm oil



Source: Oil World



# Palm oil production to increase



Malaysian palm oil output to recover after rare decline; although beginning down 0.5 MMT

Indonesian exports may soon exceed Malaysia's depending on world price and export policy

Source: Oil World; Malaysian Palm Oil Board; Prudential Bache Commodities, LLC

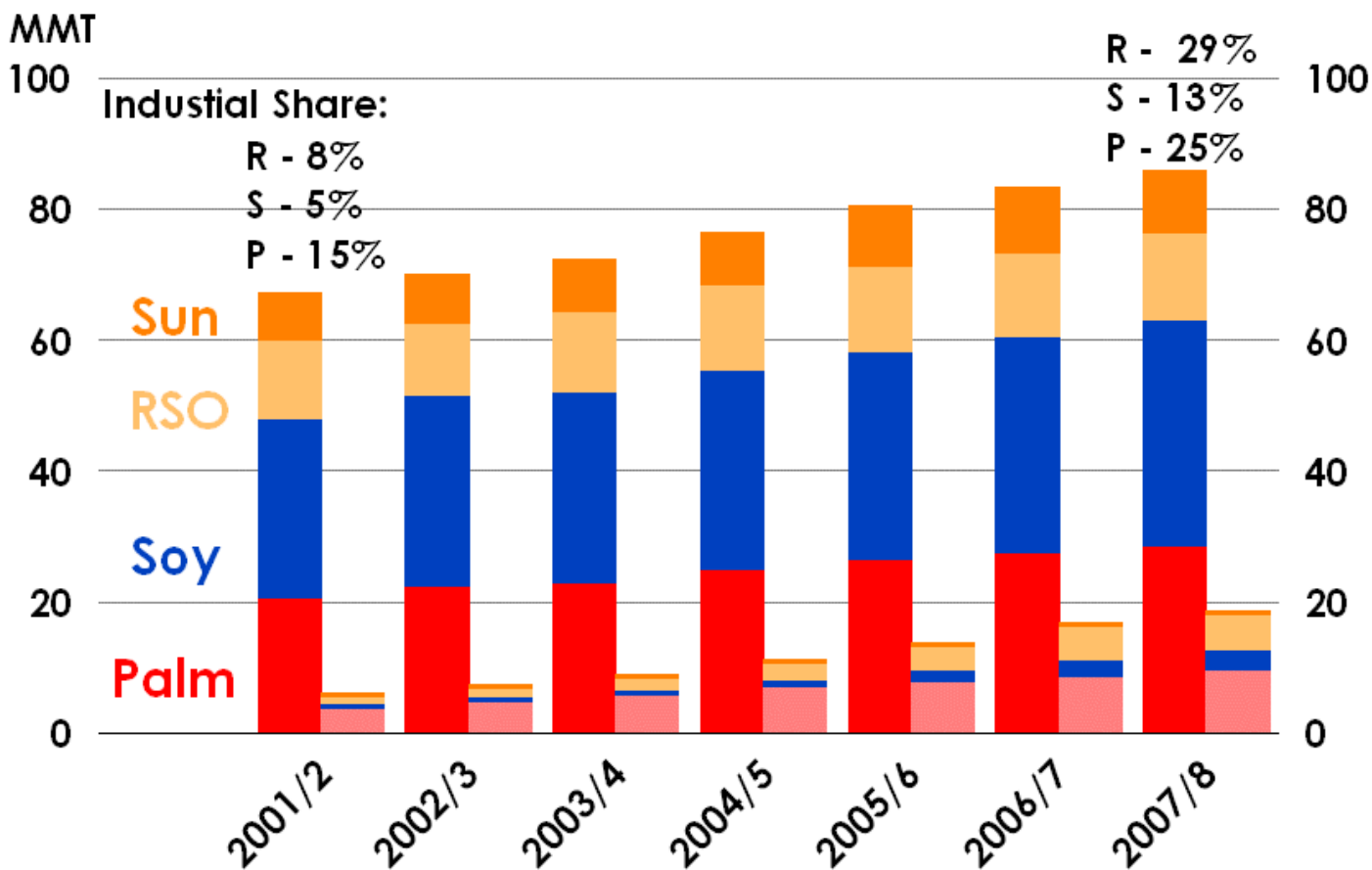
Palm oil is the bright spot in the world oil supply outlook. Domestic usage is increasing but most of production increase still goes to exports. Indonesia's export tax not onerous.



# Consumption Highlights

- **Food vs fuel**
  - Food use less price elastic
  - Humanitarian concerns
  - Policies/mandates can change
- **Impact of India and China**
  - Together 33% of world soy oil imports and 31% world palm oil imports
  - Concerns with inflation
  - Election in India
- **Substitute for sunoil**

# World industrial usage of key vegetable oils increased to **17%** of total in **2006/07** from **8%** in **2001/02**



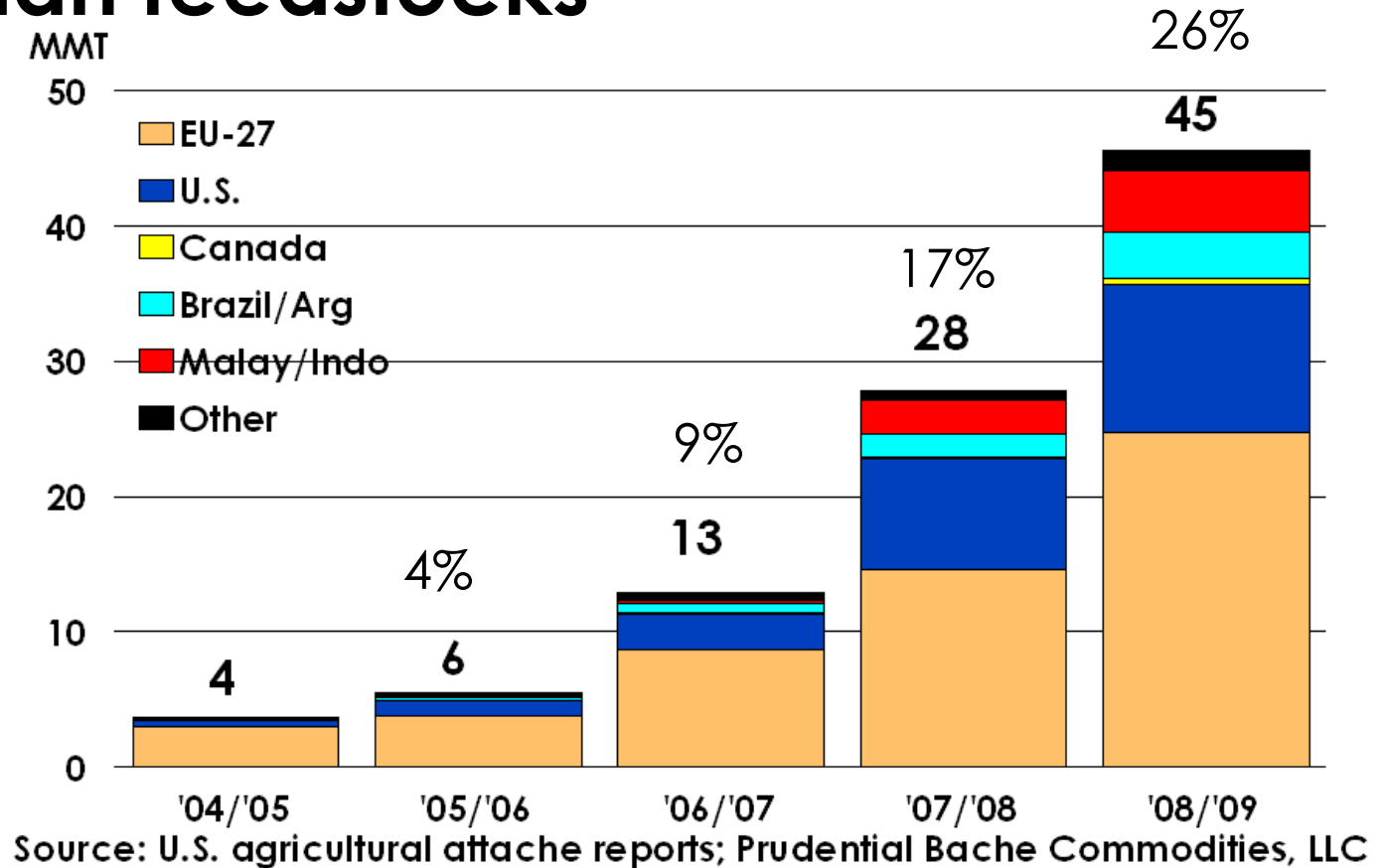
Source: USDA

Industrial usage of the 4 top oils was 8% of total use in 2001/02; forecast to be 22% in 2007/08. Food up 2.5 MMT; Industrial up 1.1 MMT



# World biodiesel capacity growing faster than feedstocks

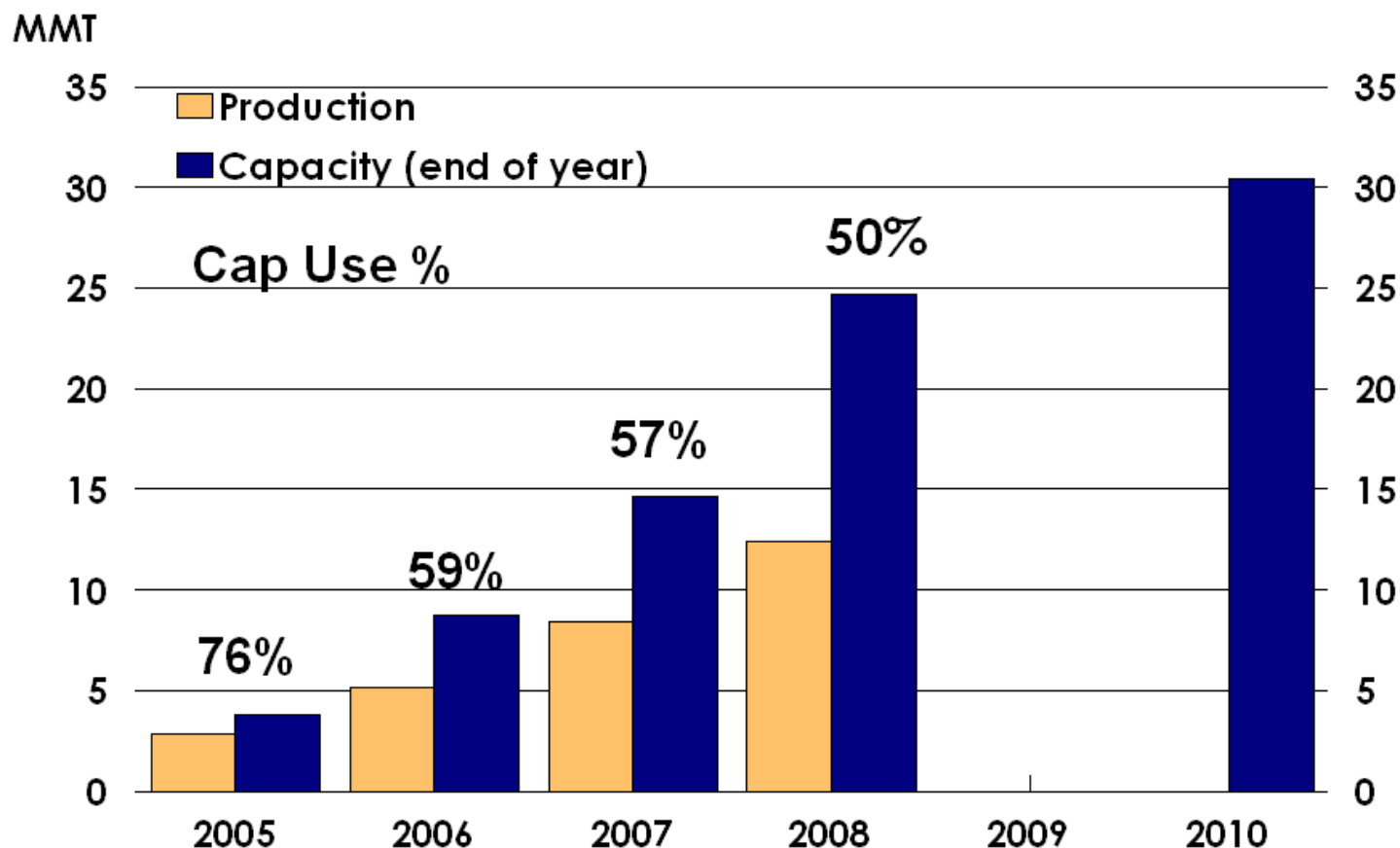
Oil World estimates show an average increase in 17 Fats and Oils output past 5 years of 6.5 MMT/year. Capacity in 2006/07 of 13 MMT=9% of production, but increase of 7 MMT exceeded increase in production. 2007/08 cap of 28 MMT = 17% of F&O. 45 MMT is about 26% of expected 2008/09 production. Ending stocks of 17 F&O this year estimated at 15.5 MMT.



# **Cautions** with Biodiesel Capacity

- **Not all announced projects built**
- **Capacity utilization declining - sharply**
- **A mix of feedstocks will be used**

# EU-27 biodiesel capacity continues to increase; rapeseed oil is over 70% of feedstock

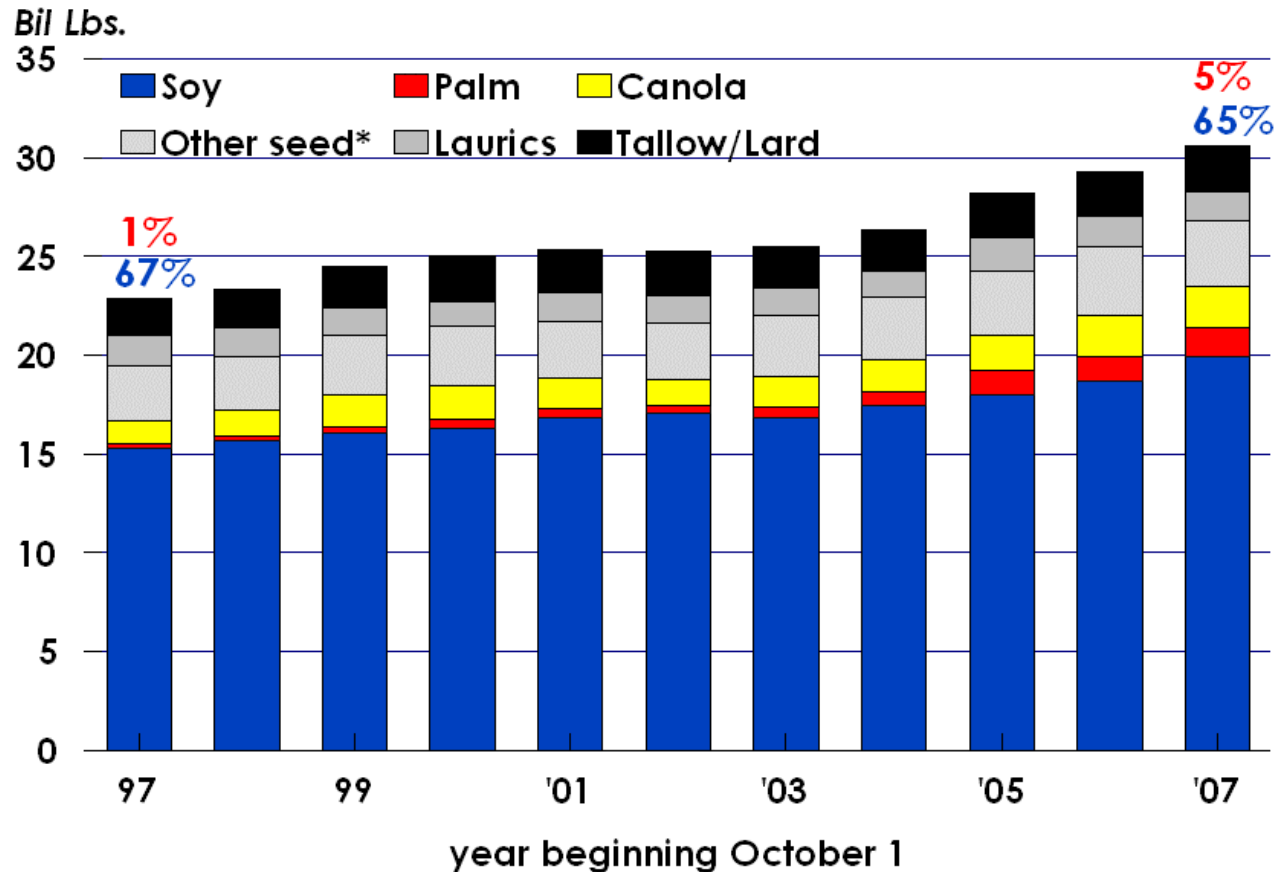


Source: U.S. agricultural attache

EU target of 5.75% biofuel by 2010, not likely to be reached. The proposal for a binding 10% target for biofuel in transport by 2020 (by 2010 in France) is expected to spur imports of biodiesel.



# Soy oil retains two-thirds share of U.S. domestic veg oil usage; palm oil use increasing

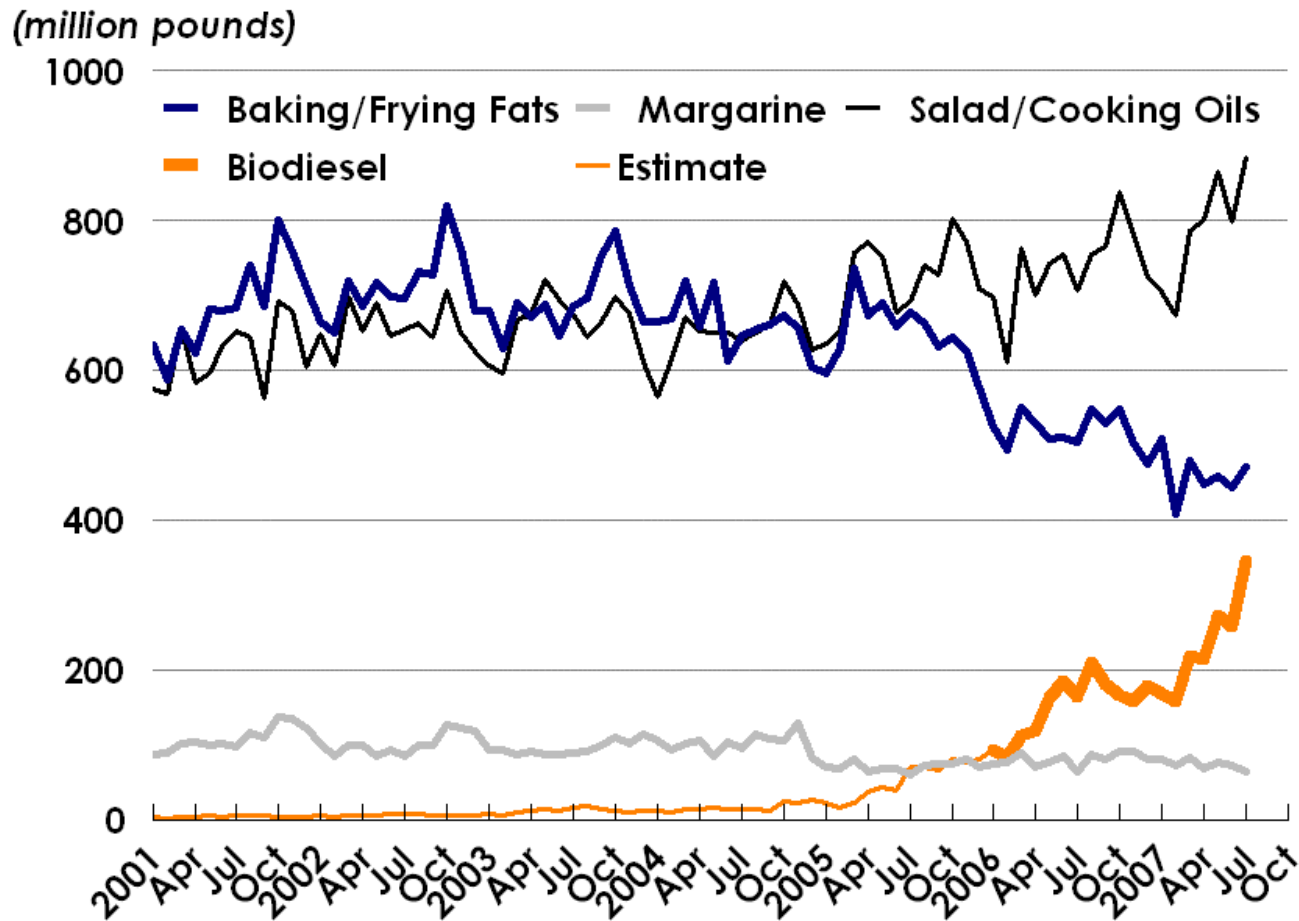


\*Corn, Cottonseed, Peanut, Sunflower, Safflower; Source: USDA

Soybean oil is still the dominant oil in the U.S. but palm oil and canola oil are making inroads.



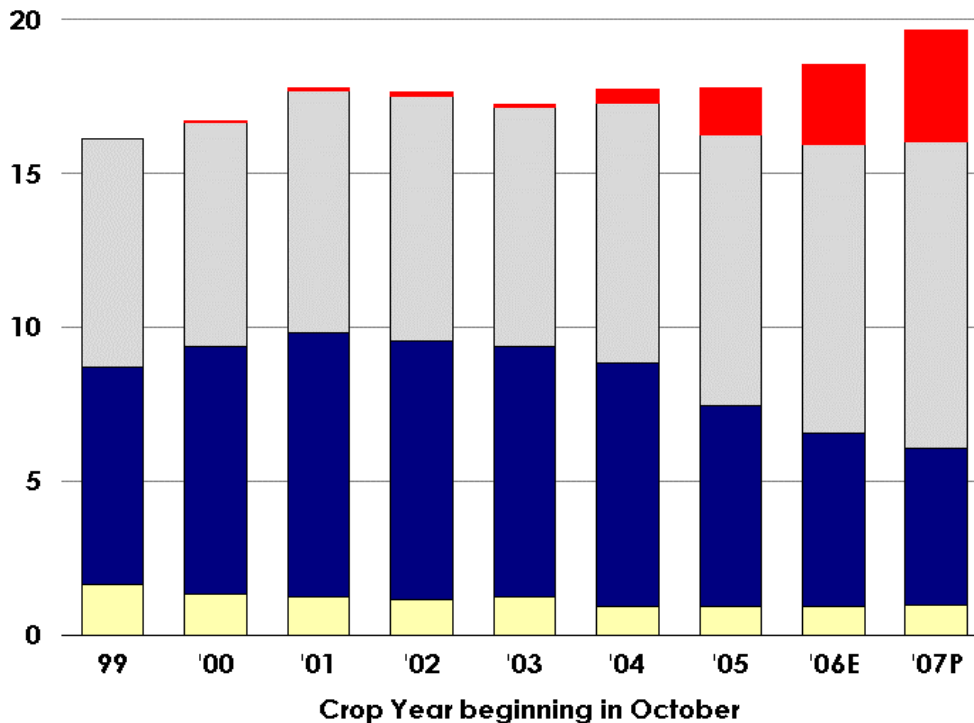
# Impact of trans fats on SBO use offset by increasing demand for methyl ester



Source: Census Bureau

# Usage for biodiesel driving growth in U.S. domestic soybean oil usage

(billion pounds)



Source: Census Bureau; Prudential Bache Commodities, LLC

**M.E. +38% (+69%)**

**SCO +6% (+6%)**

**BFF -9% (-14%)**

**Marg +5% (+3%)**

Increase in use for methyl ester and decline in use for baking and frying fats may moderate in 2007/08. Total usage is growing.



# U.S. biodiesel capacity expanding sharply, but cap use and SBO share declining

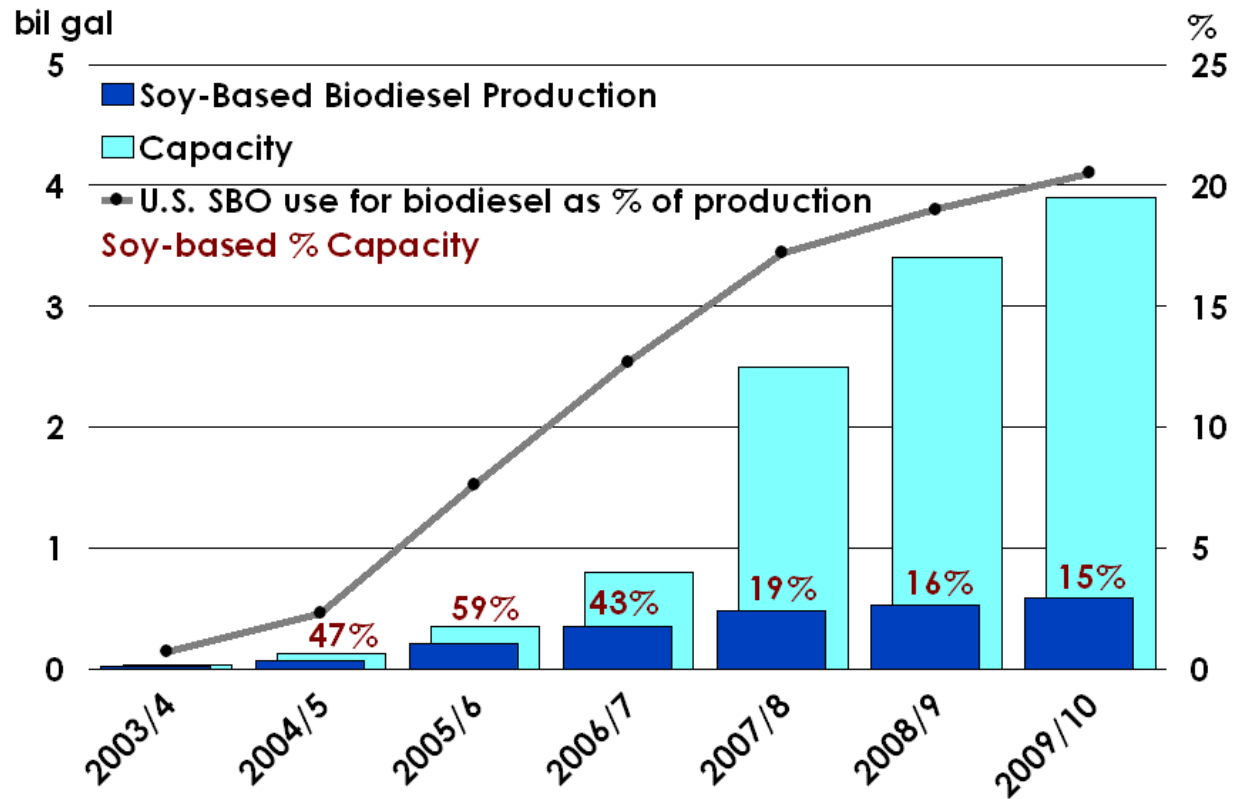
## SBO Use for Biodiesel:

'05/06 1,543

'06/07 2,600

'07/08 3,600

Mil lbs

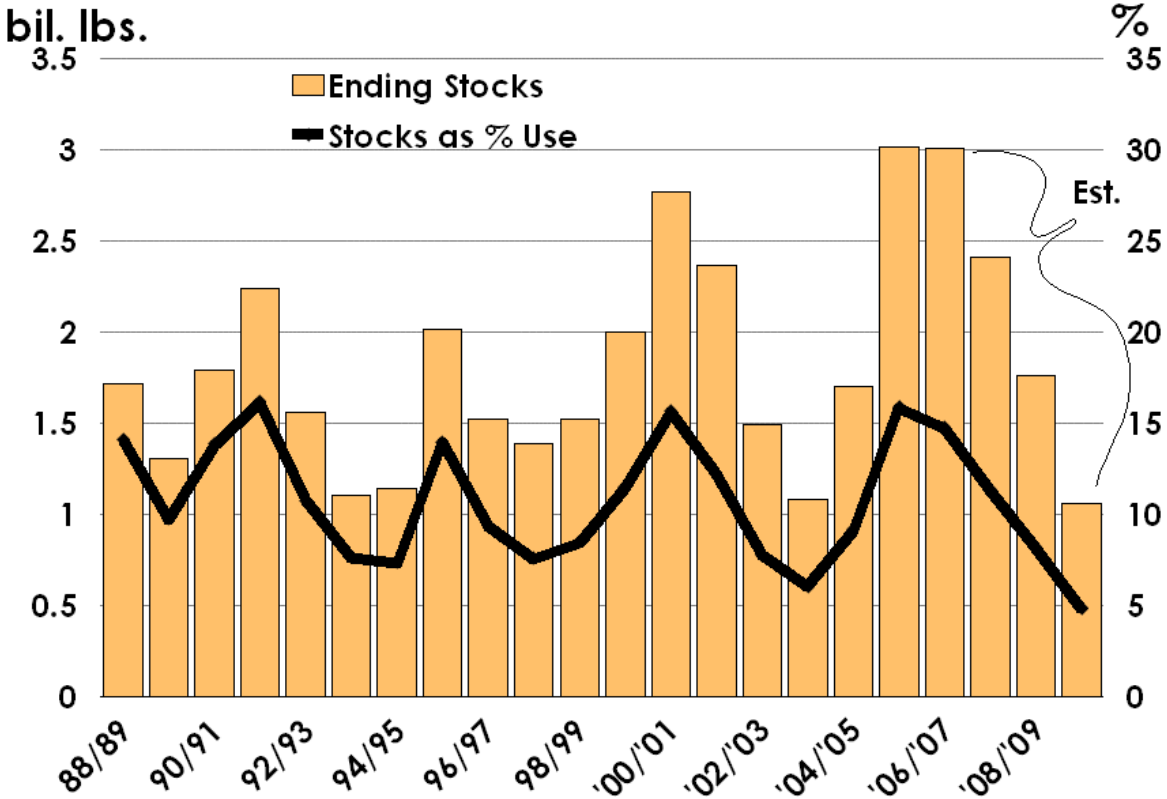


Source: Census Bureau; Prudential Bache Commodities, LLC

Even with conservative capacity figures and sharp drop in estimated soy oil usage versus capacity, consumption is expected to increase sharply – by another 1 bil lbs this season, and possibly by more.



# U.S. soy oil stocks expected to begin regime of decline in 2007/08



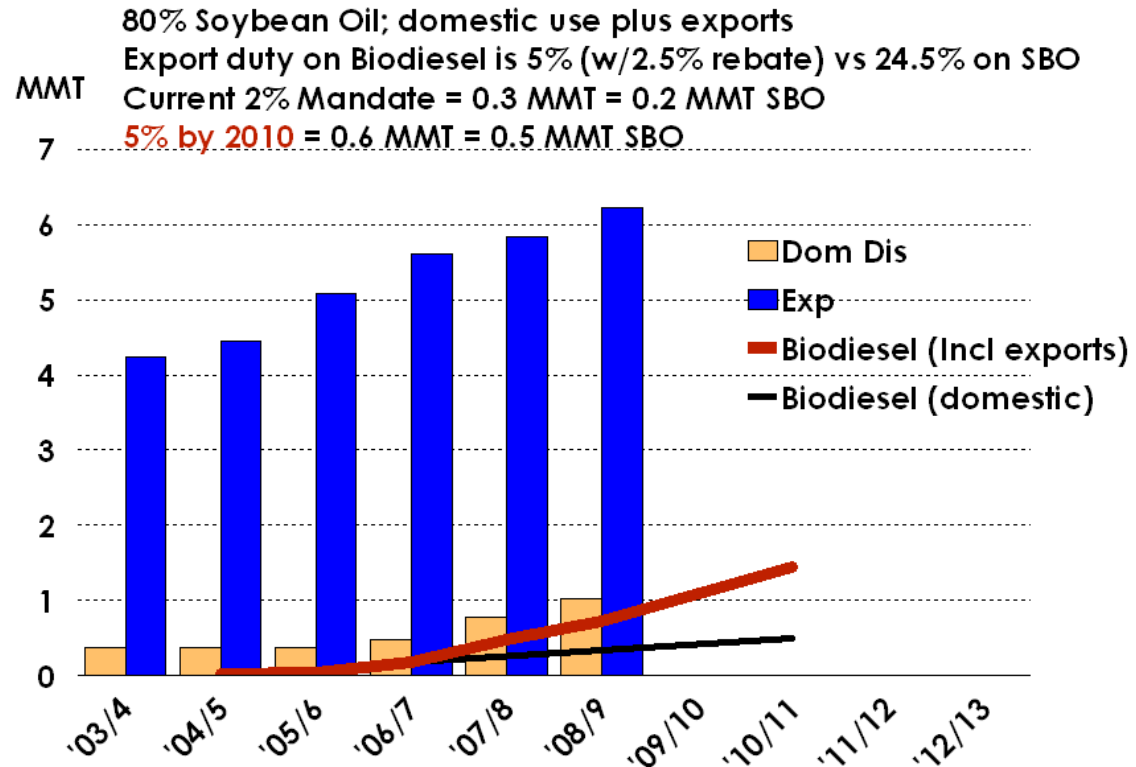
Source: USDA; Prudential Bache Commodities, LLC



# Biodiesel exports could replace some Argentine soybean oil exports

Argentina is the world's largest soybean oil exporter, but increased production of biodiesel could also hamper its exports. The domestic biodiesel requirements are expected to raise usage of soybean oil, at the expense of exports. However, the real story may be in exports of biodiesel. Some have estimated that usage of soybean oil for biodiesel fuel may reach 1 MMT by 2009, equivalent to about 18% of current exports, since the export tax on biodiesel is only 5% versus 24% for soybean oil.

## Argentine Soybean Oil Usage



Source: USDA; U.S agricultural attache; Prudential Bache Commodities, LLC

# Increasing domestic usage for biodiesel in Brazil could reduce SBO exports

## Brazilian Soybean Oil Usage

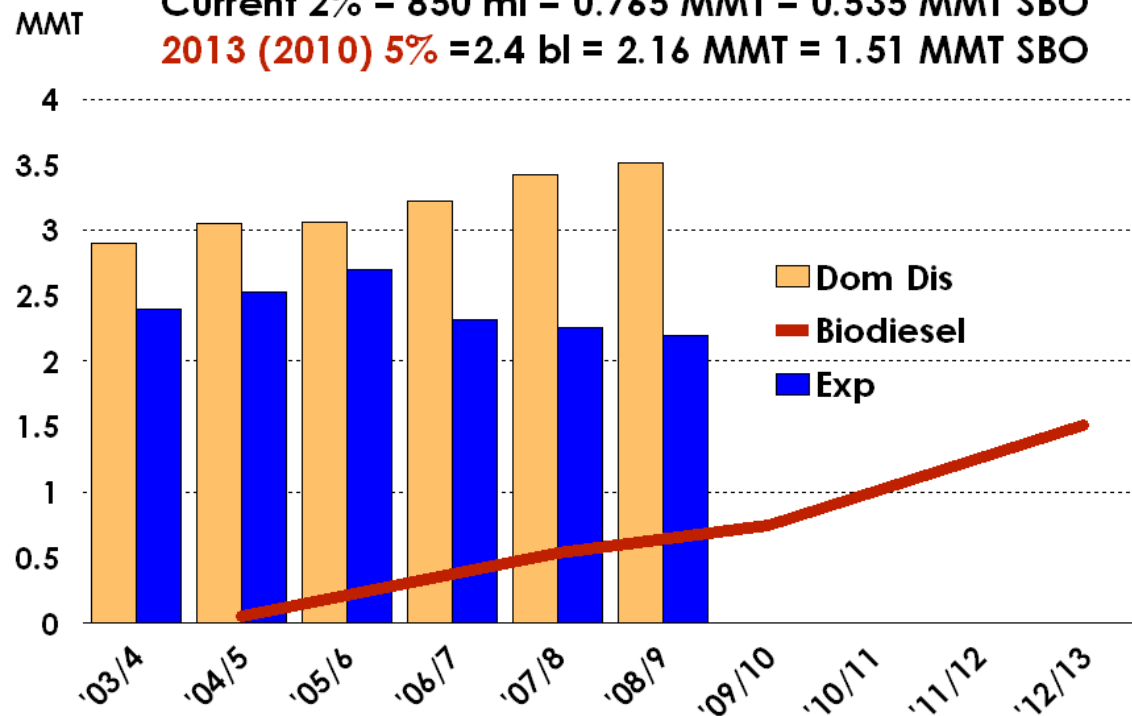
70% of Biodiesel from soy

Current 2% = 850 ml = 0.765 MMT = 0.535 MMT SBO

2013 (2010) 5% = 2.4 bl = 2.16 MMT = 1.51 MMT SBO

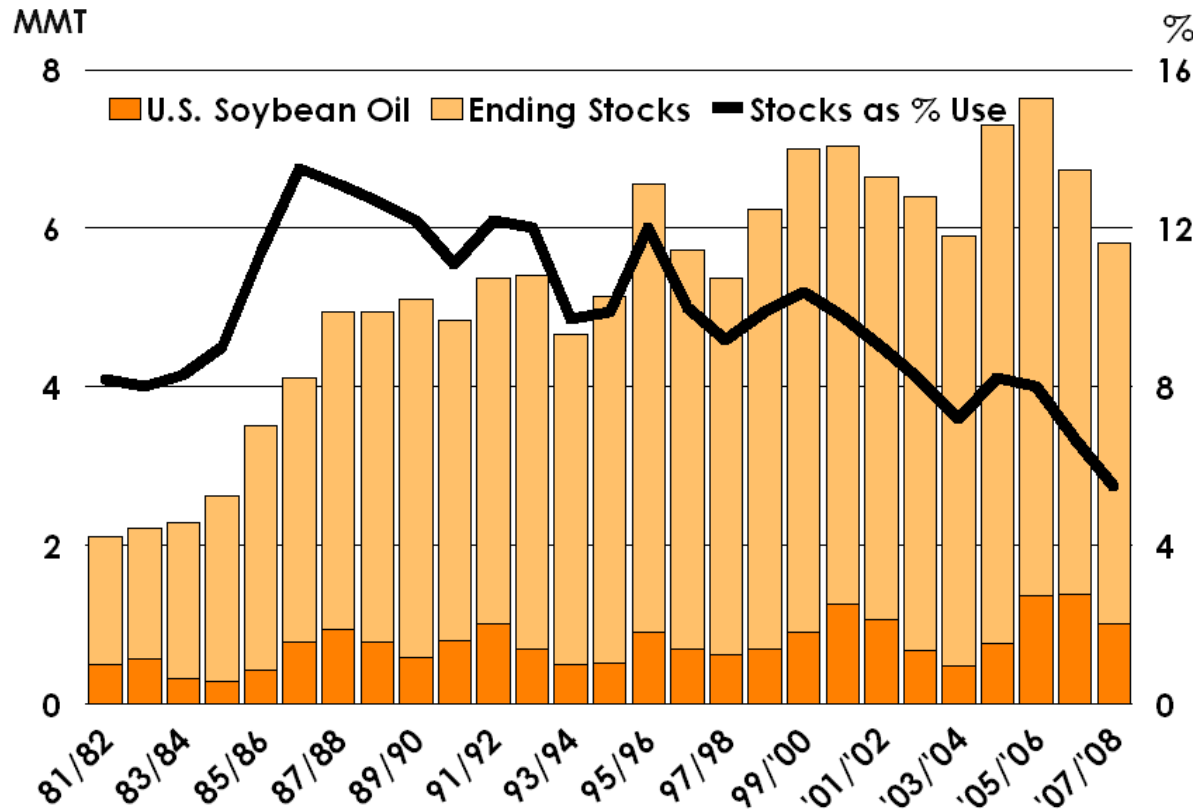
Brazilian domestic usage of soy products is much larger than Argentina's, partly because Brazil's population at 187 million is much larger than Argentina's 39 million.

The combination of stagnating crush and increased domestic oil usage for biodiesel fuel, to meet mandated blending levels, is likely to reduce Brazil's soybean oil export availabilities.



Source: USDA; U.S. agricultural attache

# World stocks of top 4 oils declining; stocks/use ratio lowest in over 25 years



Source: USDA

Oil World is also showing stocks/usage ratios the lowest back through at least 1976/77 for the 4 oils, 8 oils and 17 fats and oils.



# **Biodiesel** is here to stay

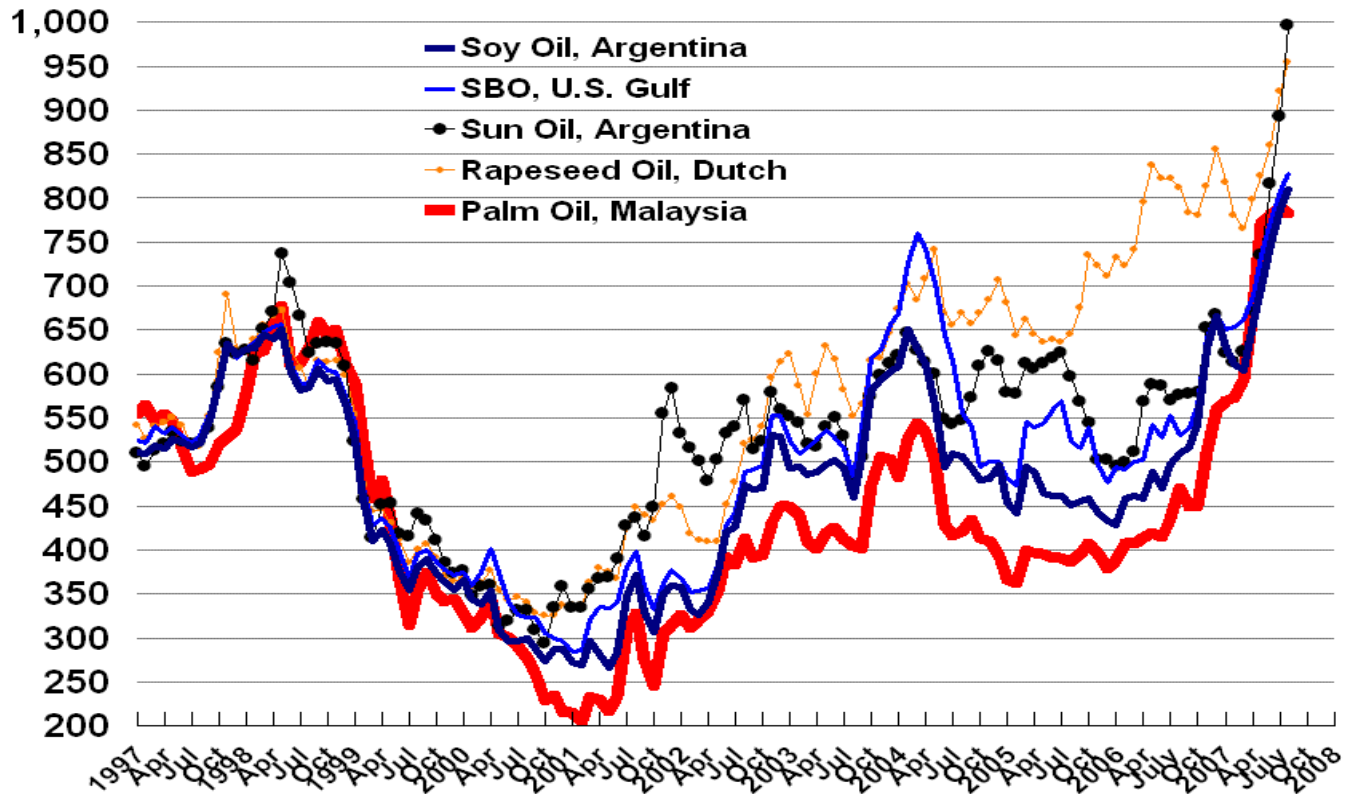
- **Edible oil easier to use because of ready availability but supply can be quickly absorbed.**
- **Leads to development of new technologies and feedstocks**
- **Puts pressure on resources such as land and water**
- **Seek balance of consumption and environmental needs**

## **Conclusion (cont.)**

- **Biodiesel is increasing domestic usage in world's largest exporters**
- **Risk to countries importing oil for food**
- **Sun oil is premium and unlikely to see large use for biodiesel**
- **Biodiesel likely to provide new, higher floor for edible oil prices**
- **Prices are already high but the supply crunch has not yet been seen**

# World oil prices are still in a bull market

Monthly Average Prices for World Vegetable Oils  
(dollars per tonne)



Source: Oil World

**Thank You For Your Attention**

**Anne Frick**

**Prudential Bache Commodities, LLC**



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