Global agricultural markets: Situation and Outlook

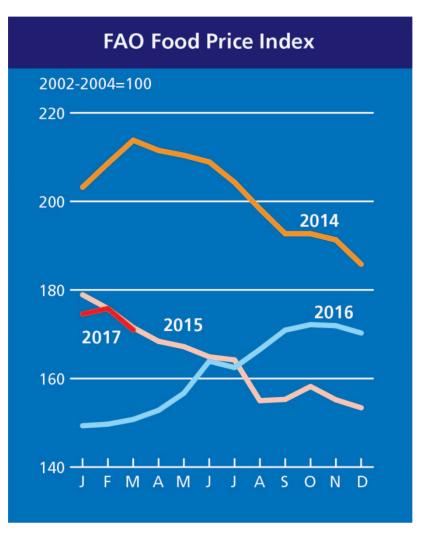


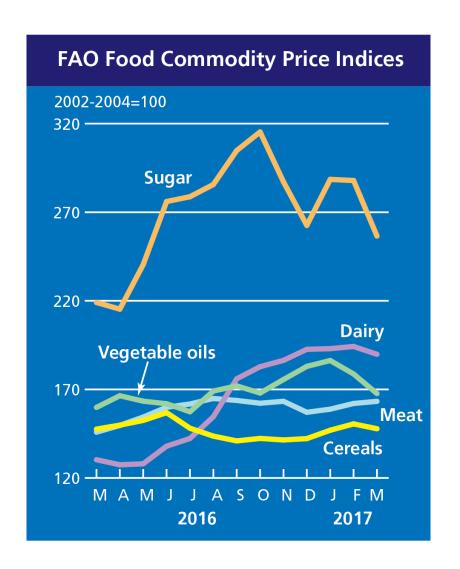
Dr. Josef Schmidhuber

Food and Agriculture Organization of the United Nations (FAO)

A. The current market situation

World market prices: -2.8% since January 2017, but +13.4% above the average of 2016.



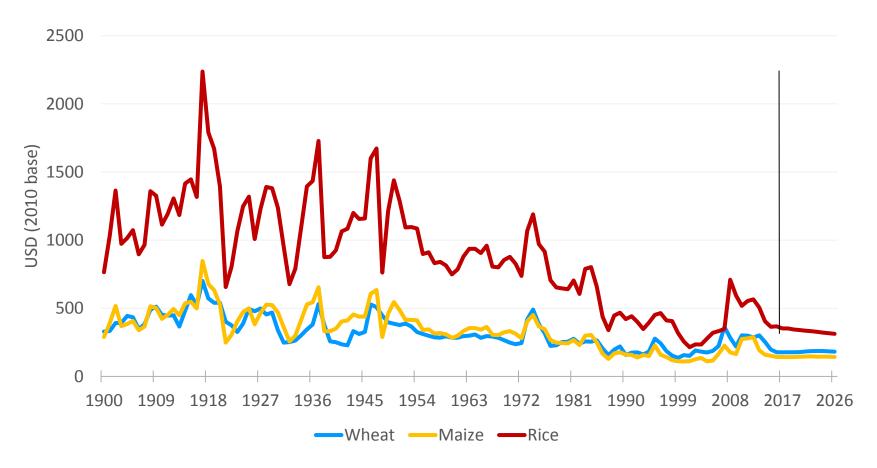


... but way below the peak levels attained over the past decade

Food Prices Indices	Peak values		March 2017	Change: March 2017 over peak values	
				%	
FAO Food Price Index	Feb-2011	240	171	-29	
Cereals	June-2008	268	148	-45	
Oils	Feb-2011	287	168	-42	
Sugar	Jan-2011	420	257	-39	
Meat	Aug-2014	212	163	-23	
Dairy	Feb-2014	275	190	-31	

Quelle: FAO

Long term trend of real commodity prices

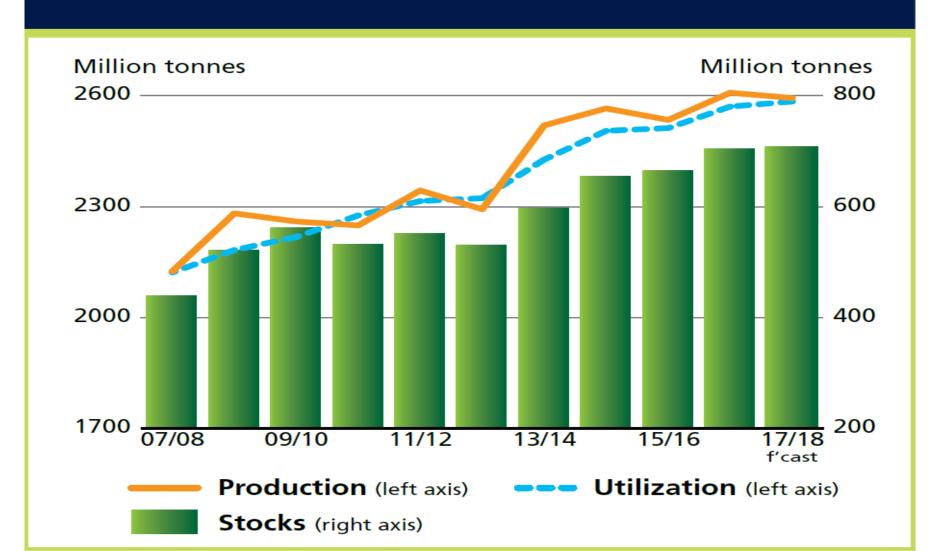


- Prices follow the long run declining trend, with an average price decrease of about 1.5% per year in real terms
- Prices of agricultural commodities are subject to considerable volatility and may show large deviations from their long-term trends for an extended period of time
- Prices eventually returned to their long-term trend

The cereal markets

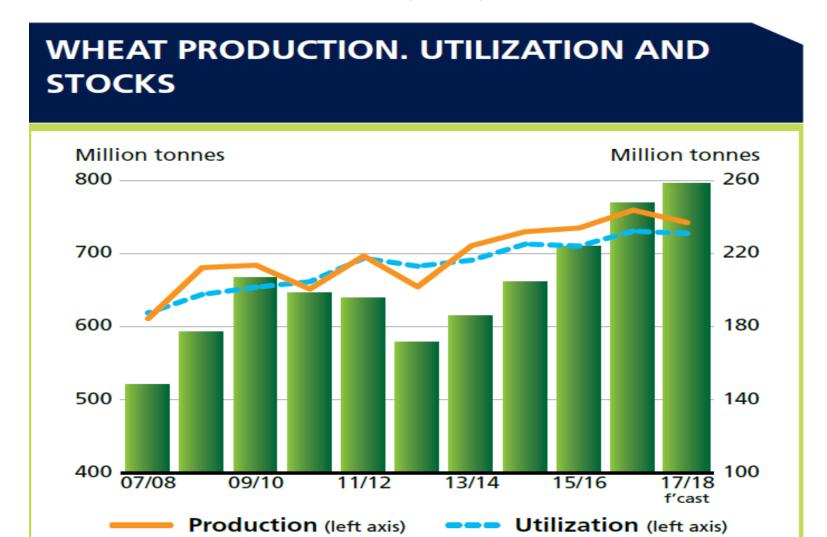
Replenished cereal stocks

CEREAL PRODUCTION, UTILIZATION AND STOCKS



Wheat stocks are particularly high ...

... at a 15 year peak



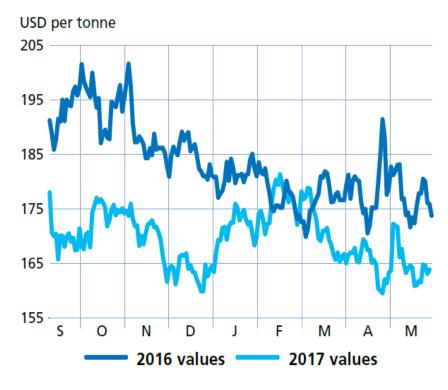
Stocks (right axis)

... high stocks weigh on prices, particularly for wheat

ICG wheat price index

CBOT Futures for wheat





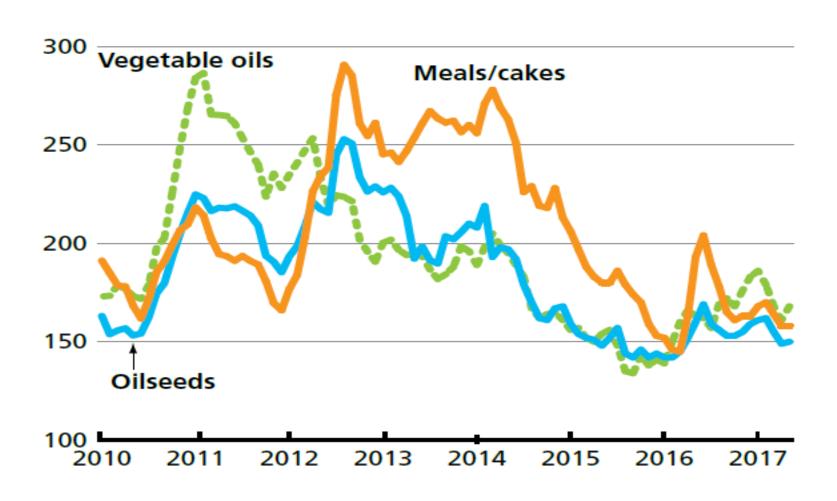
What do high stocks mean for the medium-term?

- 1. Global: Stock replenished for cereals, particularly for wheat.
- Demand for cereal stocks over the past 10 years:
 270mmt, this kind demand is no longer available for the next 10 years.
- 3. International shocks can easily be buffered, El Nino had practically no impact on grain prices
- 4. China: Lower stocks for maize, lower barley imports from the EU, lower sorghum imports from the US, more domestic soybean production, lower soybean and coarse grain imports in the future?

The markets for oilseeds and products

Prices for oilseeds and products stabilised in 2016

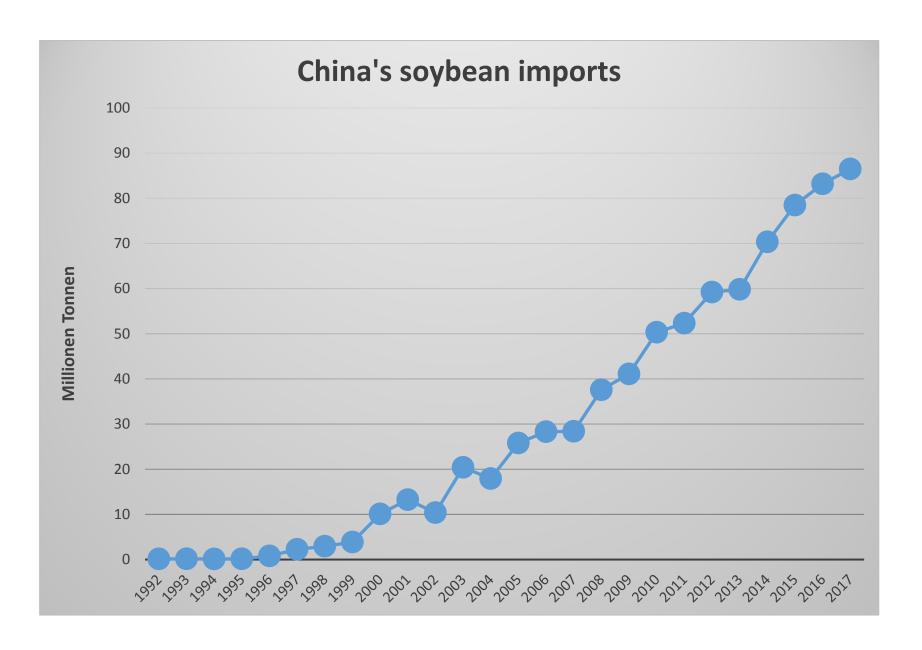
Indices for oilseeds, vegetable oils and cakes/meals



What can we expect from China?

- 1. Slower overall economic growth, slower population growth, cont. urbanisation
- Strong focus on food security and basic foodstuffs in the past, wheat, rice, maize
- 3. Ever more urgent resource problems, water scarcity, land erosion, etc.
- 4. Extremely high stock levels, particularly for maize. WTO dispute settlement panel, ethonol production and exports
- 5. Still high procurement prices for rice and wheat, but sharply lower for maize
- 6. Pig industry goes through a period of structural change, higher feeding intensities, but also improved feeding efficiencies.
- 7. Lower stocks for maize, lower barley imports from the EU, lower sorghum imports from the US, more domestic soybean production, lower soybean and coarse grain imports in the future?

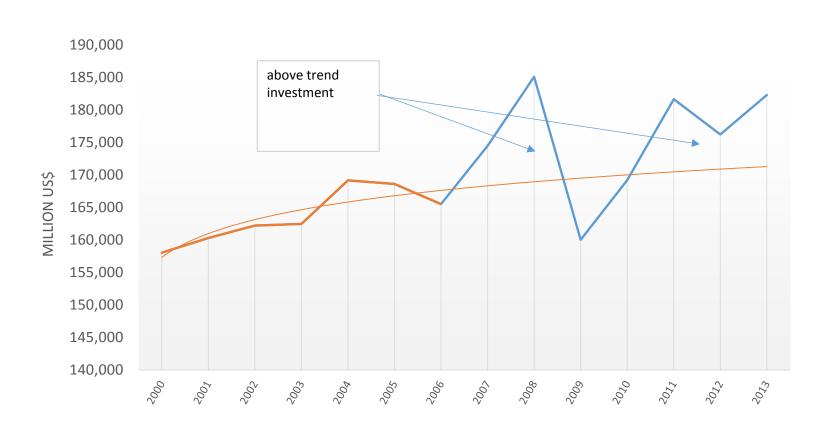
China and the world market for soybeans



From investment overhang to market hangover

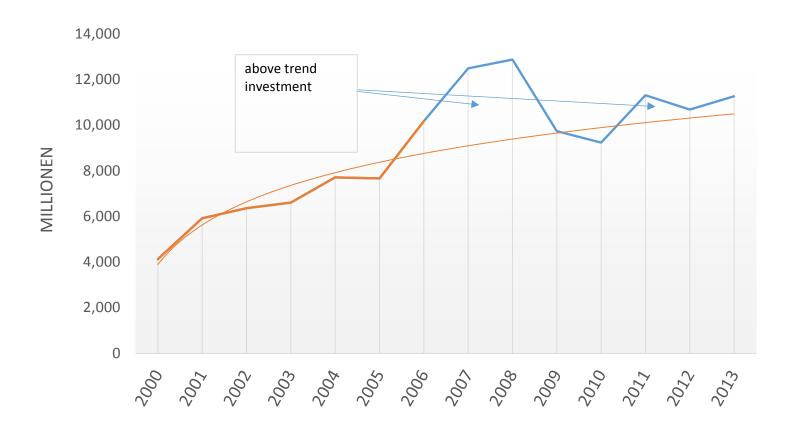
Industrial countries have to work down a considerable Investment overhang

GFCF in Agriculture, forestry and fishery (constant 2005 USD)



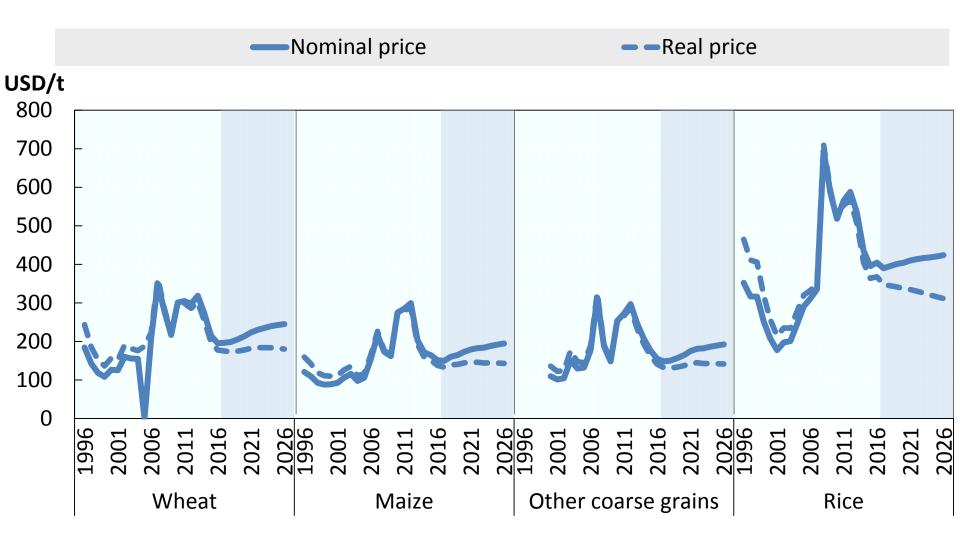
CIS countries have significantly stepped up their investment after the price hike

Gross investment in Kazakhstan, Russia, Ukraine:
GFCF in Agriculture, forestry and fishery, constant 2005 USD

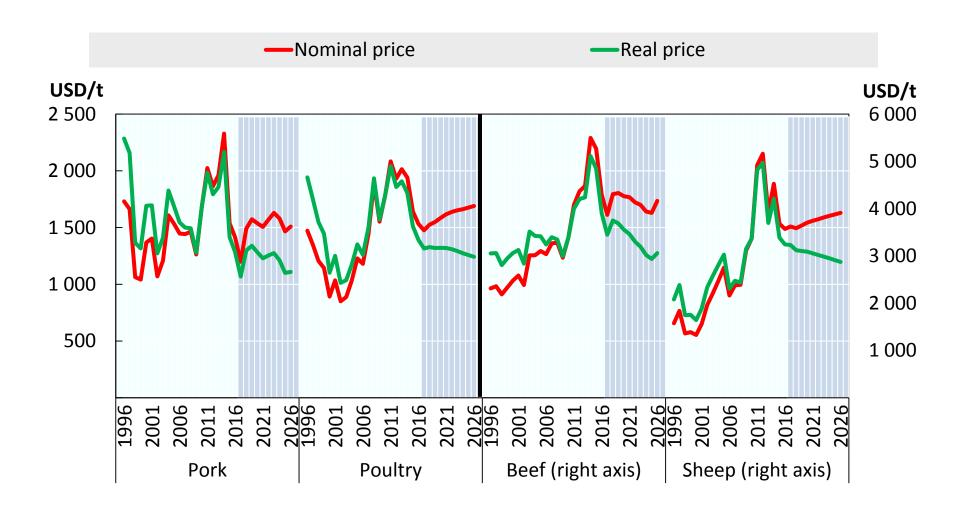


B. The medium term outlook

Grain prices to remain subdued



Meat prices even lower in real terms



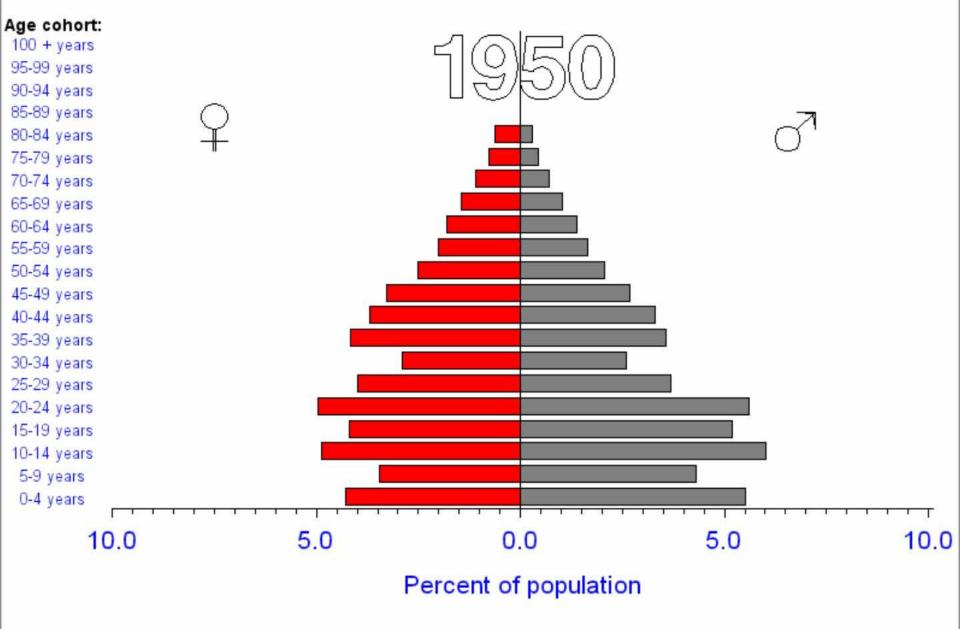
B. What drives the medium term?

1. Population growth

Population growth to remain the most important demand driver, notwithstanding slower growth

		Annual growth rate in %		Millions
		2001-16	2017-26	2017-26
World		1.19	0.99	699
	Africa	2.66	2.44	288
	Near East	1.95	1.35	37
La	Latin America & Carribean	1.15	0.89	53
	North America	0.82	0.7	24
Europe		0.11	-0.03	-2
	Asia & Pacific	1.09	0.82	289
	China	0.52	0.22	28
	India	1.31	1.05	133
	South East Asia	1.12	0.9	55
	Oceania Developed	1.51	1.12	3

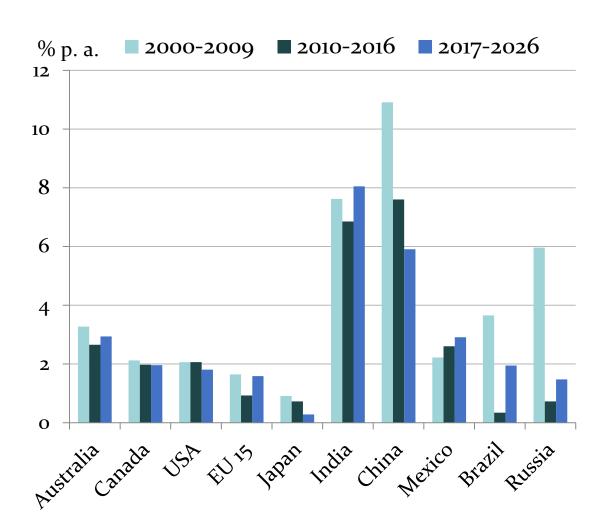
Eastern Europe: Population structure 1950 to 2050



Data: UN 2014 (http://www.un.org/esa/population/unpop.htm)
JS (2016)

2. Income growth

GDP growth of large economies

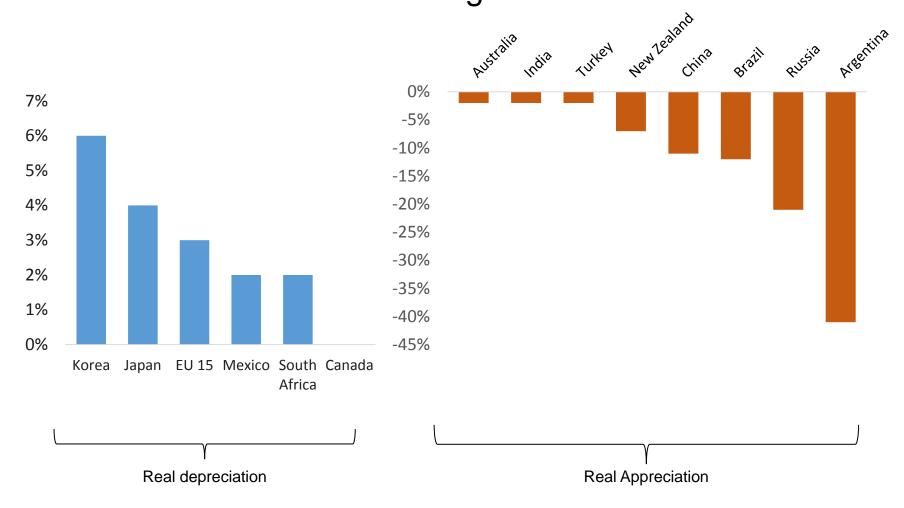


Recovery in most of industrialized economies

Growth prospects
in the large
emerging economies
diverge

3. Changes in real exchange rates

Real appreciation in exporting countries, real depreciation in importing countries Real x-rate changes 2017-2026



Source: OECD Economic Outlook, IMF World Economic Outlook, related authorities, and OECD and FAO Secretariats.

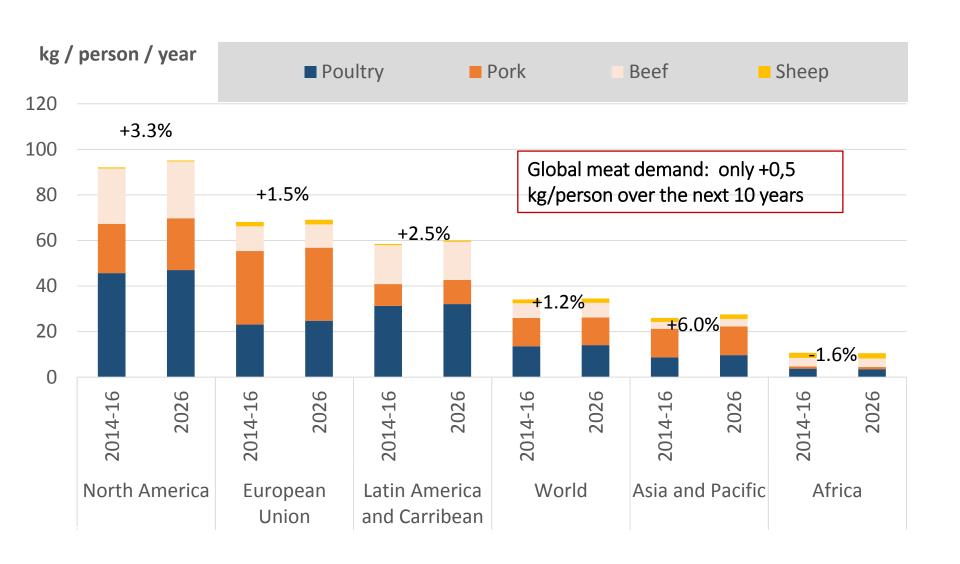
4. Changes in consumption and consumption patterns

Consumption

Main Messages

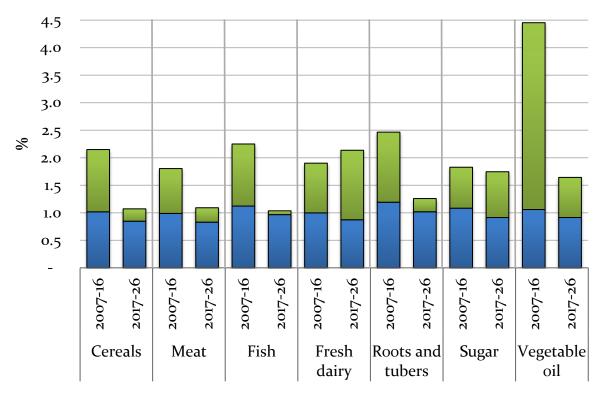
- Global consumption continues to expand and evolve toward higher value commodities
- Growth will slow down compared to previous decade
- China, India and Sub-Saharan Africa drive global growth
- Convergence in per capita food consumption patterns remains limited
- Growing income inequalities result in slower than expected aggregate demand growth
- Purportedly slower, sustainable growth on the back of under-consumption of poor consumers

Meat consumption grows only slowly: Saturation effect in rich countries, cultural, religious limits in Asia and Income constraints in Africa



Consumption by commodity

Annual growth in demand for key commodity groups, 2007-16 and 2017-26



- Due to per capita consumption growth or non-food consumption growth
- Due to population growth

Global consumption growth slows down

Total demand mainly driven by population growth

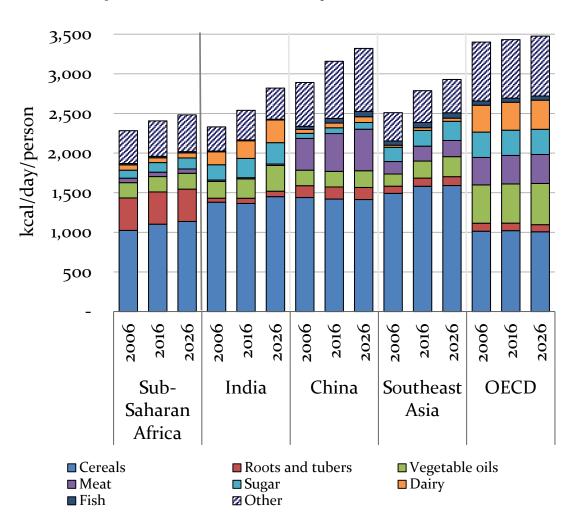
Per-capita food demand limited by:

- Saturation
- Access

For fresh dairy products, vegetable oil and sugar strong per-capita increase expected

Calorie consumption per capita

Per capita caloric availability in 2006, 2016 and 2026



Increasing trend in caloric availability per capita to continue

- Bridging caloric availability levels between developing countries and OECD
- China reaches the overall level of the OECD caloric availability.
- India makes substantial progress

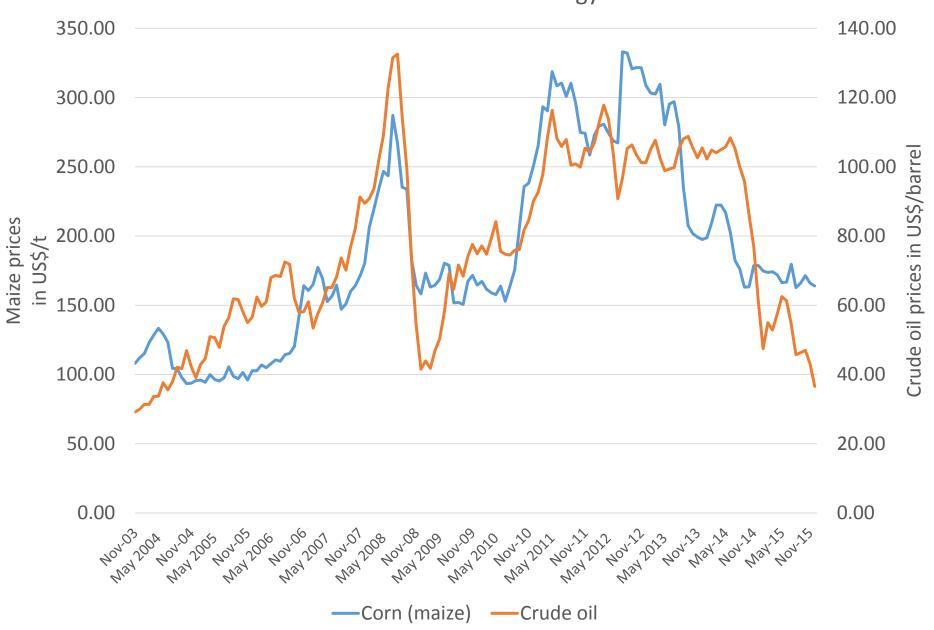
Cereals remain to be the most important source of calories across the world.

Bulk of additional calories from sugar and vegetable oil

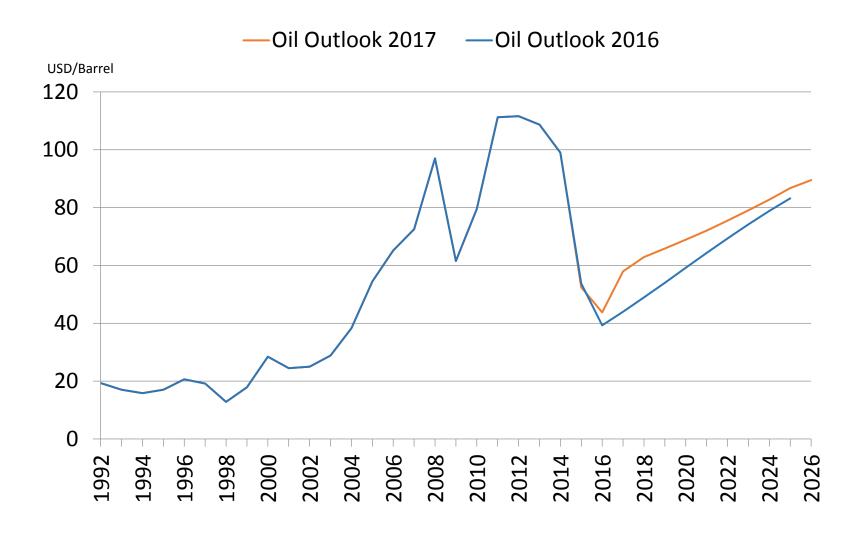
Dietary preferences persist and influence nutrition patterns

Energy market and prices

Limited demand from the energy sector



Crude oil prices are expected higher, but not enough to stimulate demand outside the mandates



Source: OECD Economic Outlook, ICE Futures Europe and calculations from IEA World Energy Outlook

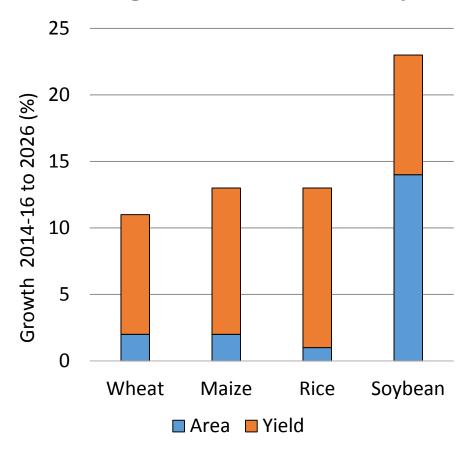
Production

Main Messages

- Yield growth will be the main driver of food crop and feed production
- Diverse growth in livestock and fish production
 - Slower growth in meat and fish production
 - Global dairy sector accelerates
- Developing countries lead the agricultural production growth

Crop production

Relative growth shares of area and yield



Yield improvements main driver of crop production growth

Wheat:

- 9% yield growth
- 2% net area gain (4 million ha) mostly in in Russia and India

Maize:

- 11% yield growth, large yield
- gap remains, 2% area growth (4 million ha), all in Africa and Latin America

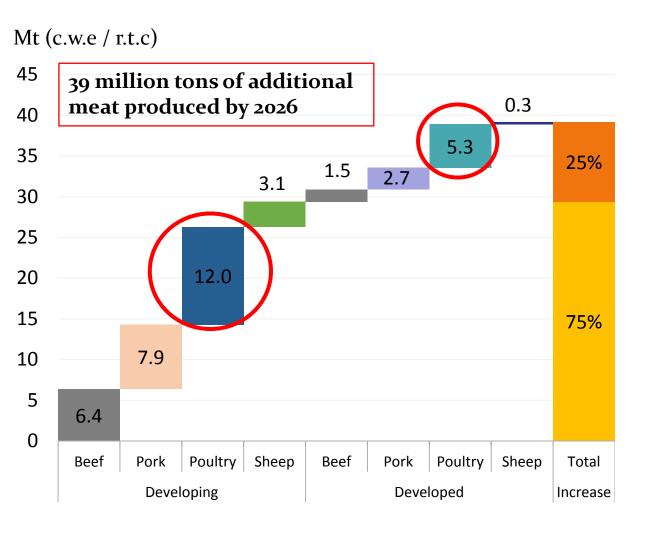
Rice:

- 12% yield growth, small net area gain globally (2 million ha), shift into LDC with low yield base

Soybean:

- 9% yield growth, yield gap small and closing,
- 14% area net growth, 16 million ha,

Meat production



Total meat, 13% growth globally

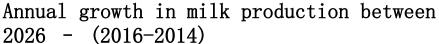
46% of it in **poultry**, becoming leading meat

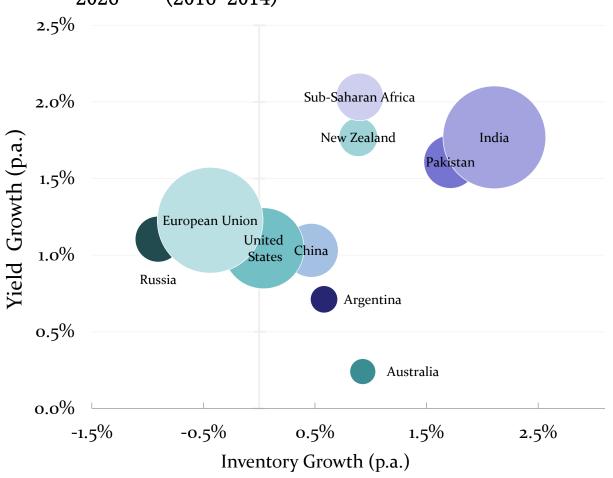
Pigmeat production expansion slowed by increased environmental regulations and animal welfare concerns

Beef production expands in Argentina, China, Brazil, India

Sheepmeat sector global growth of 22%, faster than last decade

Milk and dairy production





Milk production grows 22% globally:

- Acceleration of expansion
- Concentrated in Asia
- DVD: inventory decline by 0.2% p.a and yield 1.2% p.a growth
- DVG: inventory 1.3% p.a and yield 1.5%p.a growth

Processing remains concentrated in developed countries

Wrapping it up ...

Trends, issues and outlook

- Declining population growth, income inequalities and growing saturation of food demand limit long-term potential
- Low fertilizer/energy prices, ample grain stocks, and saturated biofuel mandates keep potential for short term price up-swing limited.
- 3. From investment overhang to market hang-over: Price incentives of 2008-2012 have attracted private flows into agriculture, particularly in Eastern Europe, EU
- 4. Exporters to face real appreciations, importers to see real depreciations, slow growth in trade
- 5. Medium term: no significant recovery, flat real prices. "false sustainability"

Uncertainties

- 1. What will happen to China? Faster reforms? Lower procurement prices? Soybean, coarse grain imports?
- 2. Will global economic recovery continue?
- 3. Real x-rates as predicted?
- 4. What will happen to oil prices? Biofuel mandates?

Thank you

