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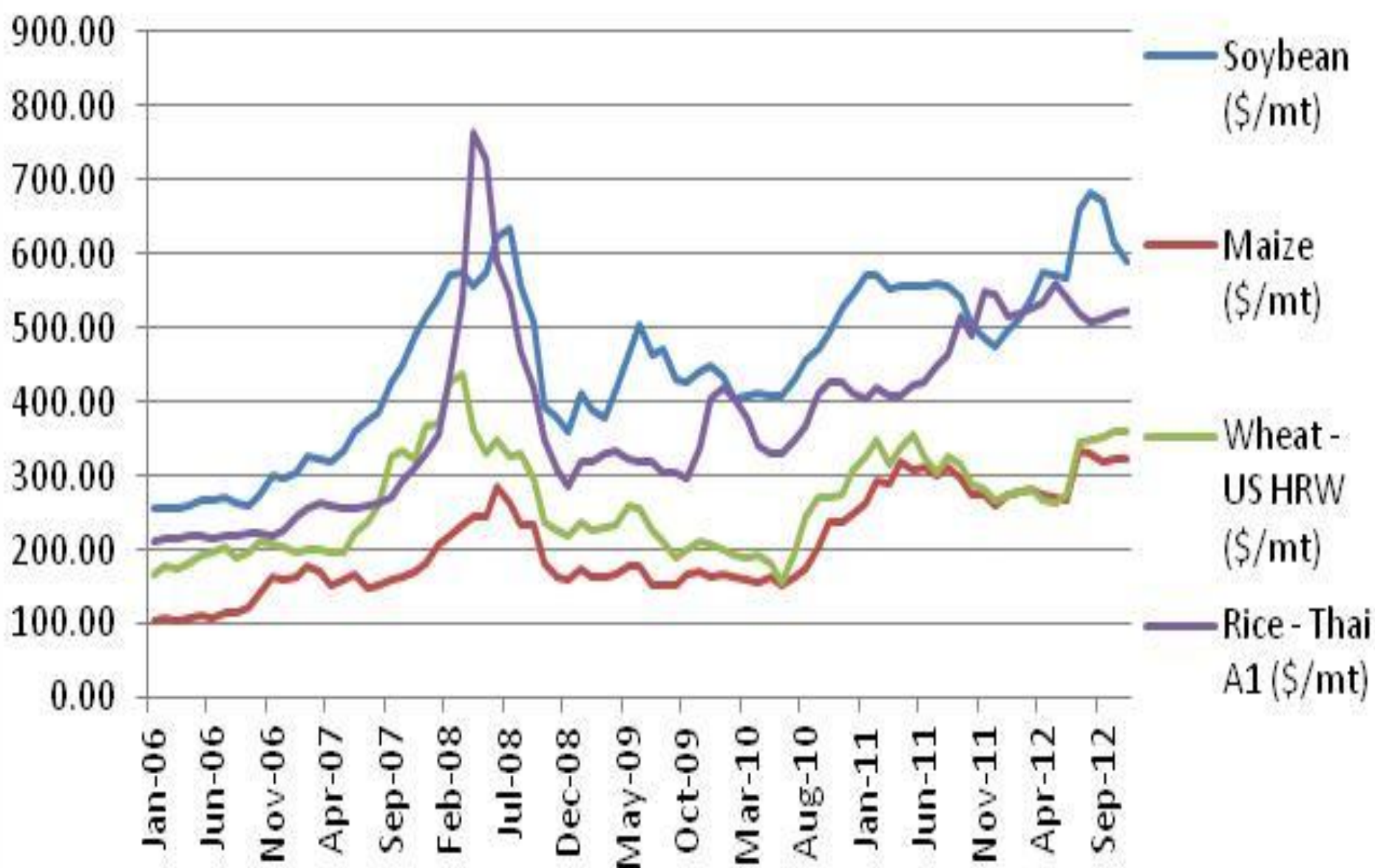
Speculation and Recent Agricultural Price Spikes

Presentation to the Expert Group on agricultural
commodity derivatives and spot markets

18th December 2012

Brendan Bayley
HM Treasury

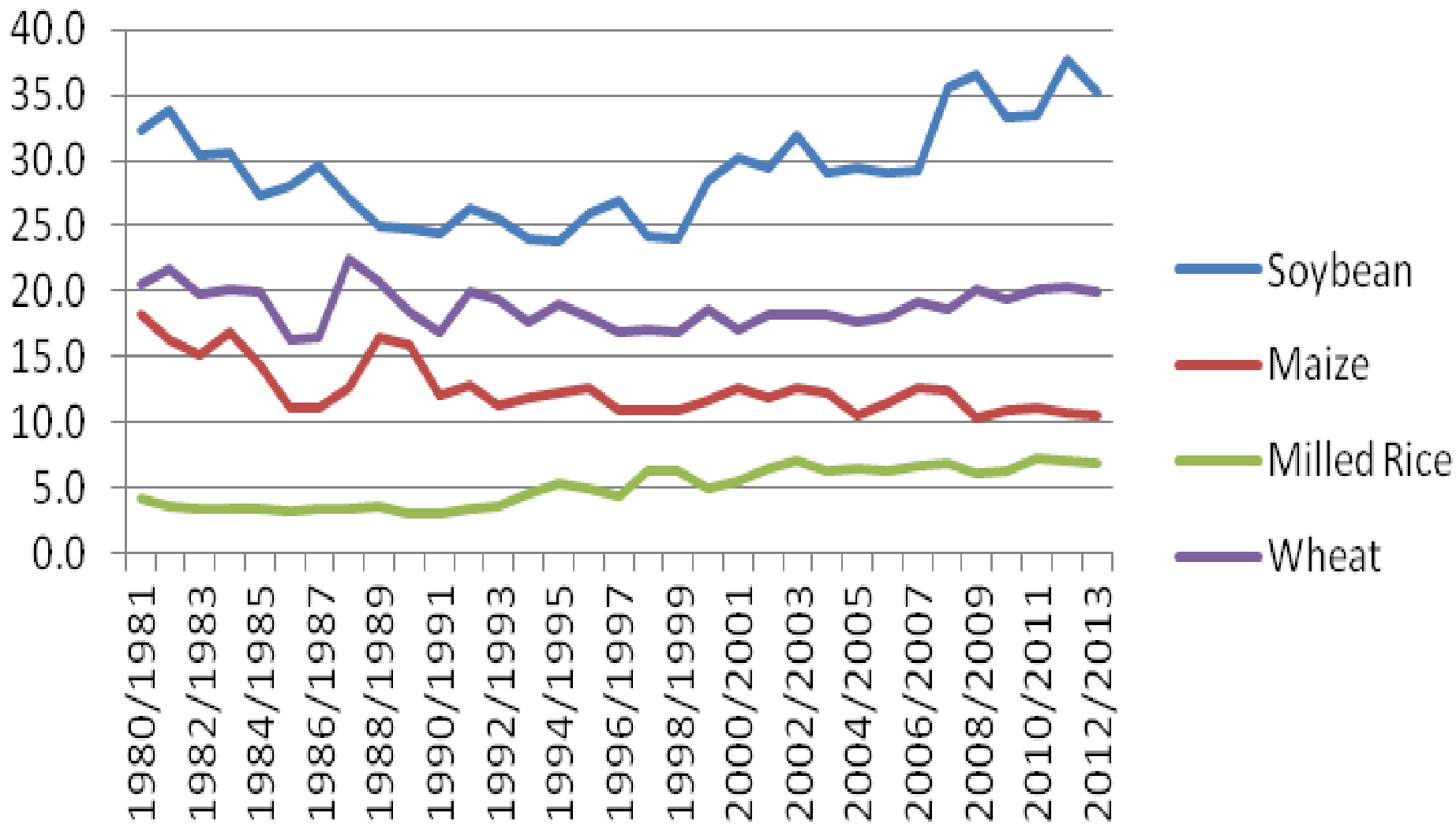
International Grain Prices



Why the price spikes matter

- Food Security impact (poorer households)
- Source of inflation
- Macroeconomic difficulties for poorer countries, especially those with high food import dependence
- Increases the risks of investment in agriculture
- But transmission to national markets uneven

Proportion of Global Grain Production Traded Internationally (%)



Factors affecting future agricultural price volatility

More

- C/change impact yields
- Increased inelasticity of demand due to rising incomes
- Energy/transport costs
- (Ad hoc) trade barriers
- Thin international markets
- Biofuels (if mandates inflexible)

Less

- Crop protection products
- Biotech developments
- Trade liberalisation
- Biofuels (if mandates flexible)

Agricultural futures and options markets – key roles

- In addition to spreading agricultural risk beyond agriculture and more evenly around the economy, agricultural futures and options markets also play a number of other important roles in ensuring the effective operation of the food system:
 - facilitating more efficient and flexible use of available agricultural resources;
 - generating more transparent price formation and discovery than might otherwise be available;
 - allowing farmers, processors and traders to plan, budget and invest with greater certainty and
 - hence to raise money in capital markets; and
 - mediating the relative incentives to use or store ‘old crop’.

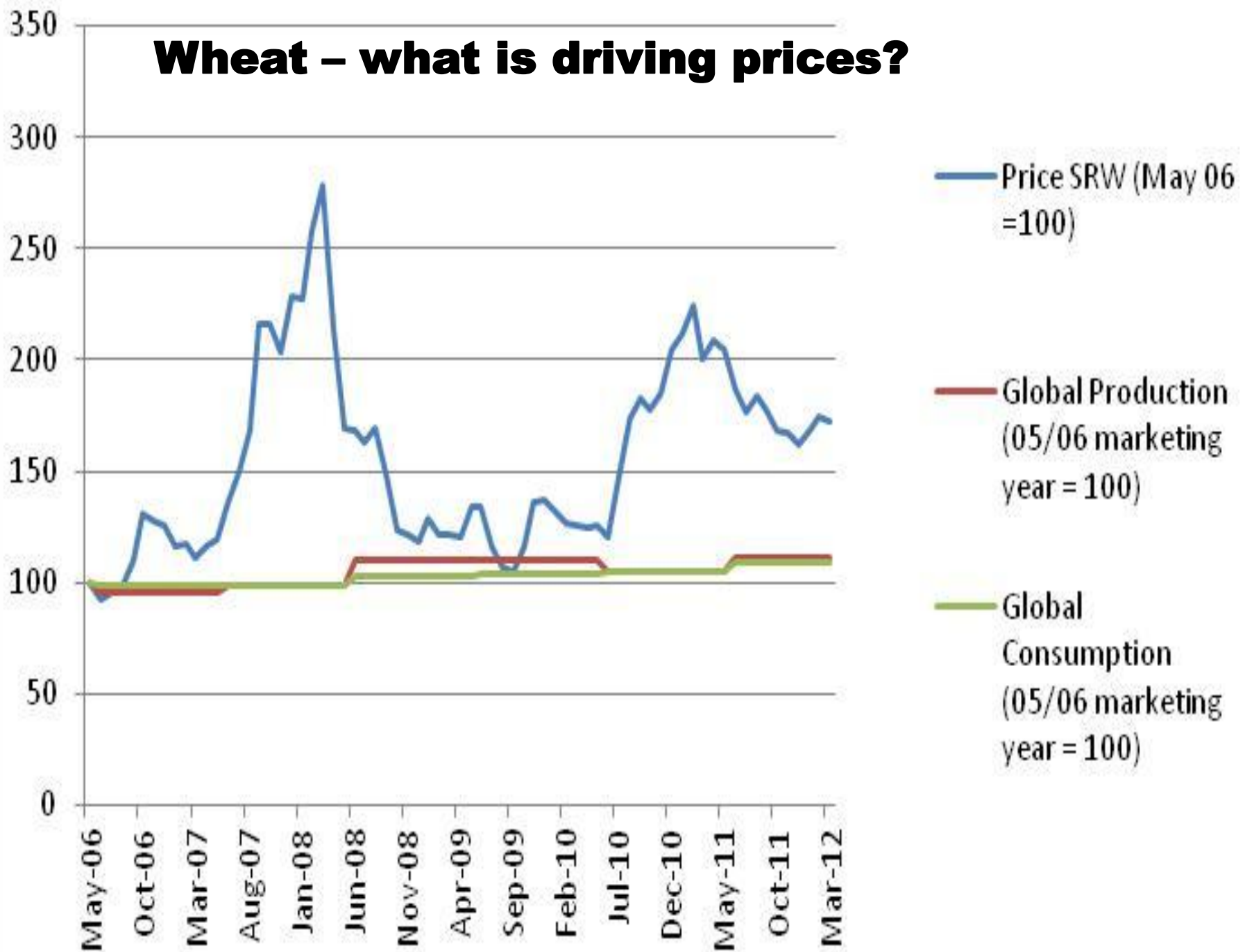




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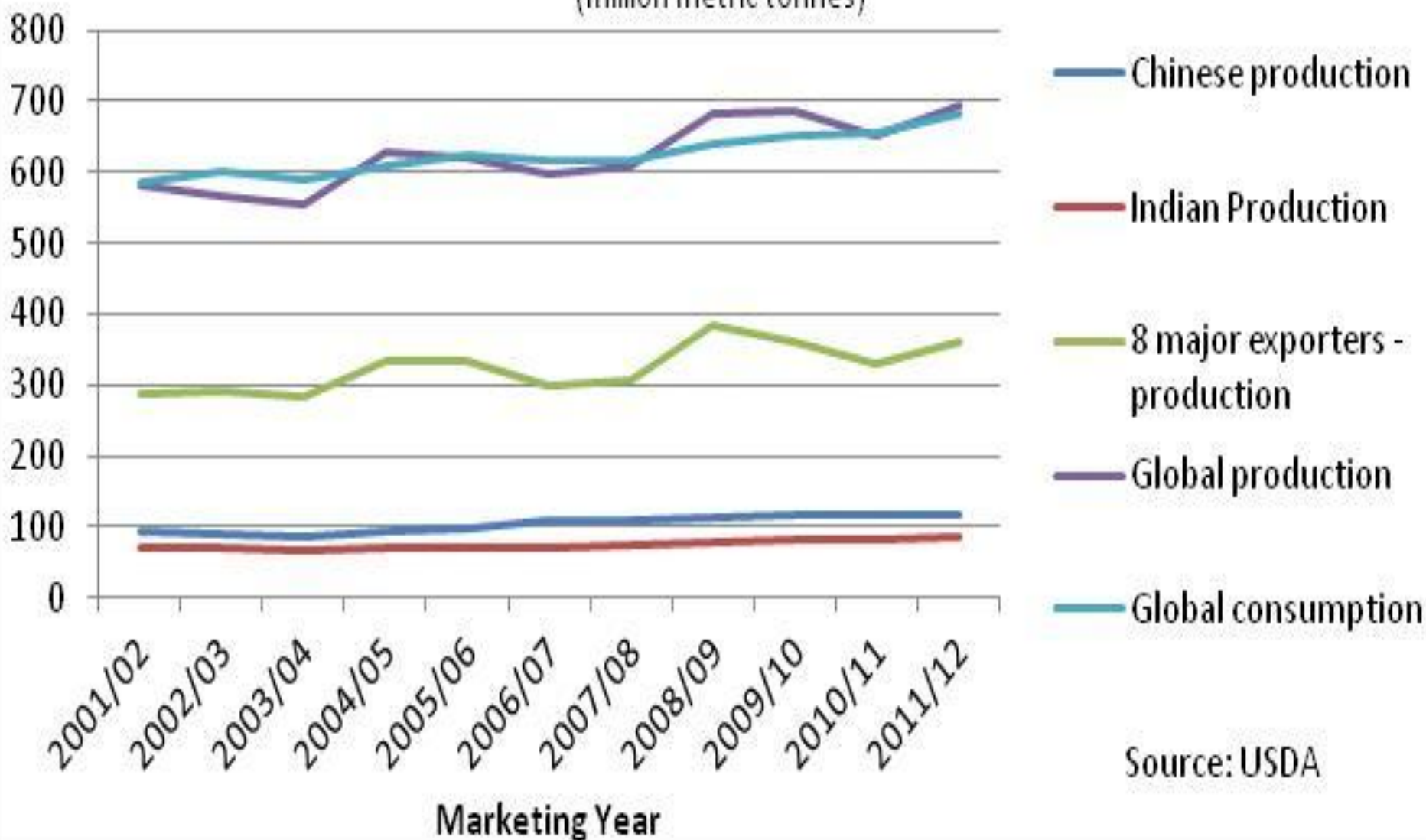
Fundamentals, or something else?

Wheat – what is driving prices?



Wheat - Key producers vs global production and consumption

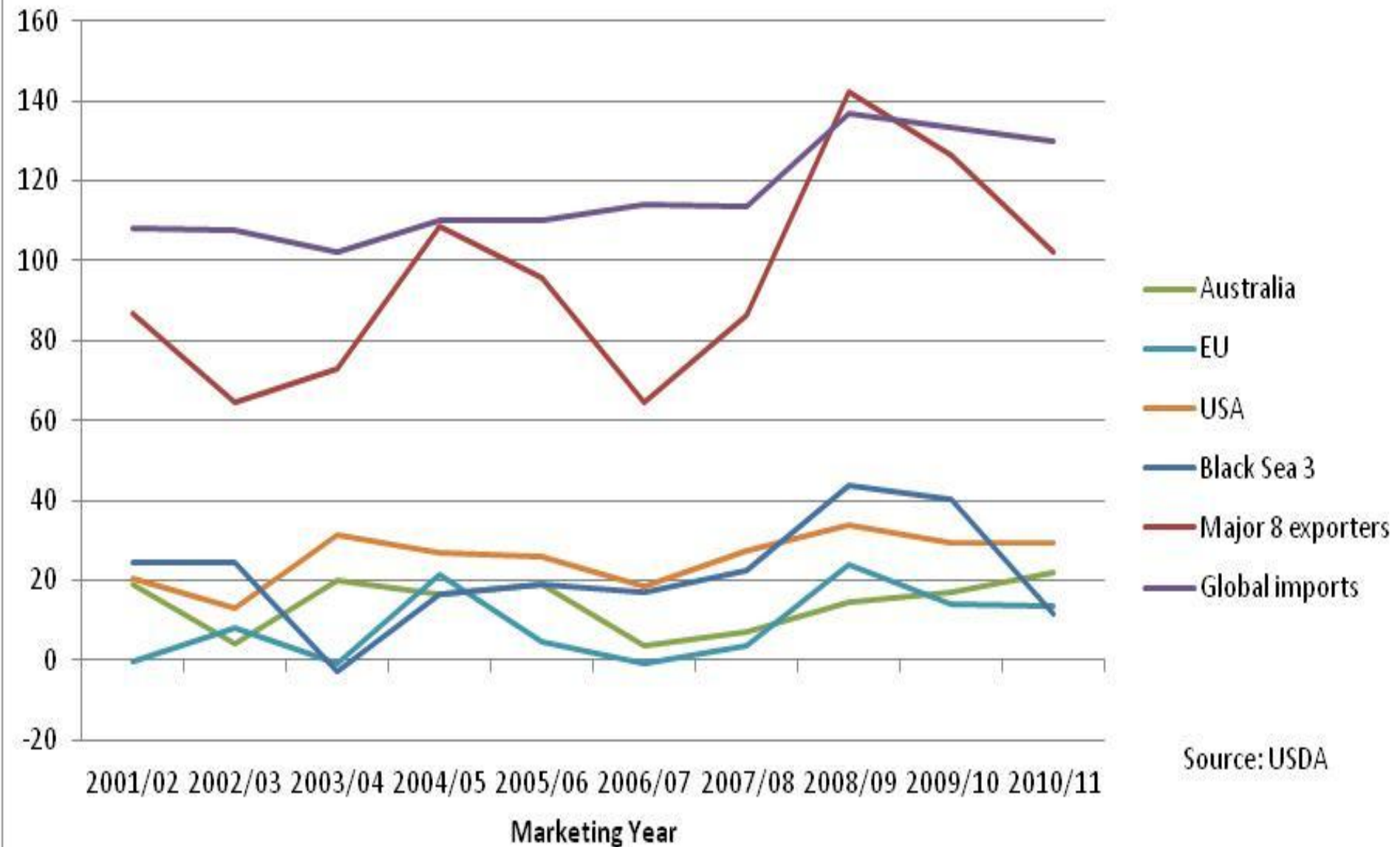
(million metric tonnes)



Source: USDA

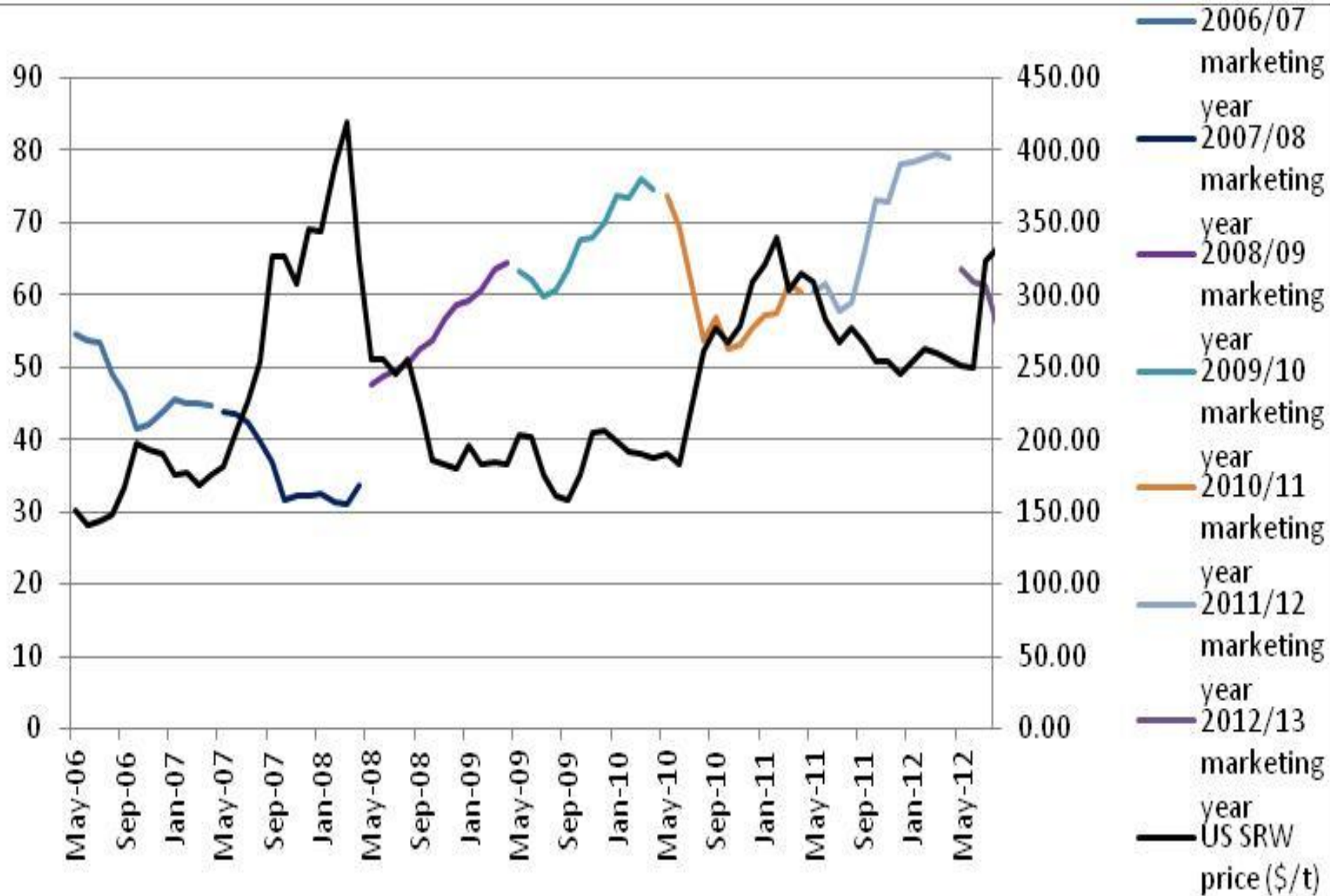
Exportable surplus - major 8 Exporters

(Production minus consumption - million metric tonnes)

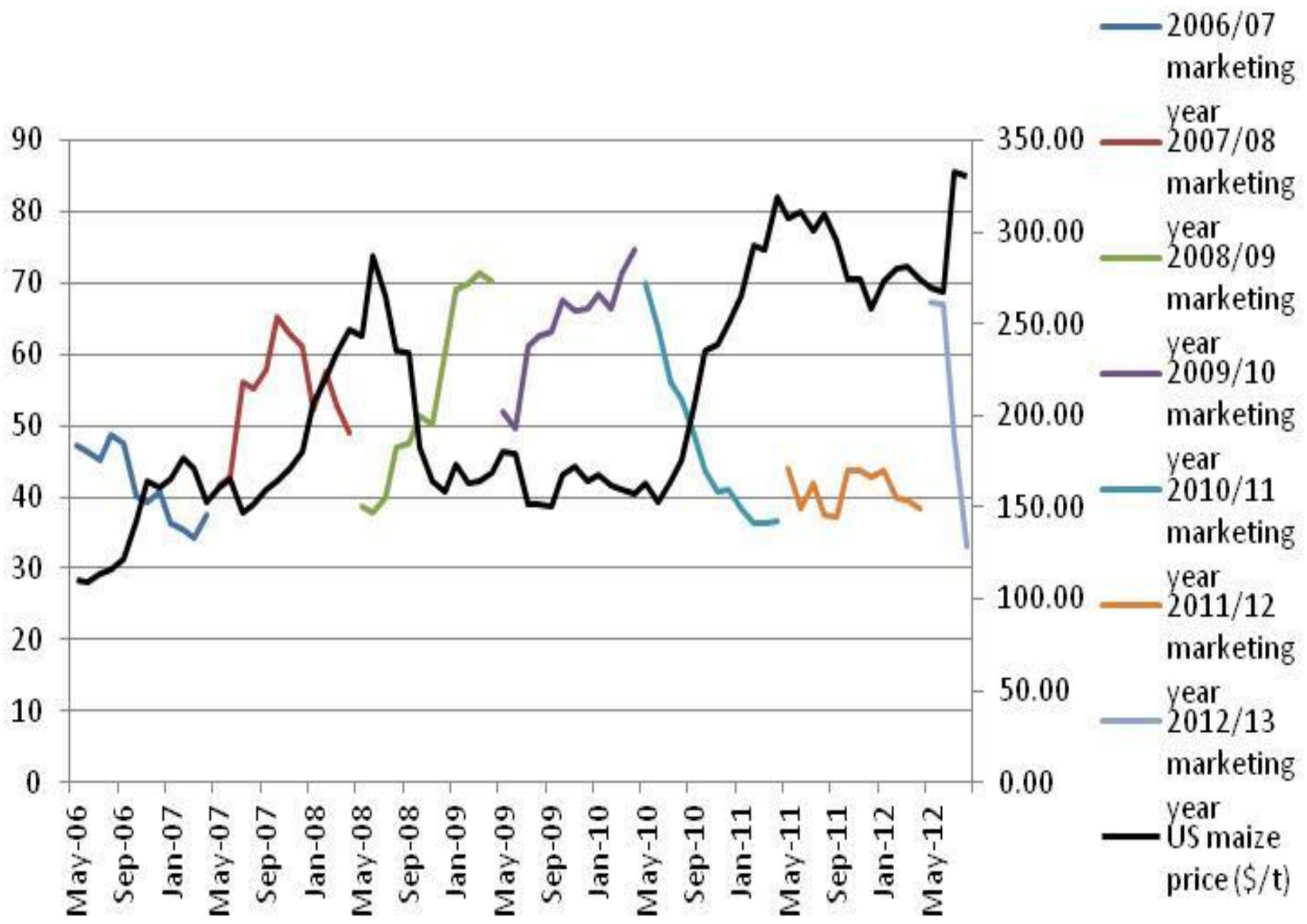


Source: USDA

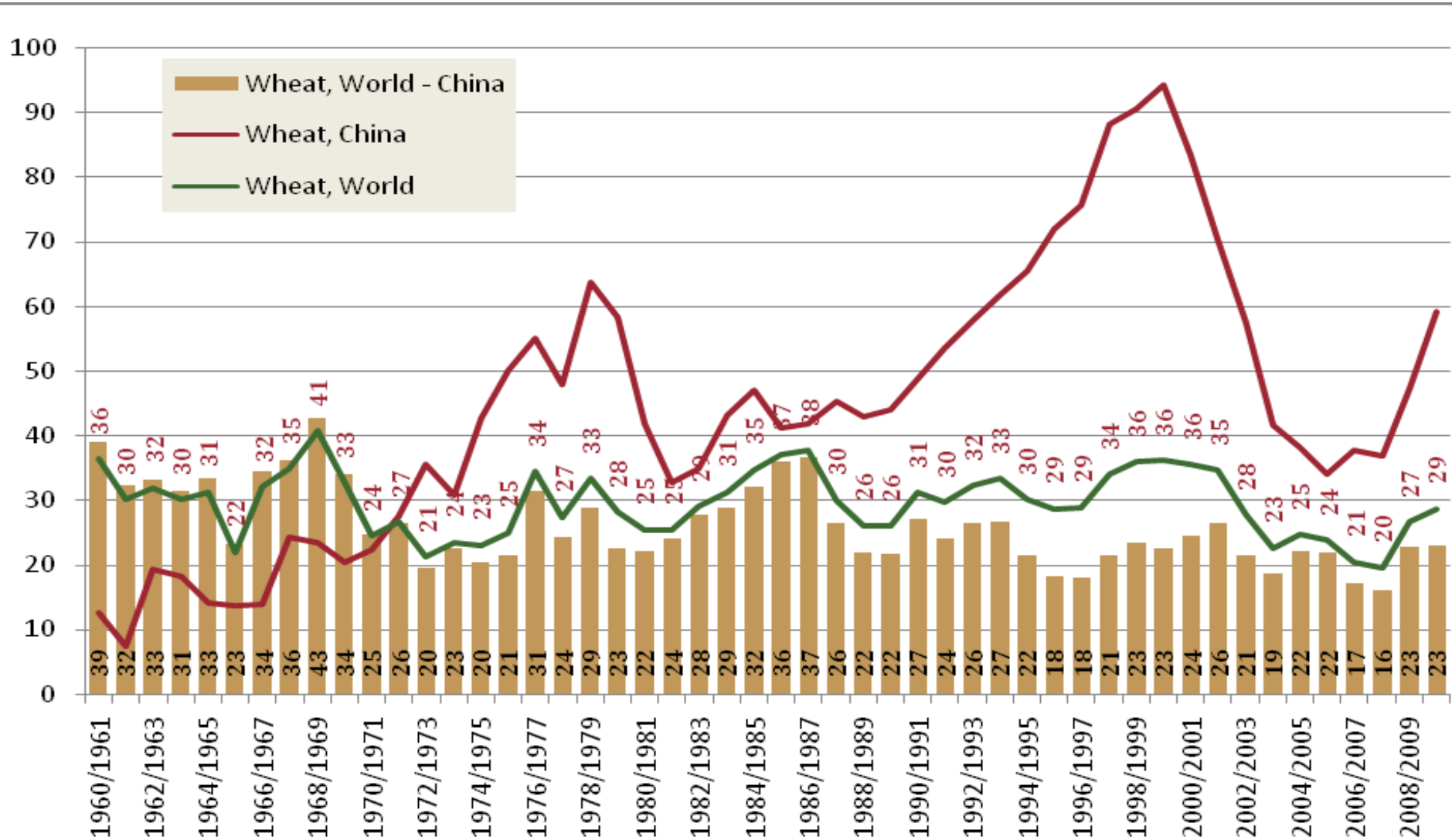
Wheat: USDA projected end stocks in the 8 biggest exporters (million tonnes, lhs) vs Prices (US\$/t, rhs)



Coarse grain: USDA projected end stocks, 7 biggest exporters (mn mt, lhs) vs Maize prices US\$/mt (rhs)



Wheat stock-to-use ratios. World, China, and World except China



Export restrictions – 2007/08

Largest dozen maize exporters 1998/99 – 2007/08				Largest dozen rice exporters 1998/99 – 2007/08				Largest dozen wheat exporters 1998/99 – 2007/08			
	A	B	C		A	B	C		A	B	C
US	63	63	130	*Thailand	29	29	390	US	26	26	160
Argentina	15	77	2,100	*Vietnam	15	44	410	Canada	15	41	220
*China	8.6	86	10	*India	15	59	32	EU	14	54	86
*Brazil	5.2	91	150	US	11	70	330	Australia	13	67	340
South Africa	1.4	93	84	*Pakistan	8.8	79	700	Argentina	9.2	76	1,200
Ukraine	1.4	94	120	*China	6.2	85	3	Russia	6.0	82	220
*India	1.0	95	310	*Egypt	2.7	88	150	Kazakhstan	4.6	87	370
Paraguay	1.0	96	93	Uruguay	2.5	91	1,600	Ukraine	3.1	90	250
EU	0.87	97	17	Argentina	1.4	92	260	*India	1.7	92	15
Canada	0.51	97	36	Burma	1.2	93	33	Turkey	1.7	93	120
*Thailand	0.39	98	130	Australia	1.1	94	170	*China	1.5	95	3.0
Serb & Mtn	0.32	98	67	EU	0.89	95	28	*Pakistan	0.57	95	28

A = Exports as a % of global exports

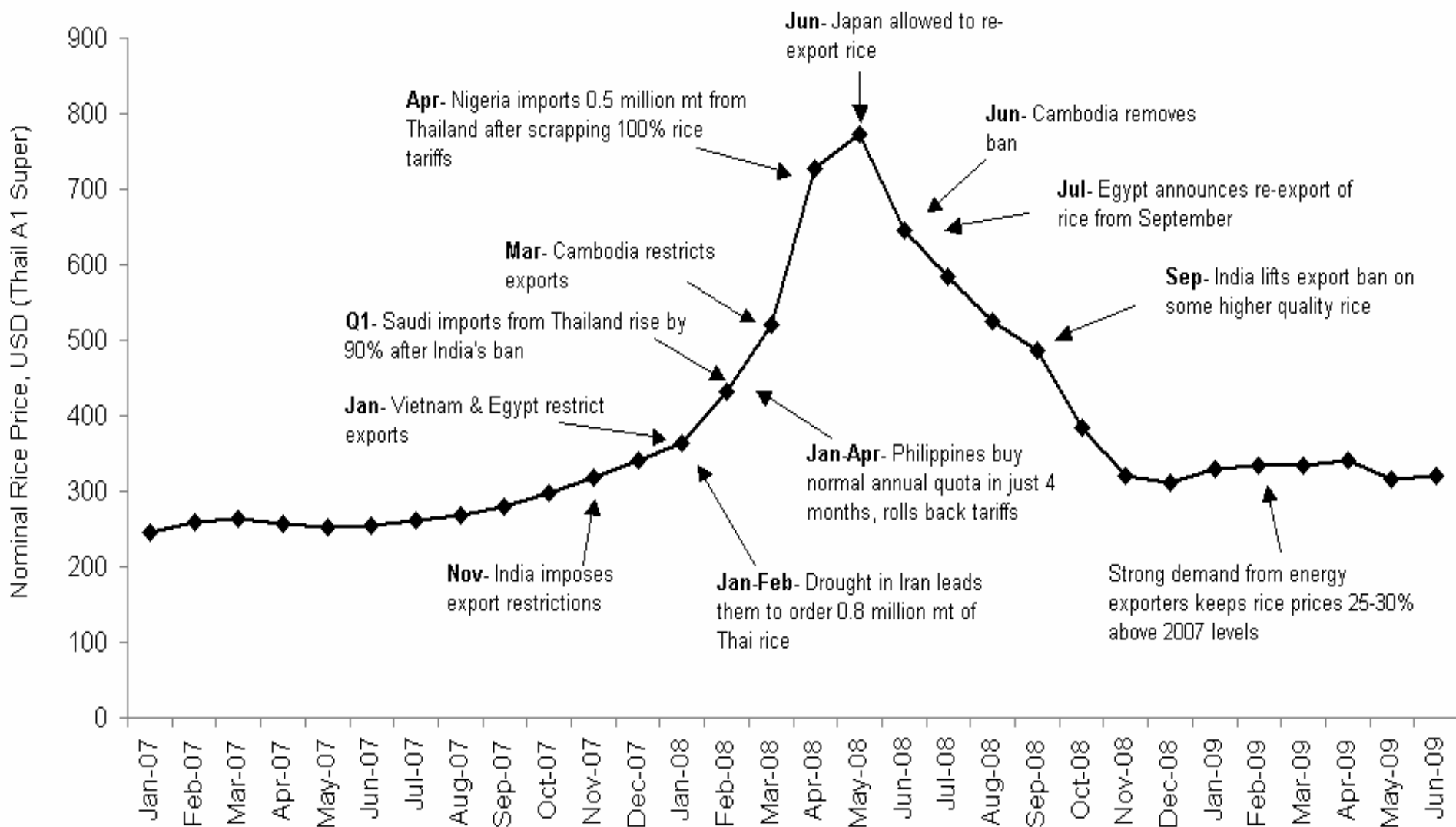
B = Cumulative % of global exports

C = Exports as % of stock

- Countries which instituted export bans or restrictions in response to the 2007/08 food price spike **appear in yellow.**
- Countries that released stock nationally at a subsidized price **appear with * in bold red**



Ad hoc export restrictions: rice



Reproduced in the "The 2007/08 Agricultural Price Spikes: Causes and Policy Implications". With kind permission from the International Food Policy Research Institute. The original discussion paper can be found at

<http://www.ifpri.org/sites/default/files/publications/ifpridp00889.pdf>



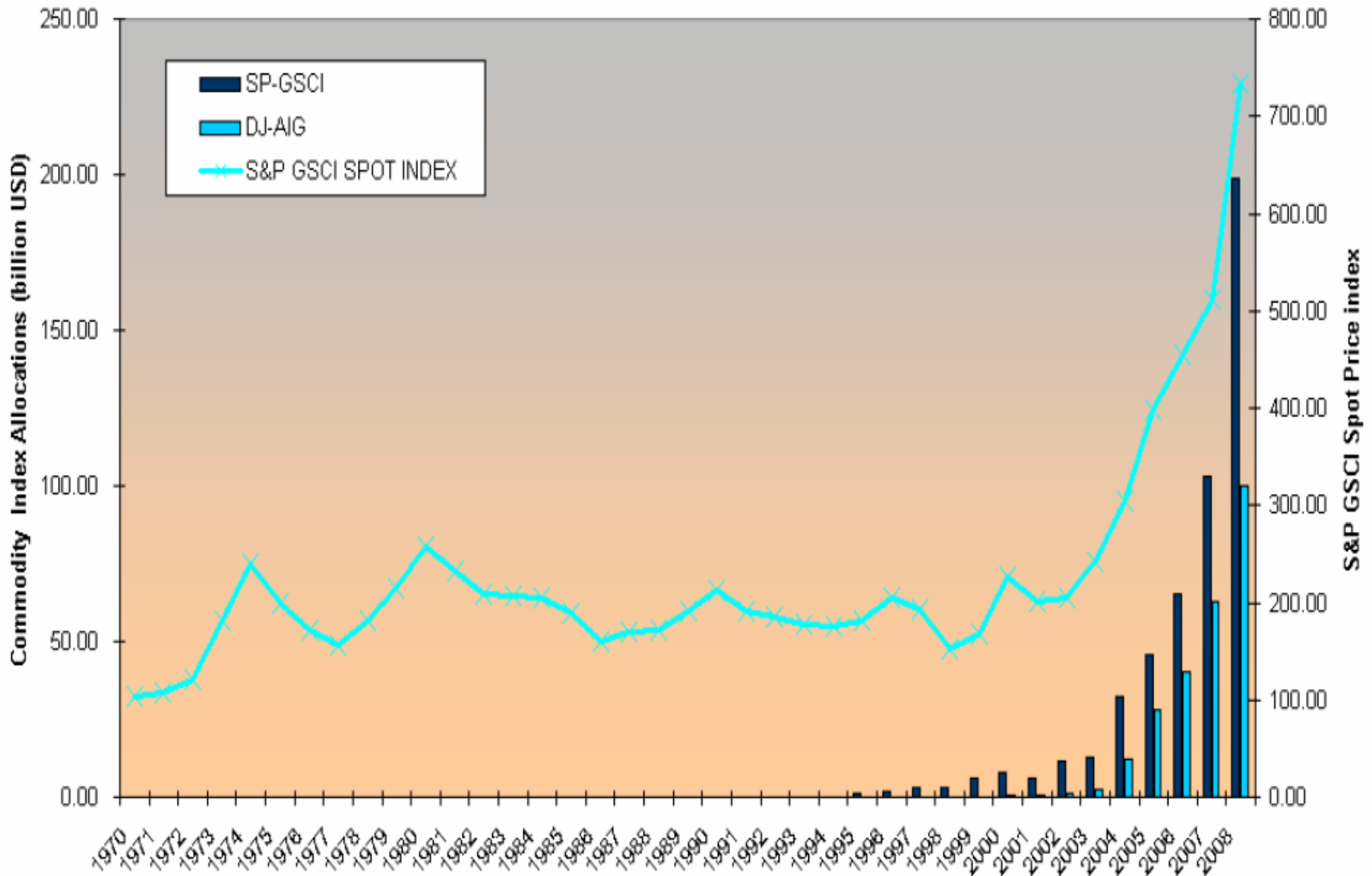
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Financial markets

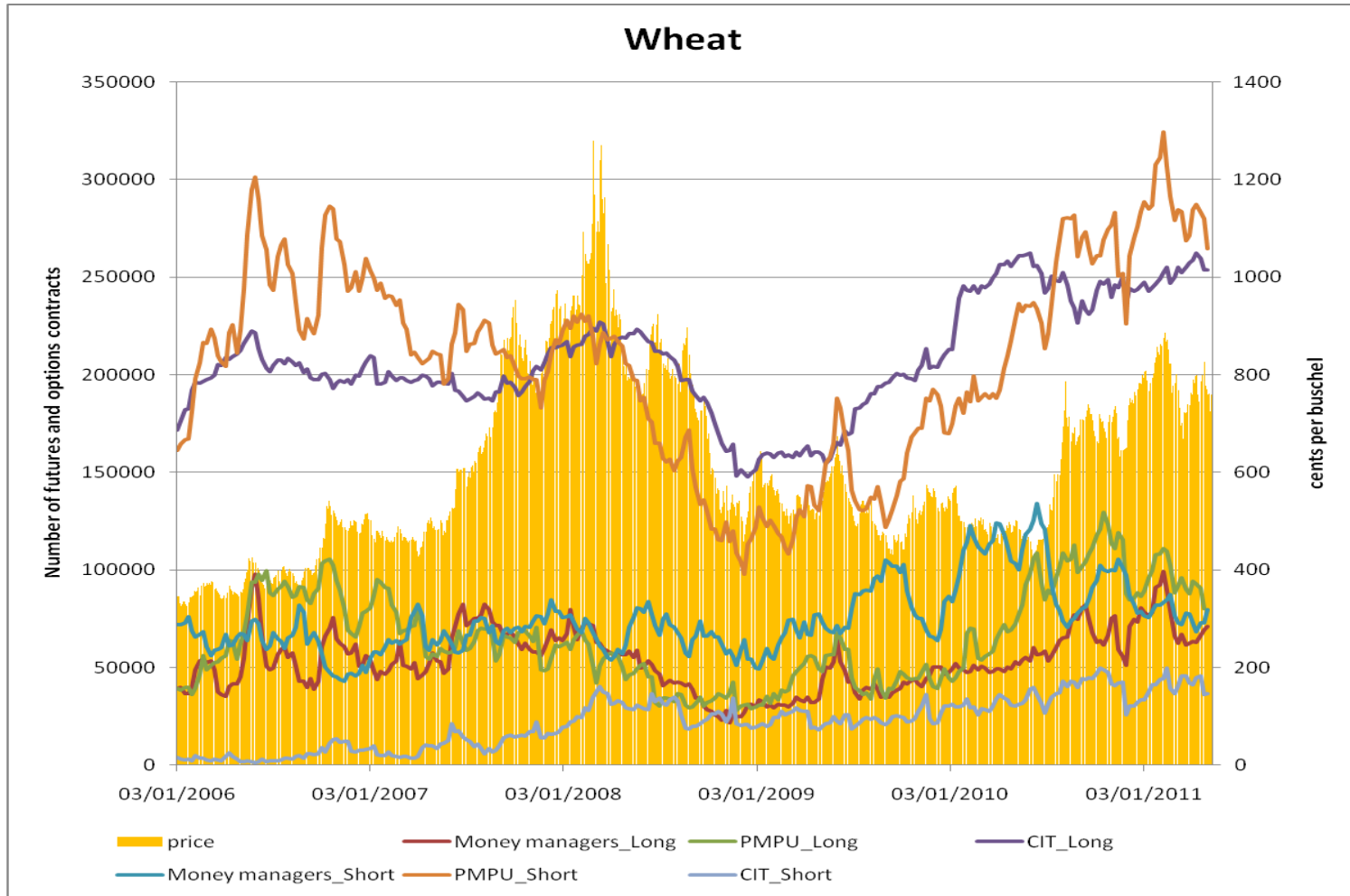
Speculation – the key arguments

- Increased level of speculation in commodity markets over the last ten years – changes in market structure
- Wall of speculative money (especially index funds) has driven futures (and spot) prices away from levels suggested by fundamentals
- Also concern about herding
- Position limits on speculators would reduce the level of excessive volatility

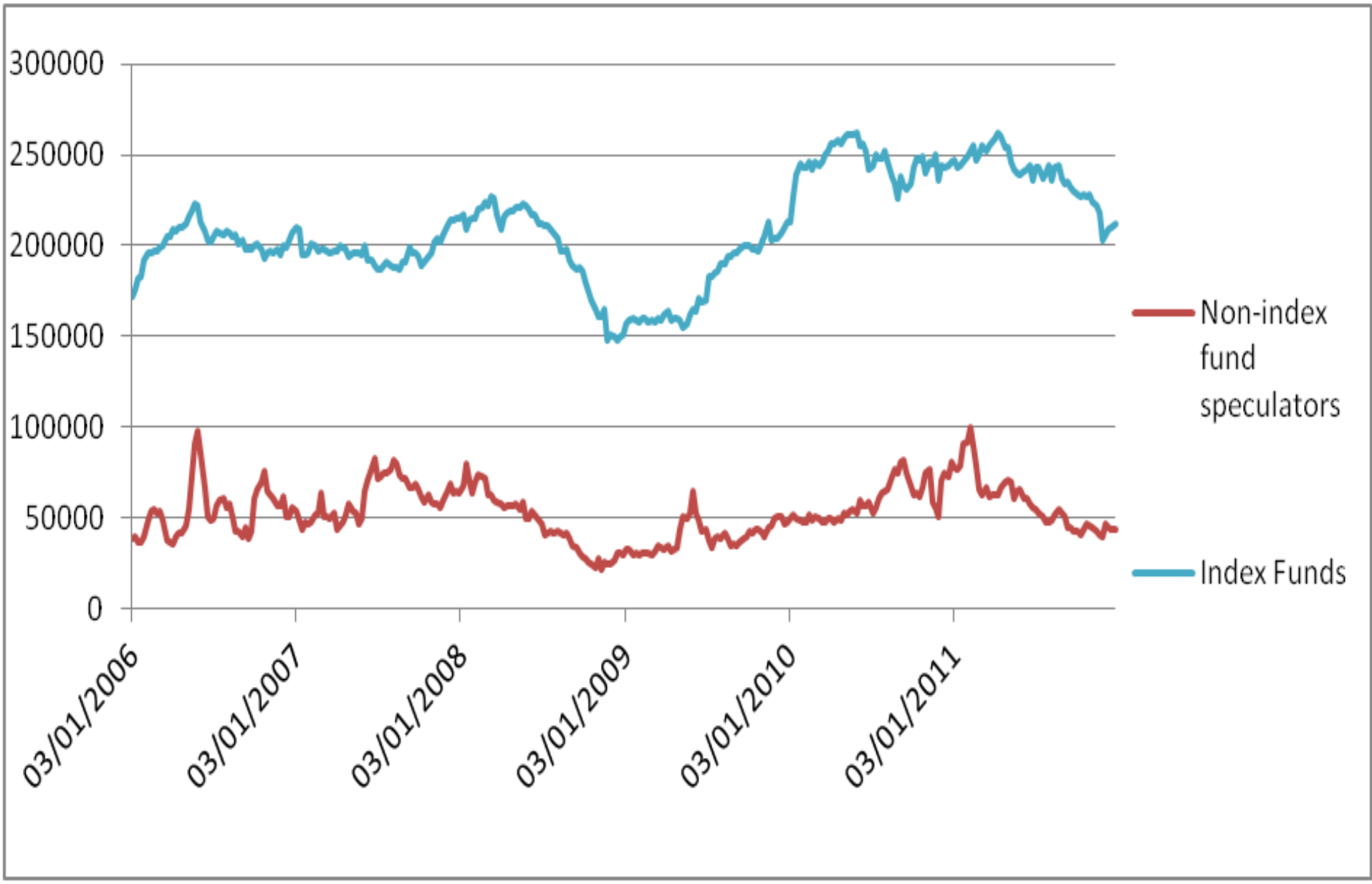
What is driving what? Volumes vs Values



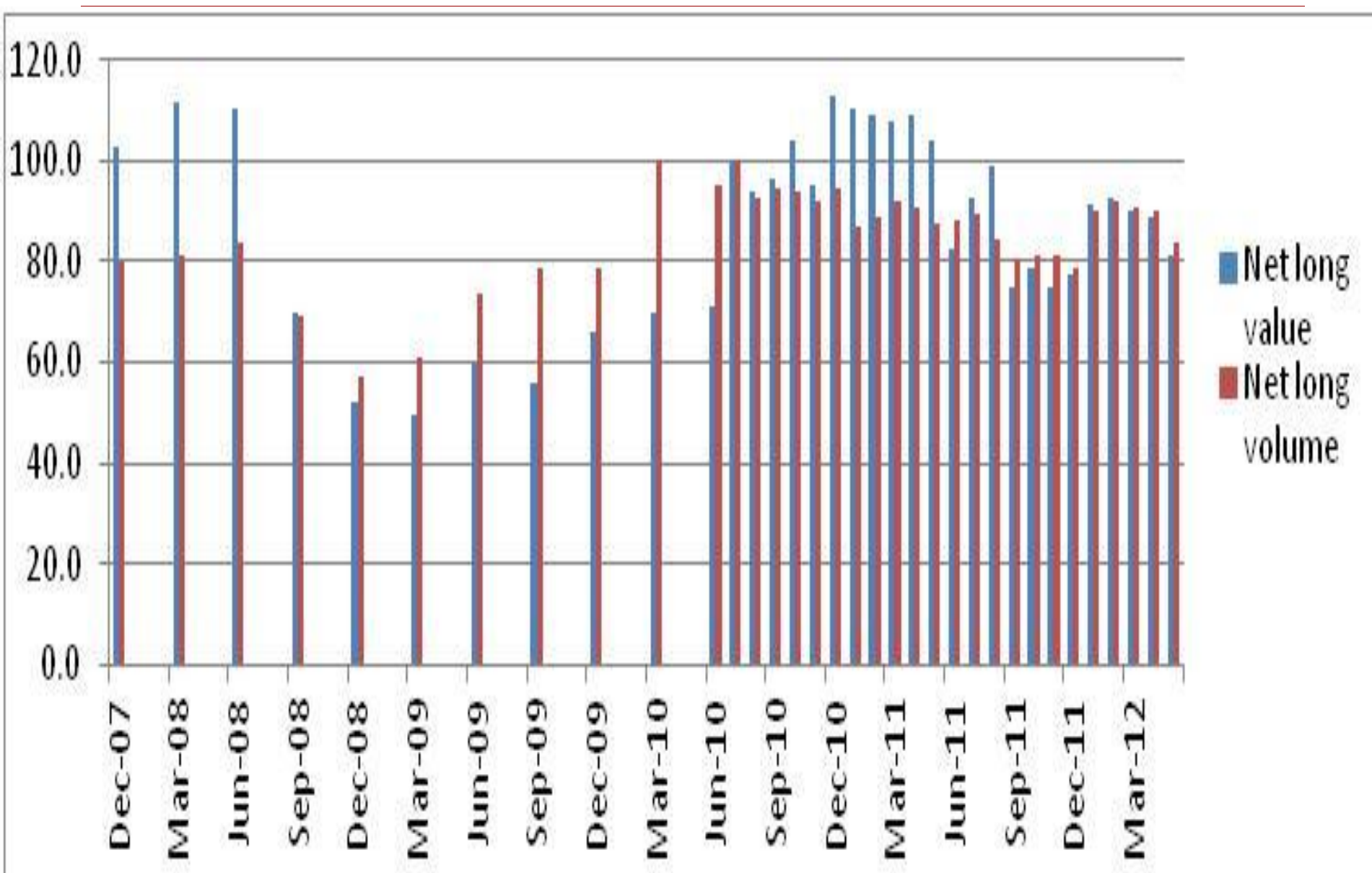
CIT Open Interest (2006-11)



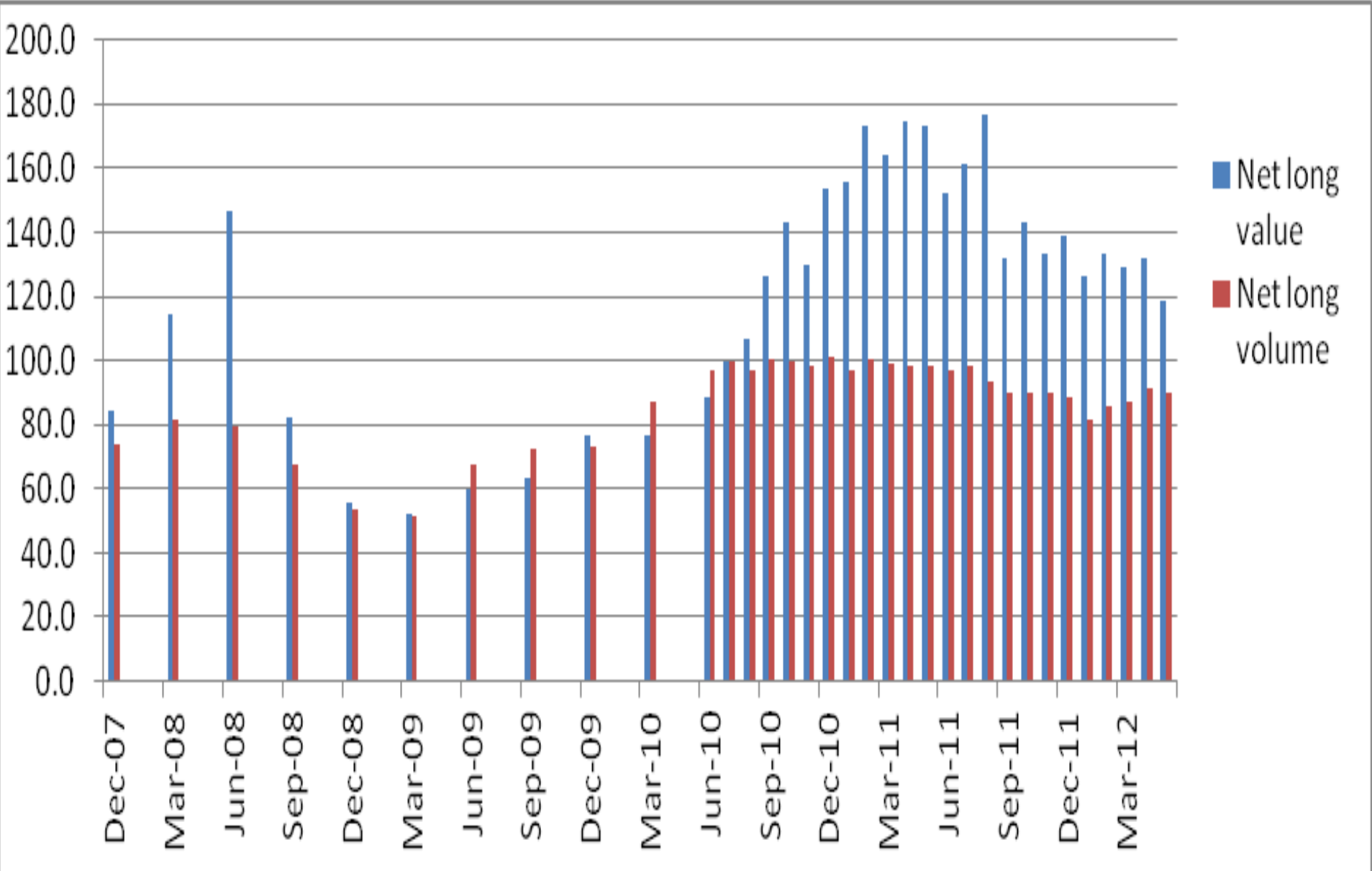
CBoT Wheat: Speculative Long Open Interest (contracts) excluding spreads



CBoT Wheat Futures Index Fund Open Interest (July 2010=100)



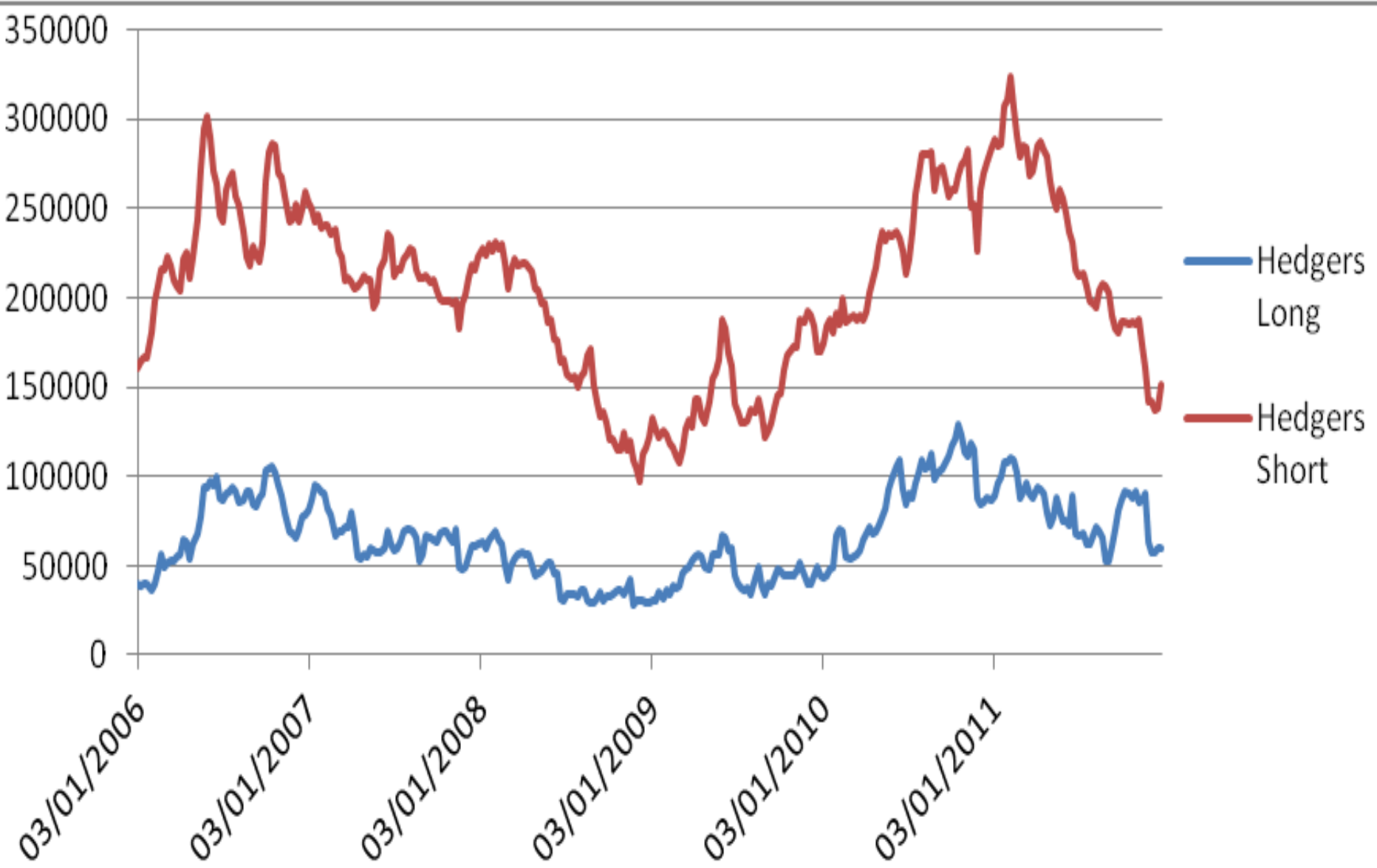
CBOT Maize Futures Index Fund Open Interest (July 2010=100)



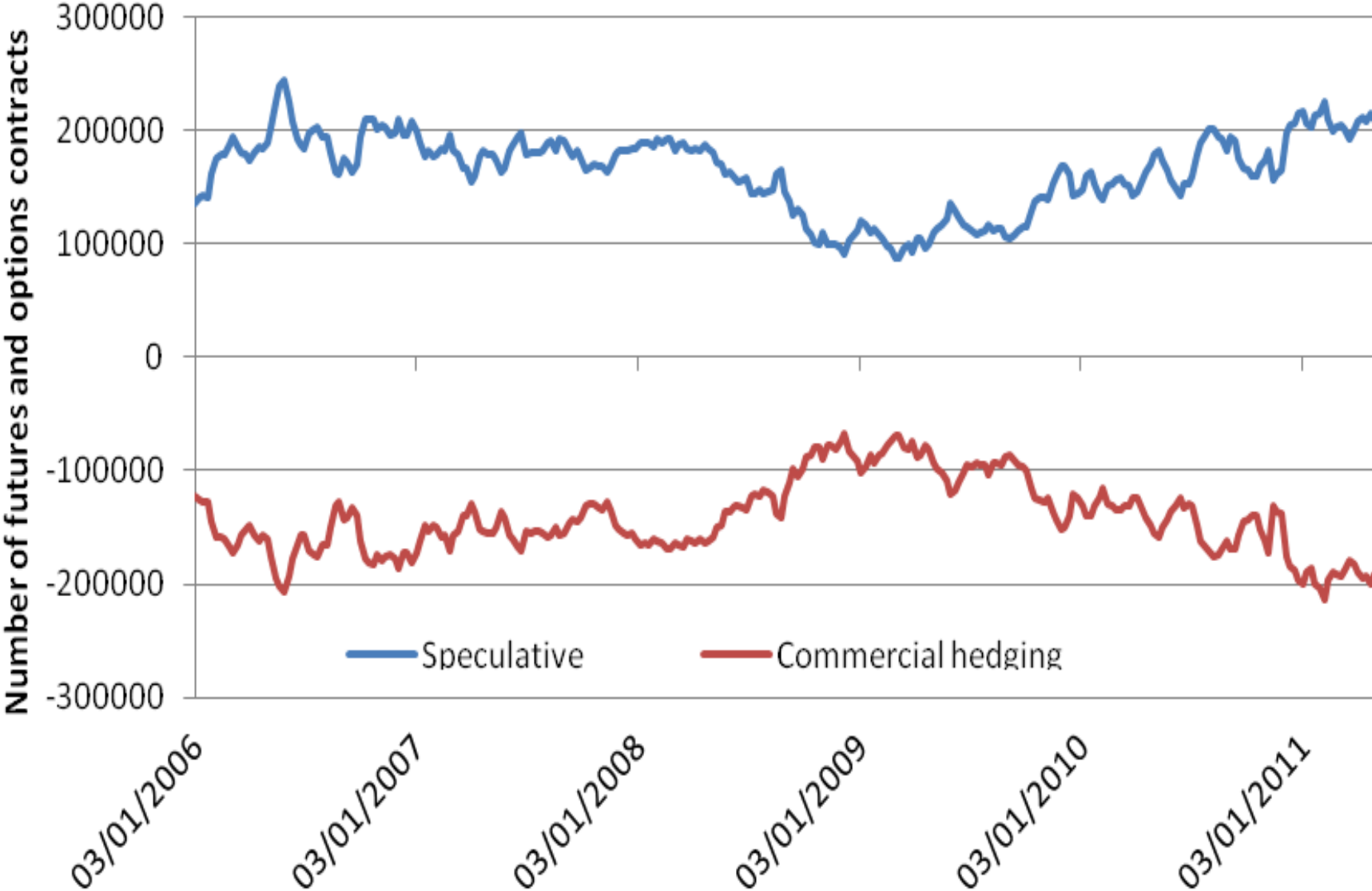
Shares of Open Interest on CBoT markets

	MAIZE			WHEAT	
	Index Long	Fund	Hedgers Short	Index Fund Long	Hedgers Short
2006	26%		47%	41%	48%
2007	21%		50%	39%	43%
2008	21%		46%	42%	36%
2009	27%		40%	44%	36%
2010	28%		44%	43%	41%
2011	23%		45%	42%	41%

CBoT Wheat: Open Interest (contracts) Held by Hedgers



Net speculative and net commercial positions in wheat (CBoT)

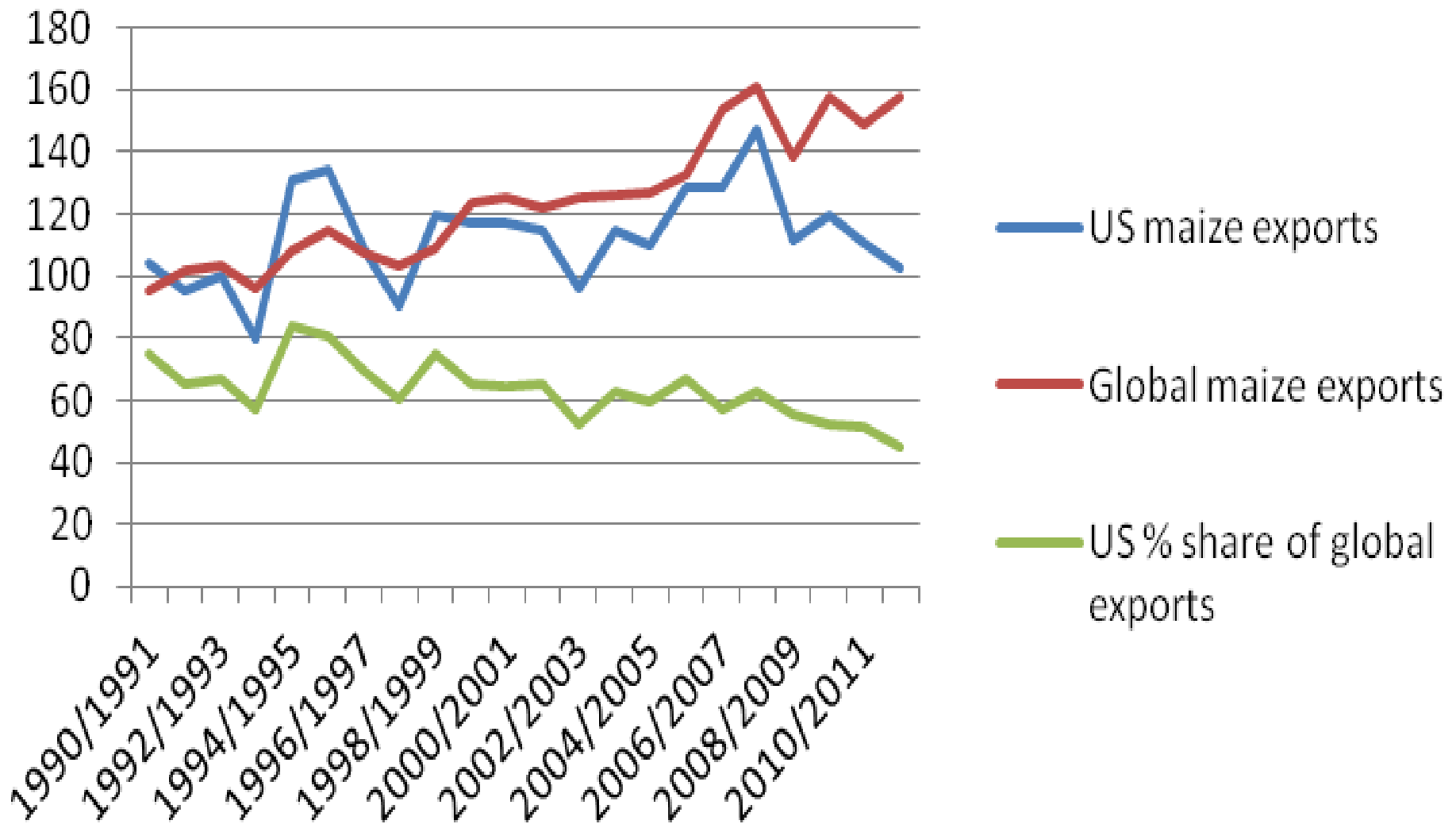


Market structure

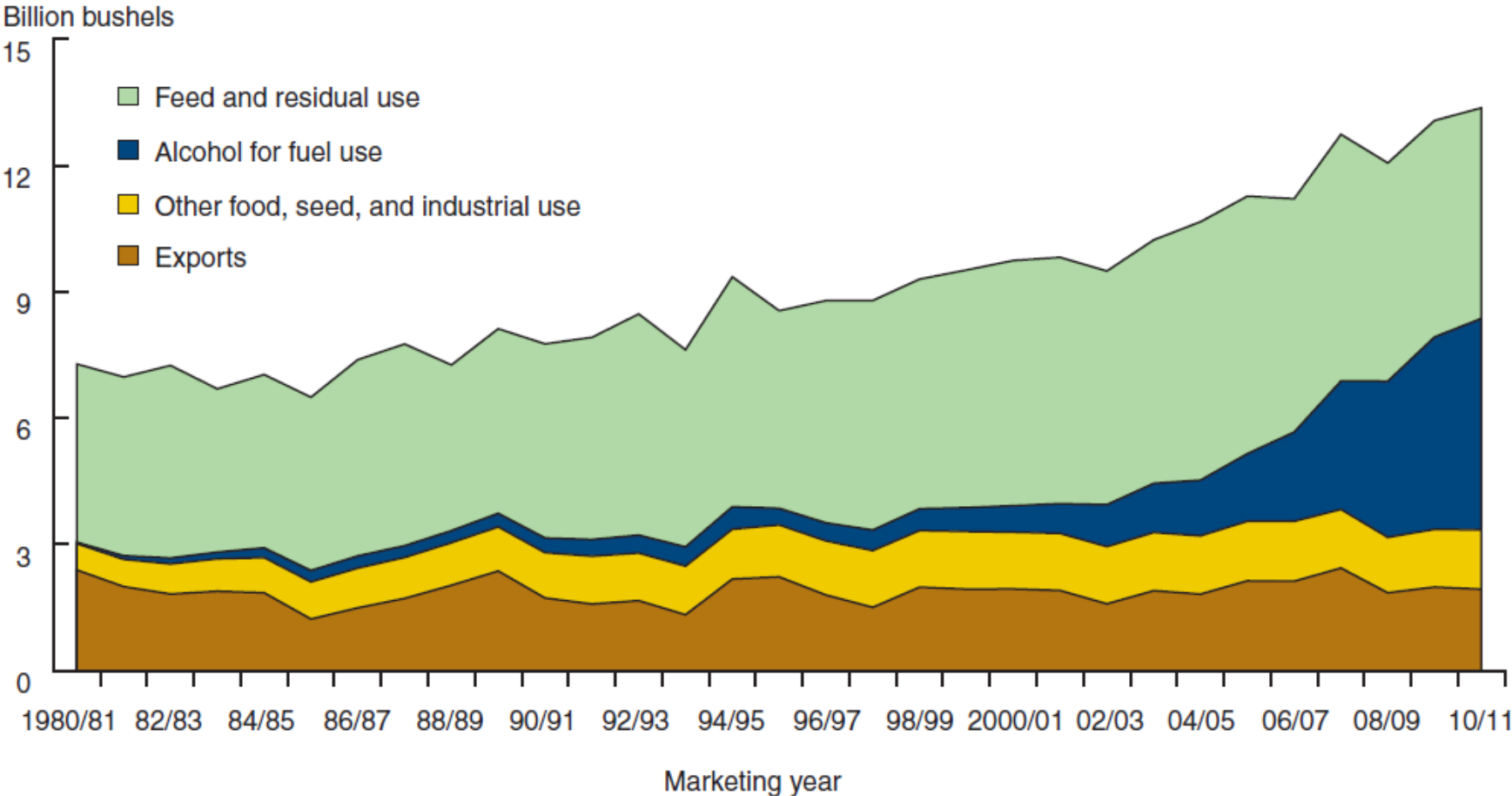
- Have the changes in the structure of agricultural derivative markets really been so dramatic?
- And isn't changing market structure is normal?
- Just look at the physical markets

US and Global maize exports

1990/91-1992/93=100



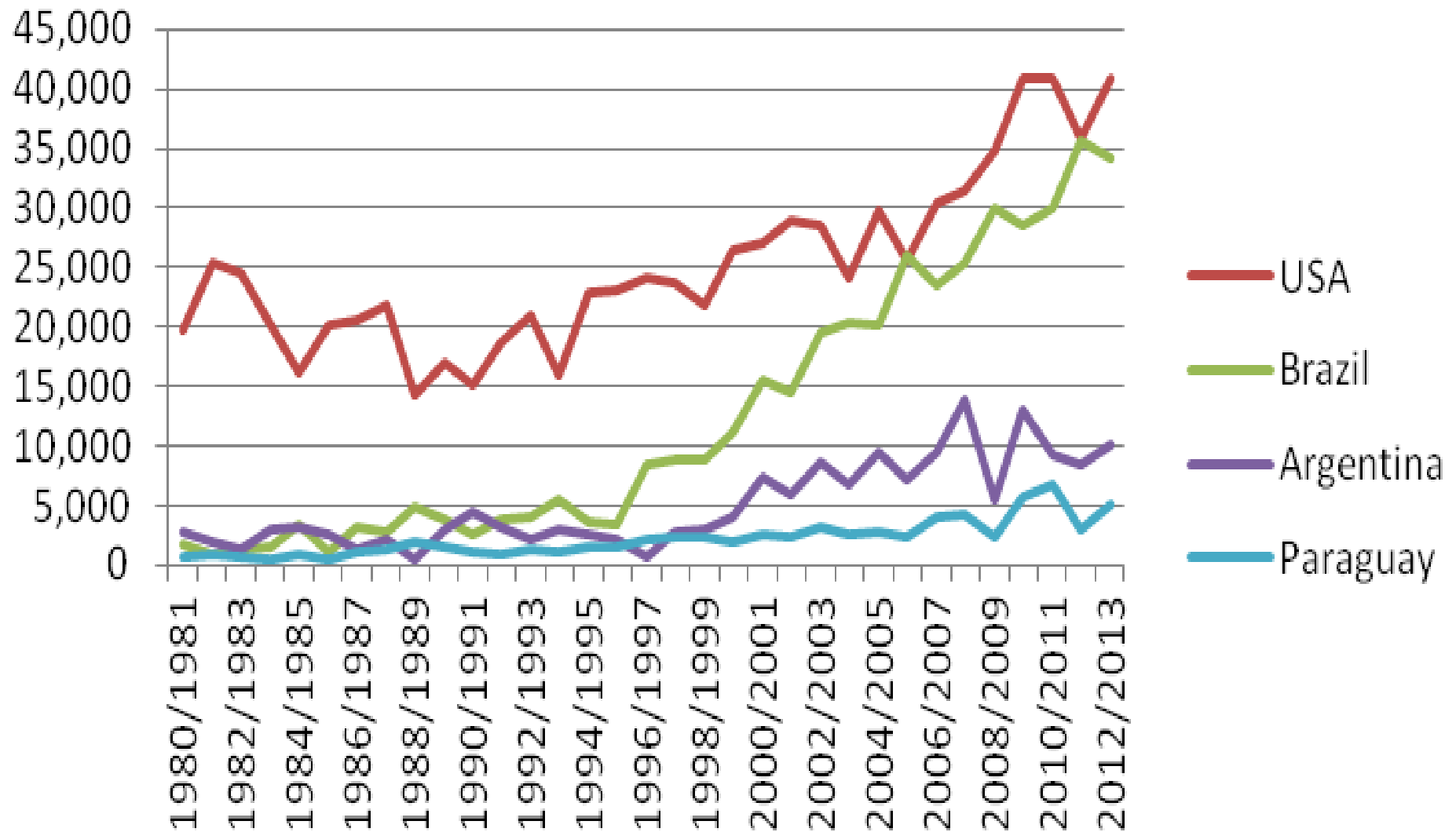
Biofuel - US Maize Use



Source: USDA, Economic Research Service.

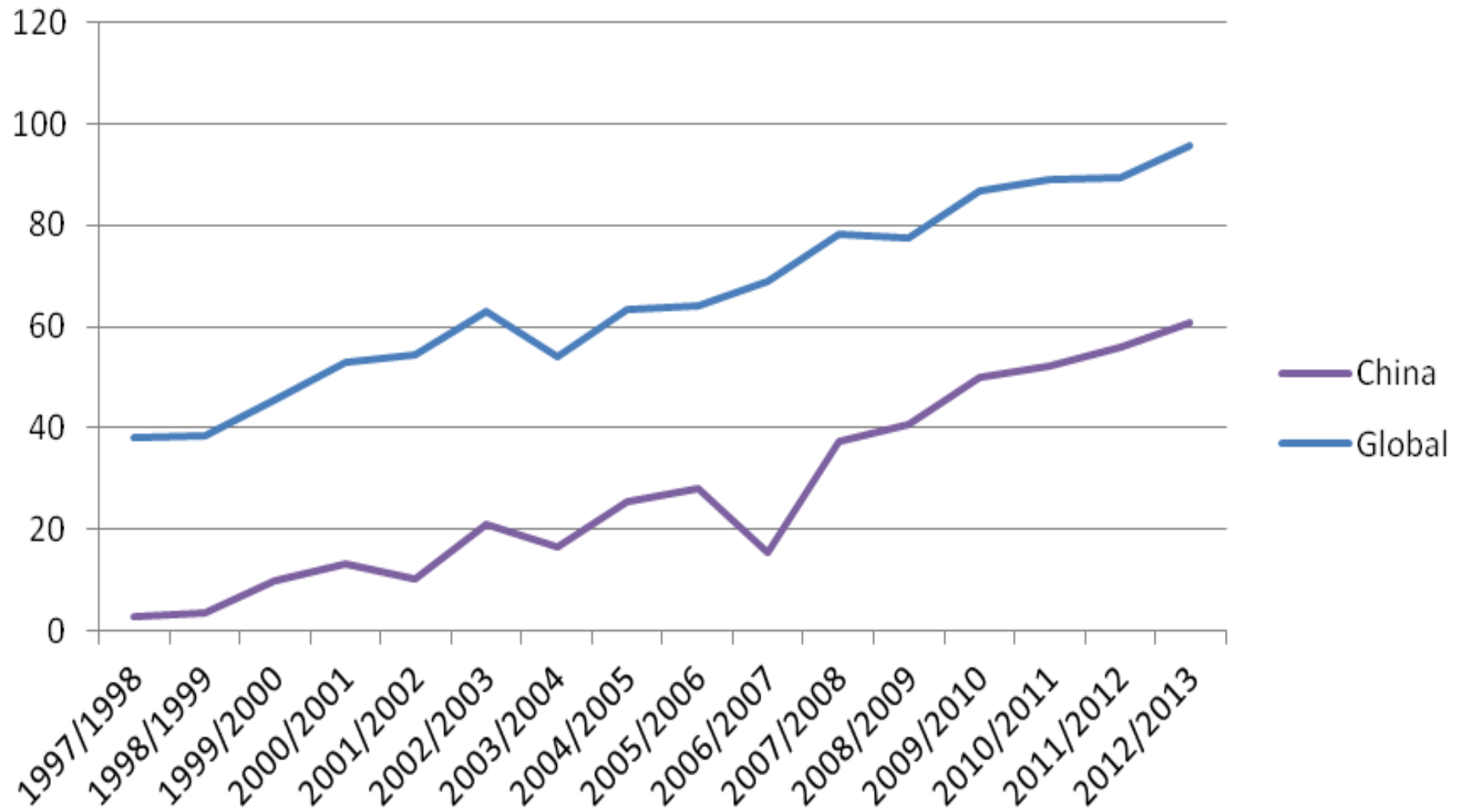
Soybean Exports

('000 metric tonnes)



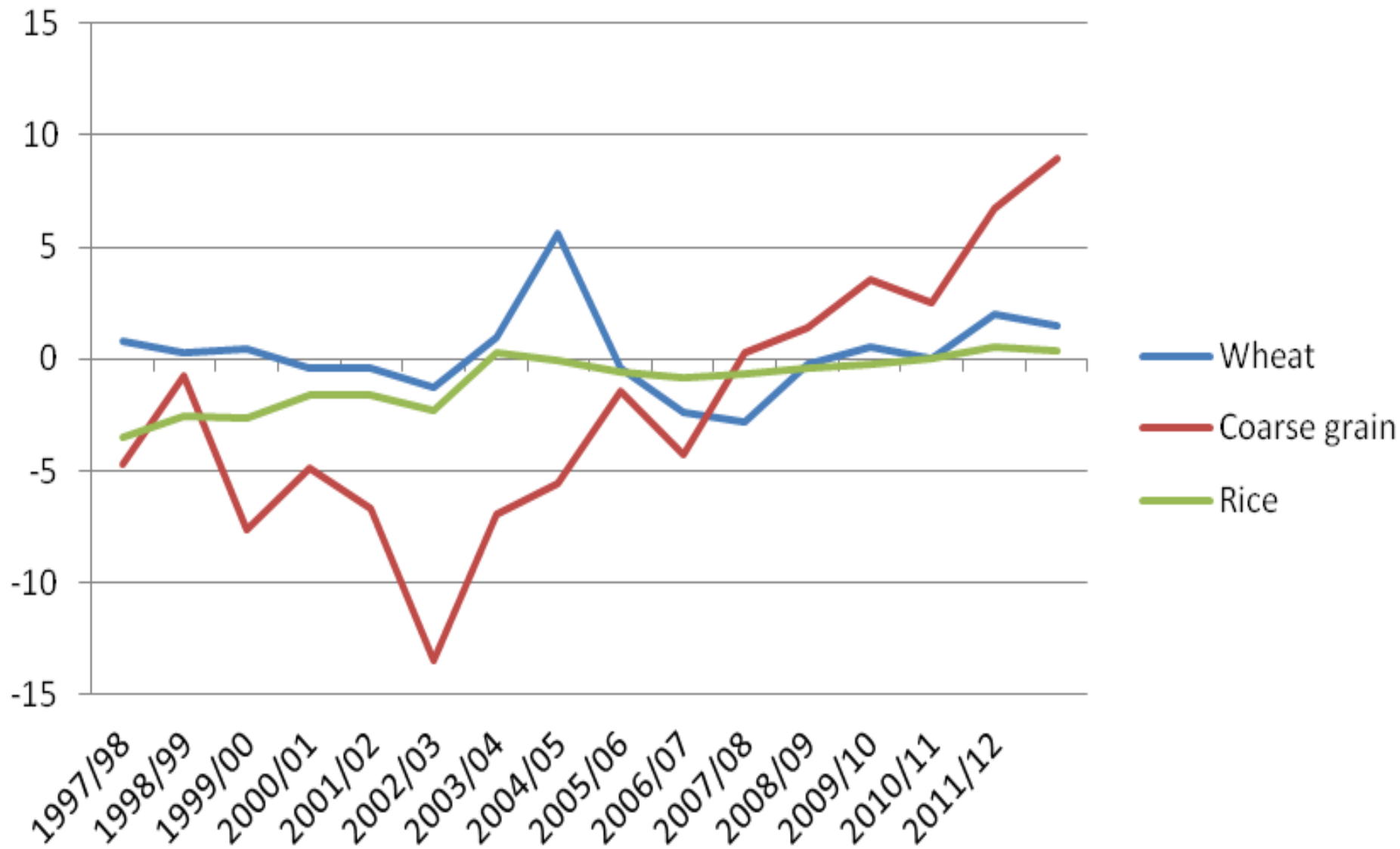
Soybean imports

(million tonnes)



Chinese Grain Imports

(net - million tonnes)





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Policy response

A range of proposals since 2008

- Emergency reserve (IFPRI)
- Internationally co-ordinated public grain reserves (W. Bank)
- Regional and national reserves
- Virtual reserve – fund to combat speculation (IFPRI)
- Diversion from industrial and animal feed uses (Wright)
- International grain clearing arrangement (Sarris)
- Production reserves (Sarris)
- Position limits on speculation

Rather than treating the symptoms...

Encourage the global/national agricultural sectors to be more efficient and responsive so

- Less chance that the conditions for a spike can form
- Any price spike smaller and shorter-lived
- Plus other benefits

What does this mean?

- Increased international trade (trade deals, less scope for export bans)
- Encourage well-functioning land, labour and capital markets
- Eliminate agricultural subsidies
- Facilitate establishment/growth/use of market mechanisms for management of price risk
- Improve International stocks data
- Thinking about biofuel mandate flexibility