International Grain Market Trends & Factors



2020 KSU Virtual Risk & Profit Conference

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Department of Agricultural Economics



Oilseeds and Soybeans - Current Market Outlook & Issues

Outline for Discussion

- Developing Issues to Watch
- II. Coarse Grains and Corn Overview and Outlook
- III. Wheat Overview and Outlook
- IV. Oilseeds and Soybeans Overview and Outlook
- v. Question and Responses

MACRO ISSUES

The Big Picture...

Developing Issue to Watch – 14 August 2020 Record World Production of Coarse Grains and Corn at 1,464.7 mmts Record World Production of Soybeans of 370.4 mmts **Economic impact** of COVID19...? - Supply Chain Disruption - Shifts in Demand Global drop in GDP and Recession Brexit and changes in the E.U Currency Volatility: Strong US\$, weaker in the past weeks... China - US Trade Dispute US Election & Politics... African Swine Flu in China and S.E. Asia Changes in Ocean Freight Increasing Tensions in the South China Sea...? Tensions in the Middle East Crude Oil Prices @ \$44/barrel Increasing concerns of Sustainability Production increases in Brazil and Argentina with weaker currencies.

Coarse Grains - Current Market Overview, Outlook & Issues Uncertainty in the market...

- 1. Impacts of COVID19
 - Supply Chain disruption, along with a shift in consumption and demand;
 - Global Recession and drop in per Capita GDP and Disposable Income;
- 2. Record Global Production in Coarse Grains and Oilseeds
 - Record Global Trade and competing exports out of the Black Sea, Brazil and Argentina
- 3. Growth in demand from Animal Agriculture
 - Impact of Animal Protein production, consumption, and related trade flows...
 - African Swine Fever in China and Southeast Asia
- 4. Strength in U.S. Currency
 - Weakness if other Exporting Countries supporting relative prices
 - Weakness in Importing Countries making U.S. commodities look expensive
- 5. Trade Tensions
 - U.S. & China
 - UK Trade Agreement Negotiations
 - Other bilateral trade Agreements Kenya & Sub-Sahara Africa, Latin America, India
- Politics
 - Geo-Political and Security issues with China
 - 2020 U.S. Election
 - Sustainability and the impact of "Climate Change" politics...?

CORN

World Situation & Outlook...

Corn - Current Market Overview, Outlook & Issues World Corn



World Corn as of Au	igust 2020							
(in 000's mts)	15/16	16/17	17/18	18/19	19/20	20/21 Jly 20	Change m-m	20/21 Aug 20
Beginning Stocks (1000 N	/IT) 279,976	312,386	352,219	341,182	320,093	311,945	-650	311,295
Area Harvested (1000 HA) 187,934	194,904	191,527	191,951	192,502	196,076	65	196,141
Yield (MT/HA)	5.40	5.79	5.63	5.85	5.78	5.93	0.04	5.97
Production (1000 MT)	1,015,045	1,127,624	1,078,621	1,123,446	1,112,398	1,163,212	7,821	1,171,033
Total Supply (1000 MT)	1,295,021	1,440,010	1,430,840	1,464,628	1,432,491	1,475,157	7,171	1,482,328
FSI Consumption (1000 N	IT) 387,891	405,673	419,076	423,293	412,740	426,987	195	427,182
Feed and Residual (1000	MT) 613,816	657,085	672,314	703,042	705,772	727,539	4,430	731,969
Total Dom. Cons. (1000 N	(T) 1,001,707	1,062,758	1,091,390	1,126,335	1,118,512	1,154,526	4,625	1,159,151
MY Exports (1000 MT)	120,150	160,610	148,198	181,053	171,223	182,451	2,205	184,656
MY Imports (1000 MT)	139,222	135,577	149,930	162,853	168,539	176,862	2,080	178,942
	-19,072	25,033	-1,732	18,200	2,684	5,589	125	5,714
Ending Stocks (1000 MT)	312,386	352,219	341,182	320,093	311,295	315,042	2,421	317,463
Percent Stocks / Use	31.2%	33.1%	31.3%	28.4%	27.8%	27.3%	0.1%	27.4%

World Corn
 Production at a record 1,171.0 mmts, up 58.6 mmts LY's, up 7.8 mmts LM

Feed Demand at a record 732.0 mmts

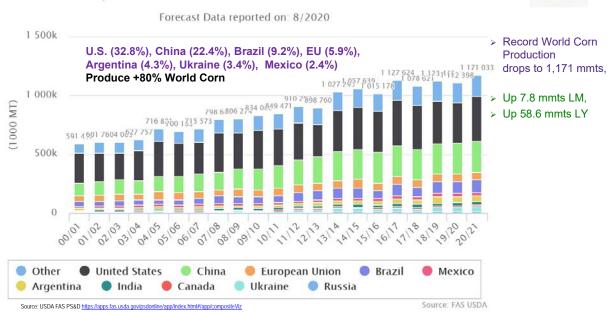
World Trade at a record **184.7 mmts**, up 13.5 mmts LY

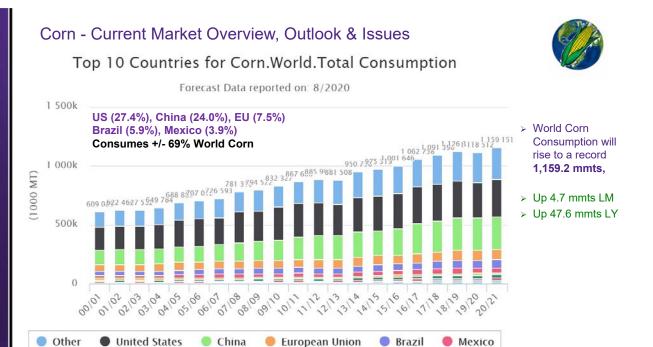
End Stx/Use up slightly to 27.4%, but still historically high

Source: https://www.nass.usda.gov/Statistics_by_Subject/index.php?sector=CROPS , USDA Oil Crops All Tables 20200110.xls

Corn - Current Market Overview, Outlook & Issues Top 10 Countries for Corn.World.Production







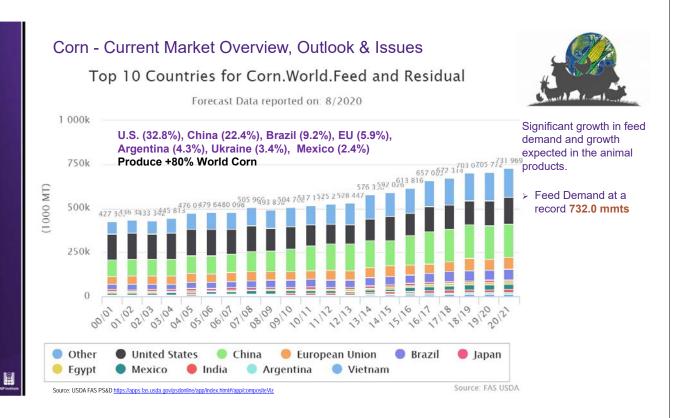
Source: FAS USDA

Egypt

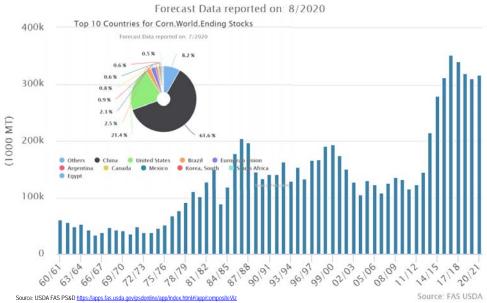
Source: USDA FAS PS&D https://apps.fas.usda.gov/psdonline/app/index.html#/app/compositeViz

Japan

Argentina



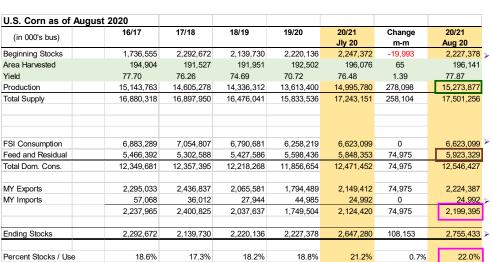
Corn - Current Market Overview, Outlook & Issues Corn.World.Ending Stocks for all Years.





- World Ending Stocks are estimated to increase modestly in 2020/21 following a three year decline, at 317.5 mmts 2020/21 up 2.4 mmts LY.
- China will hold 62%, 194 mmts of these stocks in 2020/21; compared to 204 mmts 2019/20, down 10 mmts LY 2777
 - US will hold 21%, 67.3 mmts of these stocks in 2020/21; compared to 57.1 mmts 2019/20, up 10.2 mmts LY

Corn - Current Market Overview, Outlook & Issues U.S. Corn





2,227,378 > US Record Corn 196,141 Production at a 77.87 record 15,274 mbus, up 1,660 mbus LY's, and up 278 mbus LM

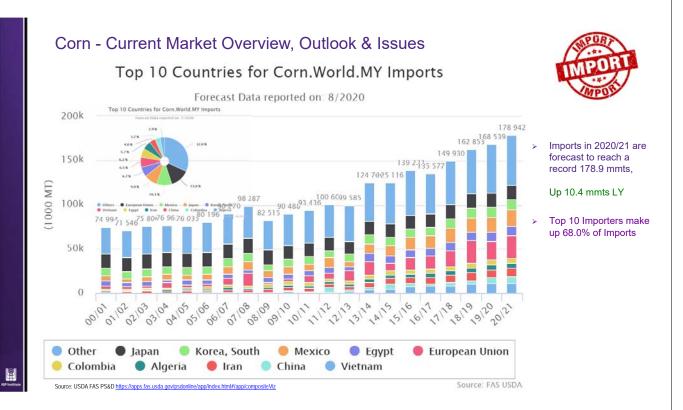
6,623,099 > US Feed Demand 5,923,329 at a record **5,923** 12,546,427 **mbus**, up 74 mbus LY

24,992 > End Stx up 75

➤ End Stx / Use up slightly to 22.0%, historically high

CORN

World Trade...



Corn - Current Market Overview, Outlook & Issues Old Crop 2019/20 Sales to China

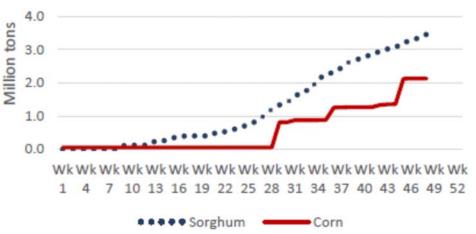


U.S. Old-Crop Commitments to China as of the last week in July



2019/20 MY

- Grain Sorghum = 3.5 mmts
- ➤ Corn 2.1 mmts



Source: USDA FAS World Markets and Trade - 12 August 2020

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Corn - Current Market Overview, Outlook & Issues New Crop 2020/21 Sales to China in 2019/20



Corn imports are subject to the tariff-rate quota (TRQ) of 7.2 mmts. I would expect corn imports to significantly exceed this volume this coming marketing year.

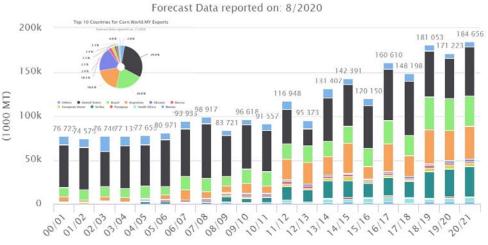
China does not limit sorghum imports.

Note: 2015 and earlier, a distortion in the domestic price of Chinese corn and imported grain sorghum values is what lead to the increase in sorghum imports.

Source: USDA FAS World Markets and Trade – 12 August 2020

Corn - Current Market Overview, Outlook & Issues Top 10 Countries for Corn.World.MY Exports





Exports in 2020/21 are forecast to reach a record **184.7 mmts**,

Up 13.43 mmts from LY

- U.S. 29.9%
- Brazil 20.8%
- Argentina 18.6%
- Ukraine 18.1%

make up +/- **87%** of world Corn Exports.

9

Paraguay

Source: USDA FAS PS&D https://apps.fas.usda.gov/psdonline/app/index.html#/app/compositeViz

European Union

United States

Source: FAS USDA

Serbia

South Africa

Brazil

Burma

Corn - Current Market Overview, Outlook & Issues **Exporter Corn Price – FOB US\$/mt**

Argentina

Ukraine





Current Values:

- US offers FOB for corn were down \$9/mt to \$162/mt
- Black Sea bids were \$1/mt higher at \$184/mt
- Argentine prices were \$1/mt higher at \$156/mt
- Brazilian offers were unchanged at \$166/mt.

US offers dropped below those of Brazil by the greatest price differential since Brazilian bids returned to publishing in early May.



CHINA CORN

A Focus on the Middle Kingdom...

Coarse Grains - Current Market Overview, Outlook & Issues Making Sense of China...?

In short, the China market is full of contradictions in terms of what we are told by China and its recovery, and, what is happening in the market.

- 1. Food Security is China's highest priority; always has been...
- Lost economic performance due to Covid19, combined with a population that has struggled through some serious lock-downs, would challenge any country. Economy showing signs of improvement:
 - China's unemployment rate in June fell 0.2 points 5.7% with indications the economy is improving.
 - Last week, China saw its foreign trade rise 6.5% y-o-y in July, with exports and imports up 10.4% and 1.6%; respectively.
- Flood waters have ravaged the lower Yangzte regions and significant losses have occurred in key grain and hog producing areas due to either rising flood waters or devastating diseases like ASF being spread further.
- 4. China's hog herd is seriously depleted numbers recently announced by the Chinese government claim numbers are at 340 million head, which is down by 37% on the base line "pre-ASF" number of 540 million head. Trade participants still believe this figure is closer to 50%, and a protein supply deficit is more like 15 to 20 mmts both this year and next.
- 5. There is no doubt that politics is playing the overall role in distorting the market. There are two key events coming up:
 - firstly, is the Phase One talks between China and the US on August 15th,
 - secondly, the US Presidential election in November.

Corn - Current Market Overview, Outlook & Issues China Corn - Supply & Demand

China Corn as of August	2020							
(in 000's mts)	15/16	16/17	17/18	18/19	19/20	20/21 July 20	Change m-m	20/21 Aug 20
Beginning Stocks (1000 MT)		212,017	223,017	222,525	210,319	204,069	0	204,069
Area Harvested (1000 HA)		44,178	42,399	42,129	41,280	42,000	0	42,000
Yield (MT/HA)		5.97	6.11	6.11	6.32	6.19	0.00	6.19
Production (1000 MT)		263,613	259,071	257,330	260,770	260,000	0	260,000
Total Supply (1000 MT)		475,630	482,088	479,855	471,089	464,069	0	464,069
FSI Consumption (1000 MT)		70,000	76,000	83,000	85,000	87,000	0	87.000
Feed and Residual (1000 MT)		185,000	187,000	191,000	189,000	190,000	0	190,000
Total Dom. Cons. (1000 MT)		255,000	263,000	274,000	274,000	277,000	0	277,000
MY Exports (1000 MT)		77	19	19	20	20	0	20
MY Imports (1000 MT)		2,464	3,456	4,483	7,000	7,000	0	7,000
		-2,387	-3,437	-4,464	-6,980	-6,980	0	-6,980
Ending Stocks (1000 MT)	212,017	223,017	222,525	210,319	204,069	194,049	0	194,049
Percent Stocks / Use		87.5%	84.6%	76.8%	74.5%	70.1%	0.0%	70.1%



- Flooding has had minimal impact of Chinese corn production at
 260 mmts
- Chinese feed demand appears to be rebounding as swine heard is rebuilt and other animal protein production increases.
- Chinese corn imports of 7.0 mmts is likely understated.
- Chinese Ending Stocks of 194 mmts, is one of the greatest unknowns ...???

Source: USDA FAS 10 July 2020; GHA World & US Grains Data for Supply Chain Pres 20200710

Current Market Overview, Outlook & Issues Agricultural Producing Area in China



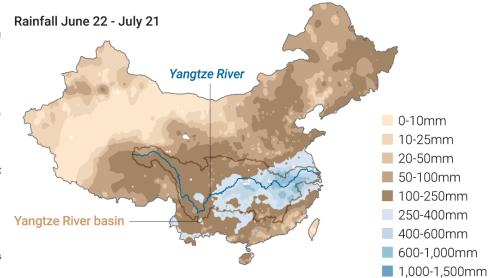
Source: https://en.wikipedia.org/wiki/Agriculture in China#/media/File:China agricultural 1986.jpg

China's Yangtze River

Intense rain and severe flooding has been battering China since early June but, according to the China Meteorological Administration, the country has experienced a 20% increase in heavy rainfall since 1961. Currently, the water level of 433 rivers is above the flood control line, with 33 of them reaching record highs.

On July 2, the Yangtze River experienced its first flood peak of the year.

The Changjiang Water Resources Commission reported the water level had reached 146.97 meters with peak inflows of 53,000 cubic meters / second, the same rate as the 1998 floods.



Source: Southern China Morning Post, 27th July 2020, by Dennis Wong; https://multimedia.scmp.com/infographics/news/china/article/3094790/china-floods/index.html

Corn - Current Market Overview, Outlook & Issues China Feed Demand – July 2020



	2019	2020	% change	
Total Consumption	226.360	227,220	0.4%	
Swine	76,510	70,740	-7.5%	
Broiler	84,580	90,700	7.2%	
Layer	30,830	30,940	0.3%	
Aquaculture	21,400	21,300	-0.4%	
Ruminants	10,740	10,900	1.4%	

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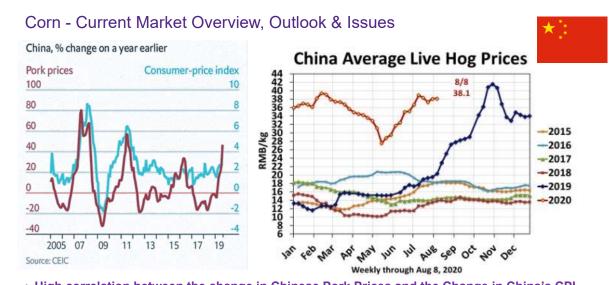
FAS Beijing F	eed and Residual	Estimates and For	recast (Million M	etric Tons)	
Grain	2018/19	2019/20	2020/21	Change	
Corn	184.0	180.0	188.0	8	
Sorghum	1.5	3.9	5.0	1.1	
Barley	2.4	3.1	2.5	-0.6	
Wheat	20.0	18.0	19.0	1	
Total	207.9	205	214.5	9.5	

Corn - Current Market Overview, Outlook & Issues China Beef, Pork Prices Imported and Domestic 82 RMB/kg 80 Dom. Beef 70 60 Dom. Pork RMB/kg 50 40 Imp. Beef 33 RMB/kg 30 20 19 RMB/kg —Imp. Pork 10 0 Monthly through July 2020



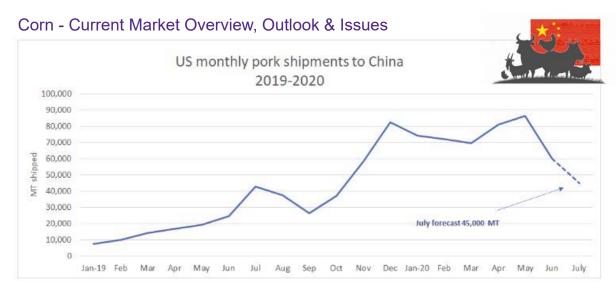
- China's domestic hog prices are back to almost record levels
- Yet US pork imports have fallen by close to 40% in the last two months;
- Yet, the cheapest pork in the world is from the US and its export pork volume is falling into China.

Source: Global Agritrends, https://s3.amazonaws.com/globalagritrends/content-sections/images/000/009/624/giant/Simon5.png?1597197538



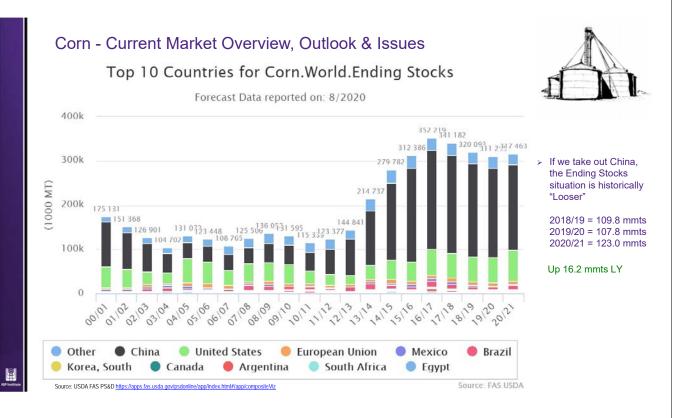
- > High correlation between the change in Chinese Pork Prices and the Change in China's CPI
- > 6.95 Chinese RMB to \$1.00 US Dollar [Spot Rate 12 August 2020]
- > China's domestic hog prices are back to almost record levels
- > Yet US pork imports have fallen by close to 40% in the last two months;

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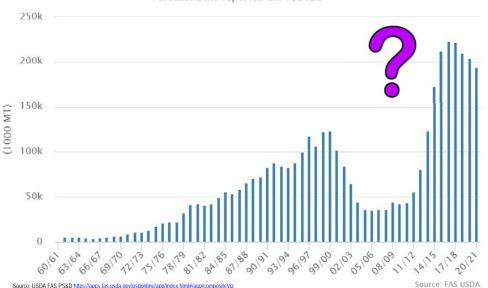
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Corn - Current Market Overview, Outlook & Issues Corn.China.Ending Stocks for all Years.

nina.Ending Stocks for all Years.
Forecast Data reported on: 7/2020





- ➤ Fourth year USDA shows a decline in China's Ending Stocks; However, still historically large...
- > But what is the reality...?
 Who much...?
 Quality...?
- Government Policy...?

Corn - Current Market Overview, Outlook & Issues Corn.China.MY Imports for all Years.

Forecast Data reported on: 7/2020





China Imports were at 7.0 mmts in 2019/20

Expected to remain at 7.0 to 7.2 mmts in 2020/21

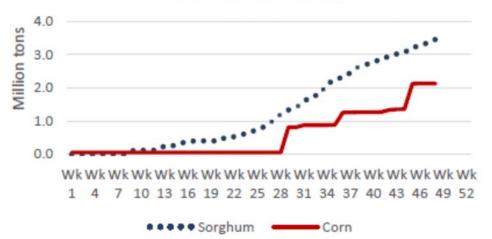
- * China's TRQ = 7.2 mmts
- Current prices relationships would suggest even larger corn imports.
- Recovery of Swine Production Sector...?
- Other livestock sectors...?
 - Meat Imports...?
 Beef: 4.67 lbs Feed
 Pork: 3.5 lbs Feed
 Chicken: 28 lbs Feed
 * Carcass Weight

4

Corn - Current Market Overview, Outlook & Issues Old Crop 2019/20 Sales to China



U.S. Old-Crop Commitments to China as of the last week in July



2019/20 MY

Total Corn and Sorghum equals 5.6 mmts; highest since 2013/14

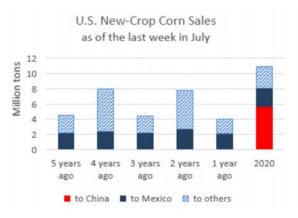
- Grain Sorghum = 3.5 mmts
- > Corn − 2.1 mmts

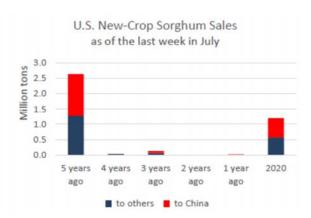
Source: USDA FAS World Markets and Trade - 12 August 2020

Source: SSS/17/S World Markets and Hade 127/agas/252

Corn - Current Market Overview, Outlook & Issues New Crop 2020/21 Sales to China in 2019/20







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China does not limit sorghum imports.

2015 and earlier, a distortion in the domestic price of Chinese corn and imported grain sorghum values is what lead to the increase in sorghum imports.

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Coarse Grains - Current Market Overview, Outlook & Issues Making Sense of China...?

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Source: Global Agritrends 12 August 2020

Coarse Grains - Current Market Overview, Outlook & Issues Making Sense of China...?



China markets is full of contradictions in terms of what we are told by China and its recovery, and, what is happening in the market.

Do not forget; on the surface China may look and act, for the most part, like a market-based economy; but in reality, it is not,,,

The invisible hand of the Chinese government is omnipresent; and, if and where needed, will exert pressure against regular market forces.

- Simon Quilty, Global Agritrends

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