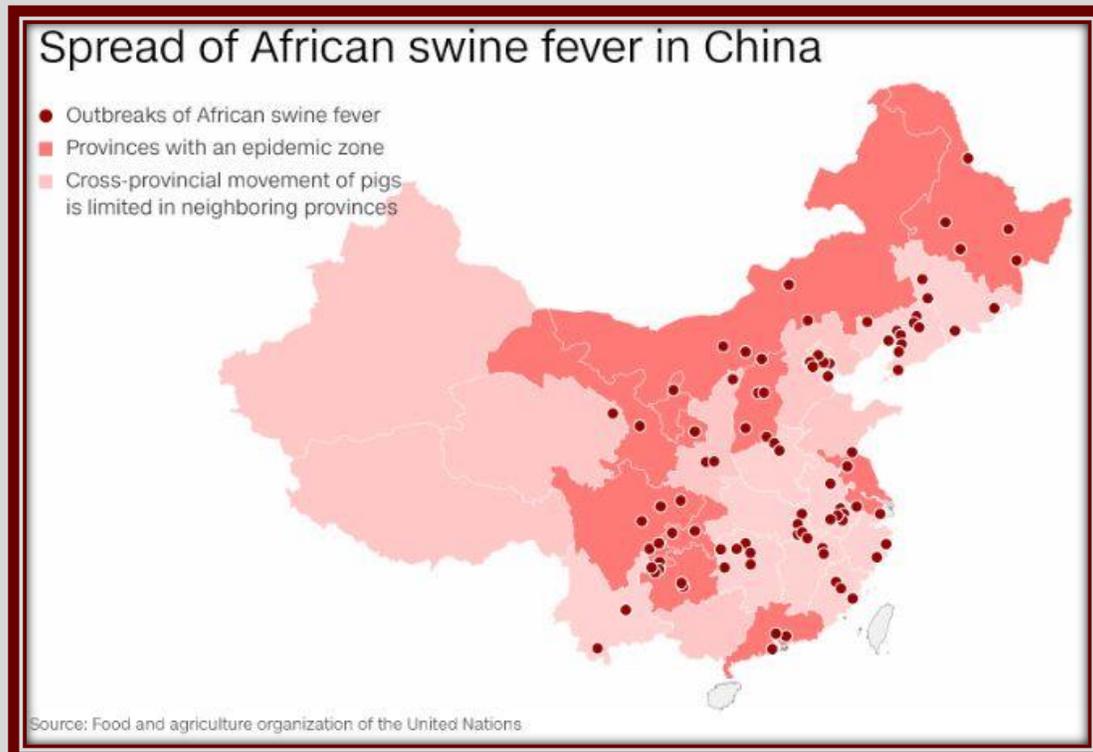
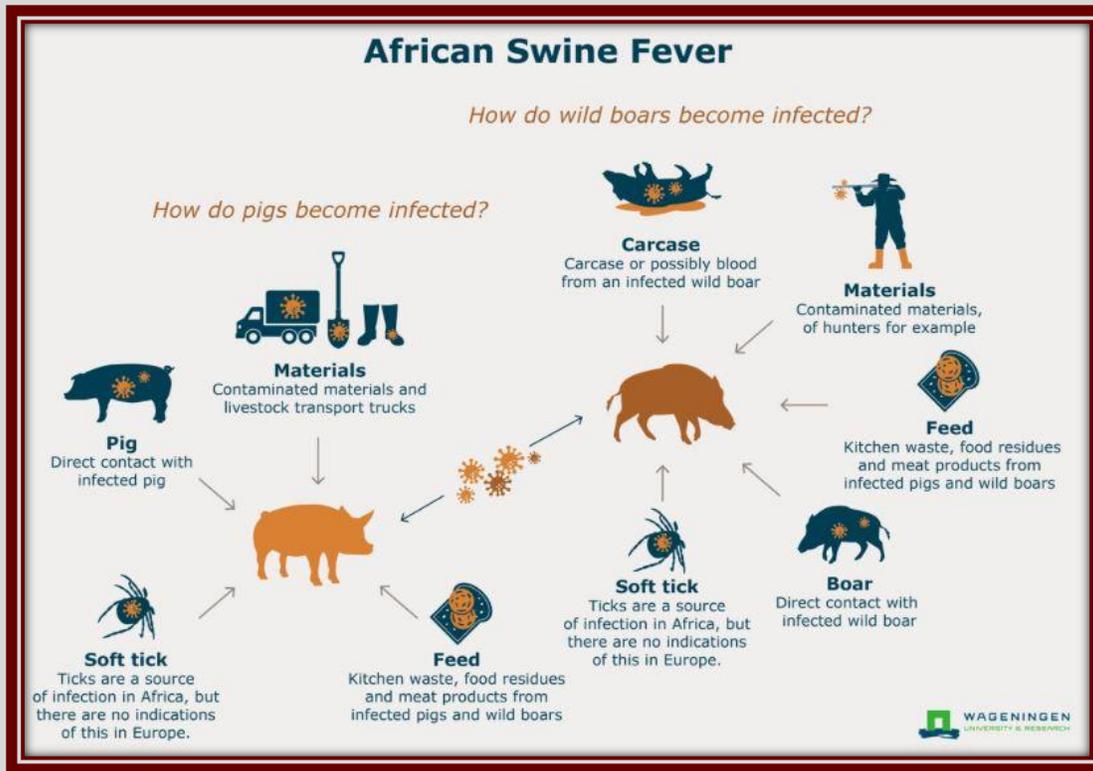




Year of the Pig in China – African Swine Flu





African swine fever is a highly contagious and deadly viral disease affecting both domestic and wild pigs of all ages. ASF is not a threat to human health and cannot be transmitted from pigs to humans. It is not a food safety issue. ASF is found in countries around the world, particularly in sub-Saharan Africa.

More recently, it has spread through China, Mongolia and Vietnam, as well as within parts of the European Union. It has never been found in the US.

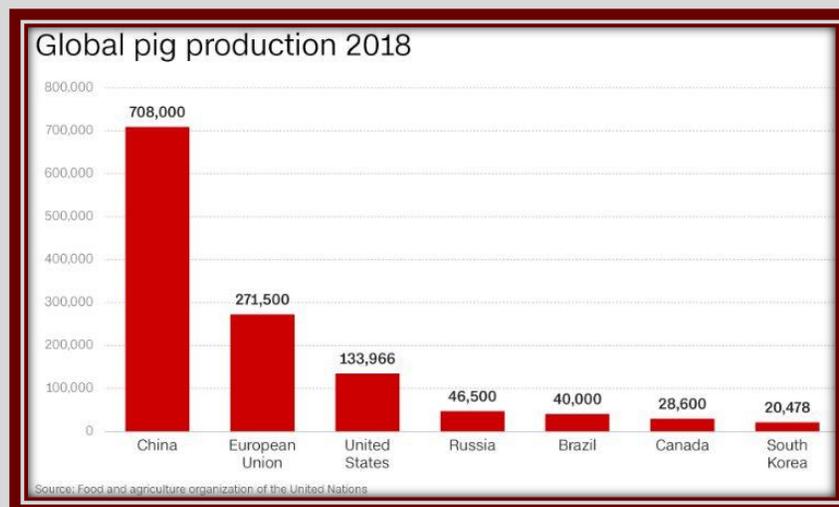
Why is African swine fever a concern?

ASF is a devastating, deadly disease that has a significant impact on livestock producers, their communities and the economy. There is no treatment or vaccine available for this disease. The only way to stop this disease is to depopulate all affected or exposed swine herds.

Affected provinces in China:

Anhui, Heilongjiang, Henan, Jilin, Liaoning, Jiangsu, Zhejiang, Shanxi, Yunnan, Hunan and Guizhou, Hubei, Jiangxi, Fujian, Sichuan, Shaanxi, Qinghai, Guangdong, Gansu, Shandong Provinces, Tianjin, Chongqing, Shanghai and Beijing Municipalities, and Inner Mongolia, Ningxia Hui and Guangxi Zhuang Autonomous Regions. Note: only 3 provinces not affected

This is a major issue because pork is the staple meat in China – and China is the world’s largest producer and consumer of pork.





What has China done to combat this?

The government set a 3 km epidemic zone and a 10 km buffer zone around the epidemic zone. A strict movement control of live pigs was introduced, and live pig markets in infected provinces and adjacent provinces were closed [reference]. Studies showed that 62% of the first 21 ASF events in China were related to swill feeding. Directives on banning swill feeding to pigs and record keeping of livestock transportation vehicles was updated [reference]. Epidemiological studies of 68 outbreaks revealed 3 major causes spread ASF virus: 46% by vehicles and workers without disinfection, 34% by swill feeding, and 19% by transport of live pigs and their products across regions [reference]. As ASF was detected in a wild boar, MARA and Ministry of Natural Resources released a joint notice on “Strengthening the Joint Prevention and Control Work on ASF in domestic pigs and wild boars” [reference]. MARA released the 2019 edition of the ‘ASF Epidemic Emergency Implementation Plan’ [reference]. In March 2019, MARA updated regulations on pig slaughterhouses: before May 2019, provinces to conduct a through inspection of pig slaughtering enterprises without pollutant discharge permit, or does not meet the animal epidemic prevention requirements, shall immediately stop production and rectify before July 2019 to continue slaughter. It task pig slaughter enterprises to conduct self-inspection by using PCR, which to be implemented from April–July 2019. If ASF is detected, the slaughtering enterprise should stop production for 48 hours, then apply for evaluation to resume production. If ASF virus nucleic acid is detected in products that are sent out from a slaughterhouse due to a mal-conduct, the slaughter enterprises needs to recall the same batch, and the activities be suspended for at least 15 days [reference].

Following assessment, Epidemic Zone was lifted in Economic and Technological Development Zone, Yongzhou City, Hunan Province on 23 March [reference] since there no new cases were reported in the affected areas after 6 weeks. As of 28 March 2019, the quarantine in 104 Epidemic Zones have been lifted.

China has essentially declared victory.



One concern with reported cases is the incentive for some farmers not to report their cases for obvious economic reasons. People can safely eat infected pigs, but those pigs can still pass the virus and enable its spreading.

The animal husbandry and veterinary affairs bureau is stepping up the investigation and punishment of illegal activity in the pig industry, said a statement published on the Ministry of Agriculture and Rural Affairs website.

Failing to report deaths and privately slaughtering and selling sick or dead pigs would be pursued under criminal law, it said, adding that compensation of 1,200 yuan (US\$175) for each pig culled was sufficient incentive for farmers to report the disease.

If you have to tell farmers \$175 is sufficient – is it?

There are fears that local authorities are covering up the spread of the disease and journalists have been ordered not to cover the story for fear of spreading panic. When you factor this in – you know you have to take the numbers with a grain of salt – although it does look like the situation is getting better.

While official figures suggest the number of cases is tailing off, industry figures have questioned whether this is down to an increasing reluctance to report cases rather than effective disease controls.



A majority of pig farms in Hebei have found cases of swine fever, and the situation is similar in neighbouring Henan and Liaoning provinces. Most cases were not reported.

Sun Dawu, Hebei Dawu Agriculture Group

Last month Sun Dawu said about 15,000 pigs had died from the fever in Xushui County in Hebei province but the local authority had covered it up.



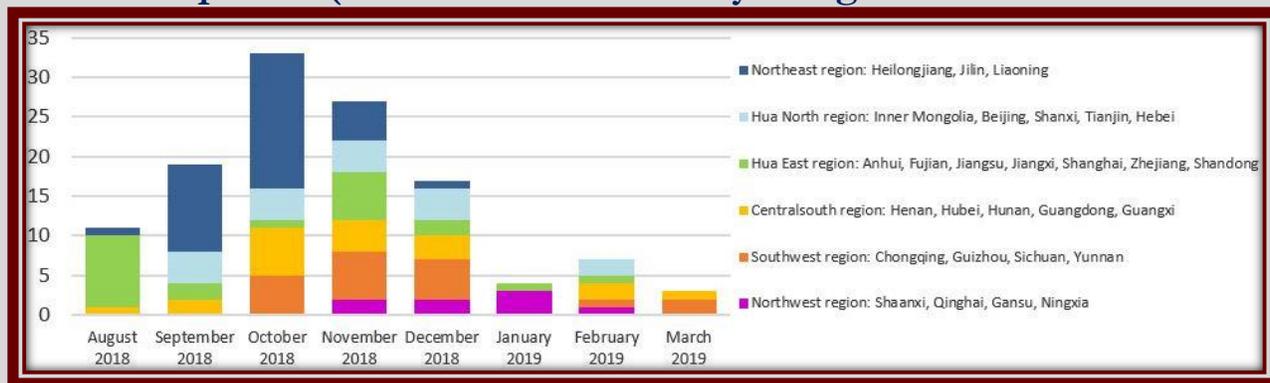
From an anonymous animal vaccine company manager per SCMP:

“Many small farms and some medium and large-scale farms are still selling the pigs even though they have found swine fevers,” he said. “There are 99 core pig breeding farms in China. As of the end of February, fewer than 20 have not been hit by the fever.”

Betsy Freese, an American agriculture editor, published an article on the Successful Farming website on March 13 under the headline “Why you can’t believe what China says about African swine fever” following a week-long trip to China.

In the article, Freese cited a “meat export expert in China” who told her that “there are reported cases all across the country, but many cases are not reported”. Swine fever has also been found in pork products on sale in China.

ASF Cases Reported (Source: China Ministry of Agriculture and Rural Affairs)



China produces more than half of the world’s pigs – 700M per year. China consumes almost all of this production – only exporting 1.6M last year.

“In addition to the pigs culled on the infected farms, many more have been slaughtered by farmers seeking to exit the industry because of the impact the disease is having on prices and trade, said Pan Chenjun, a senior analyst at Rabobank.”

Over a million pigs have been culled but the numbers culled is just a small part:



Prices in some parts of China have been sitting at loss-making levels for months, following restrictions on transport implemented after disease outbreaks.

Liquidation by small farmers and the slow restocking and expansion of larger farms could reduce China's pig herd by about 20 percent in 2019.

The effect of the swine fever outbreak is spilling over to animal feed markets. China's soymeal futures plunged almost 3 percent following a fresh outbreak on a large breeding farm announced on Saturday.

A large farm in Suihua city with 73,000 pigs in the Heilongjiang province suffered a recent outbreak. Their herd included 15,000 breeding pigs, according to its website, and it was aiming to produce 385,000 pigs for slaughter a year. Some 4,686 pigs had been infected and 3,766 animals died, the Ministry of Agriculture and Rural Affairs said late on Wednesday. All animals on infected farms must be culled under current rules.

The farm is the largest yet to be hit by the disease, which has infected almost 100 farms across China since August 2018, spreading faster than in any other country to date.

Below is a great piece I pulled from Stratfor

China: Swine Fever Outbreak Could Alter Trade Dispute with U.S. (6Sep18)

What Happened

Since the first case of African swine fever was reported in China in early August, more than 10 additional outbreaks have been reported. The disease is affecting six provinces, stretching more than 3,000 kilometers (1,864 miles) from Heilongjiang in the north to Zhejiang in the south. Now, the U.N. Food and Agriculture Organization has convened a three-day meeting of experts and representatives from countries in the region. They plan to develop a regional response to best prevent the spread of the viral hemorrhagic fever, which is not harmful to humans, beyond China's borders. As of Sept. 5, nearly 40,000 pigs had been culled in an effort to contain the disease. Restrictions have also been



placed on the movement of the animals, and pork production and live hog markets have been shut down in the affected provinces.

Why It Matters

Since the beginning of August, pork prices have risen by about 8 percent in parts of China, and those increases could exacerbate the economic fallout from the trade dispute between the United States and China. Pork is one of the major agricultural products targeted in the disagreement, so a major infection of China's domestic supply could lead to shortages, further disrupting pork markets. These developments could weaken China's ability to continue to implement tariffs. The increase in prices has already led to unease in the bond market. Should those prices remain high, Beijing could be forced to use additional economic measures to suppress inflation. Pork prices are a significant contributor to the country's consumer price index, an important economic indicator.

Background

China is both the largest consumer and largest producer of pork in the world. Its output is more than double that of the European Union, the second biggest producer. China's pork industry is in the process of consolidating and modernizing, and this outbreak is occurring in provinces with moderate to high pig-farming concentrations. As part of its trade disputes, Beijing has placed retaliatory tariffs on U.S. pork producers, who were the world's second largest exporter in 2017. When those tariffs are combined with previous duties, the tariff total on U.S. pork rises to over 70 percent.

What to Watch for Next

The continued spread of African swine fever to new areas in China can be expected. The severity of the outbreak could escalate substantially if additional cases are reported in the large pork-producing provinces of Sichuan, Hunan and Henan. Additional precautionary measures could also hurt Chinese domestic production and lead Beijing to ease many of the tariffs and counter tariffs placed on U.S. pork products. However, tariffs would most likely be relaxed on non-U.S. sources of pork first.



US Lean Hog Futures - Weekly



As you can see the swine fever spreading in China has provided some fuel for the recent breakout in hog futures in the US. The trade was taking its toll on US hog farmers but the disease has taken out about 17% of China's pig herd and hog futures have skyrocketed by 46% since 23 Feb, off of the up trendline pictured.

"All the sudden there's a rumor that [the Chinese] are going to have to buy U.S. pork, and we've seen pork futures increase by about \$40 a head," said Mark Greenwood, a Mankato-based executive at Compeer Financial, one of the largest ag lenders in the country. "We've been very busy on the hog side right now looking to lock up some profits for producers."

"2018 and most of the first quarter of 2019 have been pretty rough price-wise. Even the best farms struggle to break even," said Dave Preisler, director of the Minnesota Pork Producers Association. "Now with this pricing opportunity, the outlook certainly looks much, much better."

The outlook has been dim since President Donald Trump announced tariffs on Chinese imports last May and China responded by slapping tariffs on U.S. pork



and soybeans. In the late summer, hog futures prices meant farmers who hadn't locked in better prices faced as much as a \$40 loss on each pig they raised.

It's not clear that China will soften its stance on tariffs for U.S. pork, but U.S. supply will find the demand one way or another.

BONUS CONSPIRACY: Just For Fun

Cuban Allegations of Biological Warfare by the United States: Assessing the Evidence

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I. INTRODUCTION

Cuban government officials have often accused the U.S. of using microorganisms and insects as biological weapons against their nation's human, animal, and plant populations. It is unclear how many disease outbreaks and insect infestations for which the Cuban government holds the U.S. responsible. The highest estimate probably has been made by the Cuba Solidarity Campaign,¹ which claims that the U.S. has mounted 24 biological attacks against Cuba since 1962 (see Table 1). However, my analysis of information derived from newspaper articles, radio and television broadcasts, articles in the temporal and scientific literature, books, and expert interviews indicates that Cuban officials have affirmed or asserted that one suspicious event, ten disease outbreaks, and one insect infestation that occurred between 1964 and 1997 allegedly were biological attacks carried out by intelligence agents, or persons acting on the behest, of the U.S. government.

With one exception, all Cuban allegations have been "unofficial", that is, they were made in speeches delivered by high government officials, including President Fidel Castro, for the consumption of local and international audiences. Some speeches were repeated in print in the Cuban press

and commented on in radio and television broadcasts. However, for reasons it has kept to itself, with one exception the Cuban government has chosen not to avail itself of existing mechanisms under international law, including the United Nations Charter and the 1972 Biological and Toxin Weapons Convention (BWC), to have the alleged incidents of biological attack investigated by international bodies set up for that purpose (there were 138 BWC State Parties in 1997, including Cuba and the U.S.). The one exception was when the Cuban government accused the U.S. of having employed the insect *Thrips palmi* (Thrips) as a biological weapon against its agriculture in 1996. Subsequently, in 1997 the Cuban government lodged a complaint against the U.S. and an investigation was made according to procedures established under the BWC.²

In this article, Cuban allegations of biological attacks by the U.S. are analyzed in order to determine their veracity. There are three steps to this exercise. First, aspects of the history of Cuban-U.S. relations that set the stage for allegations by Cuban officials are reviewed. Second, each of the 12 events alleged by the Cubans to have been a biological attack is described, analyzed, and their probable etiology is determined by using epidemiological and scientific data. In the case of Thrips, the twelfth event, the

Pinecone Macro Research's Takeaways

- ❁ Price impact – prices in China are up about 40% yoy and have had a 10% weekly gain this month suggesting this is not as under control as authorities claim.
- ❁ With the media being silenced and local governments and farmers under reporting cases – it is difficult to pin down the reality of the situation. Chinese authorities have claimed the infection was under control before recent outbreaks.
- ❁ The surge in US prices (40% in just over a month) suggests China may need to relax tariffs and import more US pork. This again suggests the problem is worse than officials are reporting.
- ❁ Incentives are important – the higher prices climb in China the less the government payments per pig are likely to influence reporting. The more pigs with the virus, the higher the price. So the more the virus spreads the higher the price goes and the less likely farmers and local officials are to report outbreaks. To be fair to the authorities – if they make the price too high – farmers would happily kill pigs to collect the above market rate.
- ❁ Many producers in China are small and not likely to be able to implement proper measures and cannot afford strong biosecurity and facilities. Millions of small pig farms could perish.
- ❁ China actually has a “strategic pork reserve” of sorts – a stash of frozen pork. Expect to see them draw down those reserves to keep the inflationary impacts at bay.
- ❁ Mongolia & Vietnam border China and have their own outbreaks and less ability to control the virus. Cross border transmission is a risk to watch.
- ❁ The feeding of waste food to pigs will decline as it is a mechanism for spreading the virus. This will pressure feed prices even more.
- ❁ Expect imports to rise in the second half of the year and US producers to benefit. Buying a pullback in lean hog futures could be a great trade.
- ❁ Expect provinces that lifted quarantines to have reinfection.
- ❁ Demand for pork has fallen by over 10% in China – this is worth watching.
- ❁ Current industry expectations are for China to increase imports by 33% this yr, or 2mmt. That is based on domestic production falling 5%. I think 5% is generous and Chinese imports could go up closer to 50%.

[Best single article I found.](#)



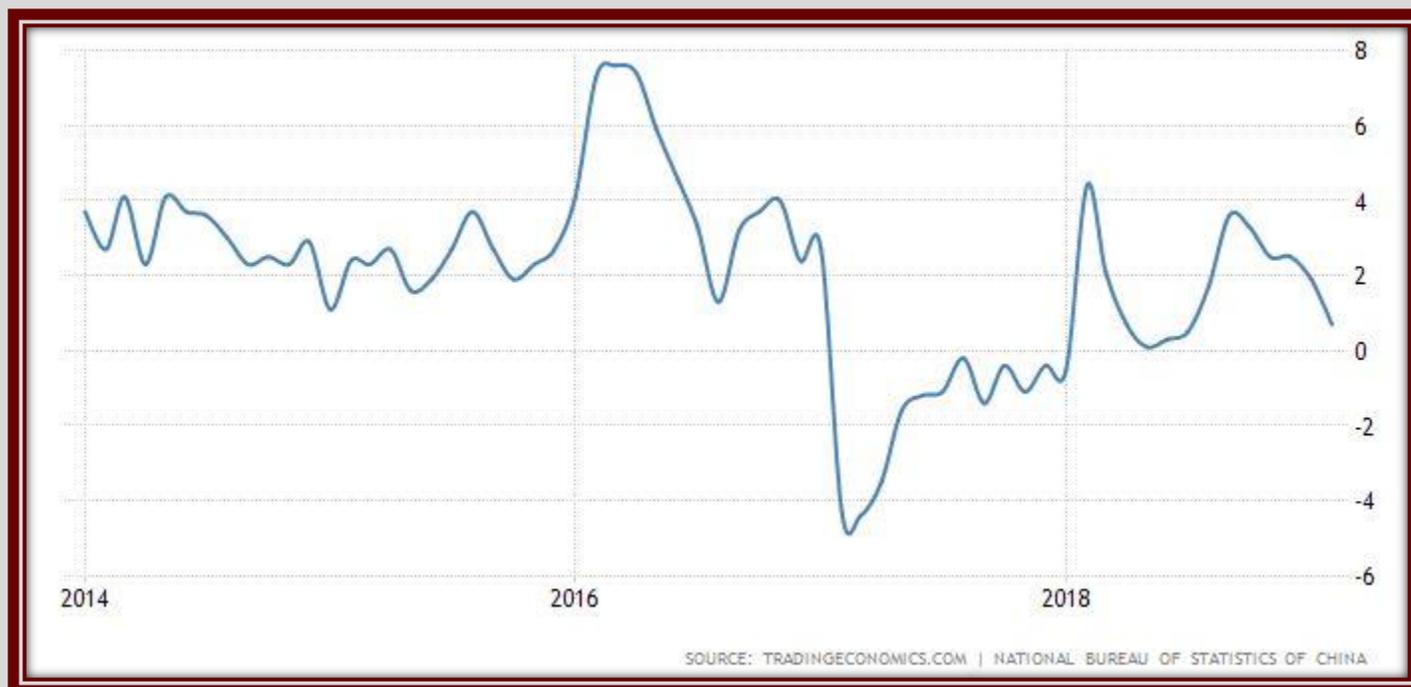
The biggest macro aspects of this story relate to the trade war and to domestic inflation in China.

China may have to ease pork tariffs with or without a grand deal with the US.

Pork is an important input into food inflation which is an important input into CPI in China.

Currently inflation is running around 1.5% in China, so we are not likely to see a macro impact on CPI. With that said a surge in food prices as China's economy slows and employment falters would be extremely unwelcome politically for the CCP.

China Food Inflation YoY



Food inflation is actually falling in China and is near zero (0.7%).

Keeping an eye on pork's impact on food inflation will be important. Also watching beef imports and prices will be important as substitution naturally takes place during this crisis.



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