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# Recent Coronavirus Impacts on Chinese F&A

## *Disruptions Could Be More Than Skin-Deep*

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## Summary

China's industries, including F&A, are bearing the immediate brunt of the coronavirus outbreak. The overall impact – which is most severe for foodservice and on-trade channels – could be more serious and longer-lasting if the virus is not contained within Q1 2020. Disruptions are being experienced across the entire F&A supply chain. However, quick and effective containment of the virus could lead to a rapid bounce-back, as experienced after the SARS outbreak in 2003.

The impact on the rest of Asia will largely occur via the reduction of food & beverage spending by Chinese if local transmission of the virus is kept under check.

The actual degree and associated projections of the virus's impact are difficult to quantify, as the situation remains fluid. Rabobank will provide updates when we have new information.

# Introduction

The recent outbreaks of coronavirus are regrettably taking a toll on human lives. China's industries, including F&A, are also bearing the immediate brunt of the coronavirus outbreak, as heavily-hit cities are under lockdown while the rest of the country rapidly hunkers down (see the RaboResearch Economic Research report *Economic Implications of the Coronavirus* [January 30] for a baseline assumption on the economy). Our working assumption is that the virus will be under control in Q1 2020. In this scenario, the outbreak of the coronavirus disease will still negatively affect F&A sectors, while the economy is already beset with a GDP slowdown, African swine fever, trade issues, and overall weaker consumer confidence.

The virus – which, by February 6, had already infected more than 28,000 people, with 564 fatalities in China – has disrupted trade, production, and supply chains, depressed out-of-home consumption, and forced some foodservice outlets to close. In the coming months, we expect:

1. Out-of-home F&A consumption to be the most severely impacted (many foodservice outlets have temporarily closed shop) – although some of the slack will be picked up by retail (as people stock up on food necessities), as well as by food delivery.
2. Supply chains to be significantly disrupted across the F&A spectrum – a result of reduced demand, logistics interruptions, and absent workforce.
3. Reduced supply and inventory – due to the reasons mentioned above, as well as increased costs. Livestock and grain production will be further reduced, with Q2 and 2H production increasingly impacted if restocking and planting are additionally restricted.
4. Extended economic decline and disruptions in the supply chain to further lead to a depressed consumption and investment climate, along with lower spending on food & beverages (F&B) and fewer activities.
5. The longer the virus is not contained beyond March, the longer, more extensive, and more structural the impact will be on the F&A chain. If the virus is contained within Q1, the bounce-back will also be rapid.

Although it is still too early to measure the impact in 2020, the SARS outbreak in 2003 can act as a reference point, although China's global influence and spending power today is multiple times that of 2003. For example, foodservice and retail sales amounted to USD 584bn in 2002 (foodservice at USD 73bn), while they have reached USD 5,900bn in 2019 (foodservice at USD 667bn). Chinese tourists to key Southeast Asia (SEA) destinations totaled 3m in 2005 and 25m in 2018 *(see Figure 3)*. And nowadays, value chains are also more integrated, both within and outside of China.

In Q2 2003, foodservice growth slowed more than GDP growth *(see Figure 1)*. However, after the disease was brought under control, the foodservice industry rebounded at a faster rate than other sectors in Q3. This is mainly due to the rebounding of suppressed demand, government subsidies (e.g. tax reduction), as well as foodservice players' efforts to upgrade product and outlet experience.

Data compiled during the SARS outbreak in 2003 also reveals that retail sales of daily necessities were relatively resilient, with growth in Q2 2003 even 2% higher than in Q1 2003 *(see Figures 1 and 2)*. This is mainly because consumers are likely to stock daily foods like vegetables, meat, and noodles to cook at home. These purchases were still mainly made in physical stores, as e-commerce platforms such as Taobao were still in their infancy in 2003.

**Figure 1: Chinese catering and hotels were mostly hit in Q2 2003**

| *YOY growth rate* | *2003 Q1* | *2003 Q2* | *2003 Q3* | *2003 Q4* | *Q2 vs. Q1* | *Q2 vs. Q3* |
|---|---|---|---|---|---|---|
| GDP | 11.1% | 9.1% | 10.0% | 10.0% | -2.0% | 0.9% |
| Catering/hotels | 11.0% | 7.4% | 16.9% | 14.3% | -3.6% | 9.5% |
| Retail/wholesale | 8.3% | 10.3% | 13.8% | 7.6% | 2.0% | 3.5% |

Source: National Bureau of Statistics of China, CICC, Rabobank 2020

**Figure 2: Chinese retail sales – growth of selected packaged food categories, 2003**

| *YOY growth rate* | *Biscuits* | *Instant noodles* | *Bouillon* | *Soy-based sauces* |
|---|---|---|---|---|
| Value sales growth 12 weeks prior to May 16, 2003 | +19% | +18% | +31% | +12% |
| Value sales growth 2003, full-year | +12% | +10% | +28% | +8% |

Source: Kantar Worldpanel, Rabobank 2020

# Chinese Foodservice Is Most Severely Impacted

In the short run, the speed of coronavirus contagion and the accompanying government actions will impact the foodservice industry even more than during the SARS outbreak. This current outbreak has come at the peak of 2020 Chinese New Year activities, and this is a significant factor when we look at Q1 numbers. Prior to the virus's outbreak, total retail and foodservice sales of 2020 New Year week were predicted to grow by 8% YOY, to around USD 155bn. Given what we have seen on the ground, along with news received from major chains – for example, the closure of stores by Starbucks, Haidilao, McDonald's, and Yum China – potential revenue losses for both retail and foodservice for the Chinese New Year week could range from 20% to 80%, i.e. USD 31bn to USD 124bn, across retail and foodservice. Some companies (Apple, Carlsberg, Baidu, McDonald's, Remy Cointreau, and Starbucks) have issued potential sales and profit warnings.

According to NBSC, foodservice revenue accounted for 11.3%[1] of total retail and foodservice sales in 2019. Translating to 2020 Chinese New Year week, the losses from foodservice (using a loss rate of 50% to 80%) could therefore total USD 8.8bn to USD 13.6bn. Given the continued slowdown in activities in February – and assuming the situation extends into March – the impact on foodservice in Q1 could well equate to a decline in the mid double-digits.

The impact of the virus outbreak on QSRs is smaller than on full-service restaurants (many of which have also closed). Chained QSRs can rely more on take-away/food delivery to compensate for losses from onsite dining, while full-service restaurants will suffer more. Smaller and independent restaurants may face more pressure on cash flow to cover costs from labor and rentals. Those players may face 'acceleration of closure' if the outbreak drags on in the coming months. Foodservice outlets' inputs and raw material supply would also be disrupted.

## Digital and Delivery Will Become More Critical

Prior to the virus outbreak, Rabobank estimated that delivery was expected to account for around 18% of total foodservice sales in 2020 (see our *Rabobank to Go Foodservice 2020 Global Outlook*). During the outbreak, food delivery players have adopted innovations such as launching 'contactless delivery,' allowing consumers to add a note for the driver to leave the food on their doorstep. Food delivery platforms like Meituan have announced they will be waiving commission fees for merchants in Wuhan in February, in order to alleviate their cost pressures during these difficult times. In the near future, food delivery will become more critical (higher than the earlier projection of 18% in 2020), due to its convenience and ability to cope with disruptions.

## Food & Beverages

Retail sales of F&B daily necessities (packaged food and soft drinks) are relatively resilient to the virus outbreak. Retail sales of staple food categories (frozen foods, ready meals, instant noodles, and baked goods) and soft drink categories like bottled water may benefit due to panic-buying. The performance of categories such as sauces, dressing, and condiments varies greatly between channels. In general, sales via foodservice channels will be hit heavily, while sales via retail channels can offset the sales decline of on-trade channels.

Snacks, carbonates, or 100% juices are likely to perform well – largely due to 'emotional consumption' when consumers turn to comfort foods when forced to stay at home during the outbreak. RTD milk tea and RTD coffee will rebound in the off-peak season, as the closure of foodservice outlets like Starbucks will lead coffee consumers to buy more retail products.

Alcoholic drinks might be more affected, compared to F&B necessities.

1. Baijiu will be the most affected among alcoholic drinks – especially in the mid- and premium ranges, which are mainly sold via on-trade channels. According to industry sources, sales of baijiu during festival holidays could contribute at least 30% to 50% of full-year revenue. Massive overstock could push down the price in the coming few months, when channel dealers are eager to withdraw funds in order to secure cash flow.
2. Wine already experienced a tough year in 2019. Inventory overstock is a reality for channel dealers and retailers, as well as foodservice operators. Increased costs – such as warehouse management costs and rental costs – will affect the entire wine sector.

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[1] As there is no official published percentage split between foodservice and retail during the Chinese New Year week, we are using a 2019 full-year split between foodservice and retail as a proxy. In reality, foodservice's contribution toward the New Year week to total retail and foodservice could well be higher than this percentage split.

3. Beer – with an on-trade value contribution of 63.7% in 2019 and from foodservice – will also be significantly impacted. Nonetheless, compared to wine and baijiu, beer is perceived as a secondary option for business and festival occasions. Beer could be consumed frequently at home during festival holidays. As such, the sales from the retail channel will partially offset the loss from short-term foodservice closures.

The virus – especially if the outbreak lasts for an extended period – will force the closure of small alcoholic drinks companies and lead to a further round of consolidation.

Prior to the virus outbreak, we predicted that China's vitamin and dietary supplements (VHMS) industry would remain depressed through 2020, as a result of scandals and the rollout of the new e-commerce law (see the RaboResearch report *Responding to the Changes in China's Vitamin and Dietary Supplements Industry*). Due to this virus outbreak, VHMS may recover earlier than we expected, as panic among Chinese consumers will increase the demand for health-related products.

# Coronavirus Impacts Other F&A Sectors in China

## Farm Inputs

In the short term, the impact will be limited due to low seasonal demand. Manufacturers usually have raw material inventory for 45 days, and this should tie them over until the end of February. However, the longer-term impact will be significant if the epidemic cannot be brought under control effectively by the end of the month. Both fertilizer and agrochemical markets would be challenged by production, logistics and transportation, and demand.

1. The supply side will be impacted by production and logistics, with prices under pressure as a result of low inventory, low utilization, and high input costs.
2. We can expect to see low existing inventory throughout the industry, due to the low price at the end of 2019. In addition, only some large-scale manufacturers are currently in operation, which will be insufficient to meet spring ploughing demand after February.
3. The current cross-regional transportation ban and restrictions may lead to increased transportation costs of CNY 70/metric ton to CNY 80/metric ton. Logistics costs can be avoided if companies can gain access to the 'transportation green channel,' which involves fewer inspections, no fines, and reduced tolls – and thus ensures that vehicles carrying farm inputs products reach spring ploughing areas in time.
4. Production volume for spring ploughing may decline further, as a result of limited raw material supply and a low utilization rate. SARS data is not relevant, as those were times of rapid expansion: Production could resume rapidly after the SARS epidemic, compared to the current restructuring of the industry. Supply-side reforms and zero-growth initiatives have forced many SMEs to withdraw from the market. Owing to the epidemic outbreak, labor and raw material shortages will also lead to sub-normal operations for large manufacturers, thereby affecting the timely resumption of production.
5. The biggest impact will likely be on the distributors. The continuous shortage of raw material supply and import products will lead to a further increase in the price of farm inputs. The cash flow of enterprises will be tight, with declining profit margins. This may accelerate the restructuring of the agricultural materials circulation industry.
6. Depressed farmers' produce and commodity sales – and thus, lower farmers' incomes – could lead to reduced demand for ag inputs in the next season.
7. Listing the coronavirus outbreak as a 'Public Health Emergency of International Concern' by the World Health Organization (WHO) will also impact exports.

## Grains & Oilseeds and Sugar

Negative impacts of the coronavirus are expected to be short-term and modest for food grains and edible oil. Due to fewer people dining out, the consumption of edible oil and meat in the foodservice channel will be mostly affected, particularly palm oil. Nevertheless, retail sales of these food necessities will be more resilient, as consumers tend to stock up on packaged edible oil, wheat flour, rice, and meat.

Work absence extensions will cause operational delays in a number of oilseed-crushing plants. After a full resumption of work, China is expected to continue to import soybeans – but at a slower pace, as long as the coronavirus lingers. Purchases under the US-Chinese phase one trade deal could therefore be affected, as acknowledged by US National Economic Council Director Larry Kudlow.

As a result of the suspension of operations, as well as transportation bottlenecks, feed sales distribution is being hampered in many regions. Facing insufficient feed supply and weak demand, many poultry farms – both broiler and layer – are being forced to lower the daily dose or eliminate bird stocks, which could lead to a drop in poultry feed demand at a later stage. Aside from this, the spread of the coronavirus might further postpone farmers' decisions to rebuild their hog herd in the first half of 2020. Therefore, Chinese feed consumption – including both feed corn and soymeal – is likely to remain stagnant in the short term.

As for sugar, the impact is likely to be limited and short-term. Amid slowing out-of-home F&B consumption, this could have a negative knock-on effect on sugar mills and traders. However, in-home consumption should remain resilient, as people continue purchasing in supermarkets and CVS. Any downturn should recover quickly once the outbreak is dealt with – China remains forecast to report 1% sugar consumption growth in 2019/20.

Export fixtures to China have thinned amid the outbreak, with Brazil-China sugar freight rates falling – this impact should also be limited to the duration of the outbreak. In the event of a temporary supply shortage, China's state reserves will act as a buffer to maintain the domestic sugar supply.

## Animal Protein

Animal protein consumption is believed to have dropped greatly in January and early February – and this situation will likely continue for the rest of Q1 2020. If the spread of the virus can be controlled by the end of March, demand will likely recover strongly in Q2. However, supply won't immediately recover in Q2, due to the production suspension in Q1. If the disease cannot be brought under control until May/June, demand will remain weak throughout 1H 2020. In any case, we expect a bigger supply gap of animal protein in 2020 than we saw in 2019 – but different species will perform differently.

As beef, lamb, and seafood consumption is heavily associated with foodservice – especially full-service restaurants and hotpots – the closure of most restaurants of this kind in January and February suggests that sales of these three proteins would be hit the most. Seafood – particularly species for sashimi, such as tuna, salmon, and shellfish – would be greatly impacted in Q1 and beyond, as consumers are likely to remain cautious for a period after the disease is under control.

Pork and poultry demand is expected to be impacted to a lesser extent, though sales via foodservice have also dropped. Usually, most families in China stock sufficient food before the Chinese New Year. It's normal to shop less frequently during CNY than other seasons, and sales of animal protein via the retail channel are not impacted much. However, many wet markets – particularly those selling live birds – have been closed, and they are expected to remain that way in the coming weeks, and potentially longer. This mainly impacts the demand for yellow-feathered broilers, as white-feathered broilers are seldom sold alive. While the demand for animal protein is expected to rebound after the virus outbreak is under control, we expect demand to be pressured by the low supply of fresh meat, along with rising prices in Q2 and even Q3.

On the supply side – due to transportation blockages and labor shortages following the holiday extension – the production of livestock has largely been suspended during CNY. Feed transportation has become difficult in many regions due to road blockages, and farmers need to slow down their production speed in order to deal with the situation. This has resulted in rising prices during CNY and early in February. Pork meat prices set a new record high in early February, due to the low supply as a result of transportation disruptions. Poultry production faces greater challenges. Some day-old-chicks (DOC) are reportedly being destroyed due to the combined factors of transportation blockages, a lack of access to feed, and weak market demand. The reporting of H5N1 in Xinjiang and Hunan has made farmers more hesitant to replenish. DOC prices have dropped to below CNY 1/bird, compared to CNY 4/bird pre-CNY.

We expect to see a shortage of poultry supply in Q2 and Q3, along with surging prices during that period. To which extent the shortage could grow depends on when traffic will recover and when feed transportation returns to normal. The longer the situation lasts, the larger shortage we will see. However, due to the short production lifecycle, the poultry supply shortage is expected to be short-term. For pork, we previously expected a further drop of 15% in pork production in 2020, from the level seen in 2019. Now, we are adjusting our forecast for pork production to drop to a larger extent, by above 20%, due to the slowdown of restocking in Q1. With greater supply shortages, pork prices are expected to increase strongly throughout 2020. China will continue to increase imports to help narrow the supply gap. The resulting negative impact will also translate to a sizable drop in feed for poultry and pork.

## Dairy

Generally, the impact on demand for dairy as a result of the epidemic should be short-term, assuming the virus will be contained soon. Falling foot traffic at grocery retailers and a lack of delivery capacity at online retailers may have a short-term effect on sales, adding to some inventory pileup at the retail end – retailers had stocked up before the Chinese New Year. As distributors are seeing slower movement of inventory via retail channels, they are delaying restocking from processors. Restocking is also being impacted by road traffic control and a shortage of labor post-CNY. If normal restocking is not resumed for an extended period of time, retail inventory should start to wear off through the remainder of Q1.

Tighter road traffic controls to contain the epidemic are causing disruptions to inter-provincial logistics around China, affecting processing demand and raw milk shipments. News reports and our crosschecks with industry sources suggest that the dry spraying of raw milk has started in a number of regions. This could potentially bring more pressure than usual on milk prices, which generally head into weakness after the Chinese New Year. In some regions, farms have encountered tight supply of feed due to an extended CNY holiday.

In the near term, the situation could also have an impact on China's appetite for dairy ingredients, following abundant arrivals of January shipments and with carryover of inventory from last year.

# Coronavirus's Impact on Southeast Asia

## Foodservice

As is discussed in our earlier report (see *Coronavirus Brings Risks for Foodservice*), reduced Chinese tourist arrivals are expected to affect foodservice in Southeast Asia (SEA). We expect foodservice revenue in the key Southeast Asian markets of Singapore, Thailand, and Vietnam to be impacted in the first quarter of 2020.

**Figure 3: Southeast Asia tourist arrivals, 2005 vs. 2018**

| | Indonesia | Malaysia | Philippines | Singapore | Thailand | Vietnam |
|---|---|---|---|---|---|---|
| Total arrivals, 2005* (million) | 5.0 | 16.3 | 2.9 | 8.9 | 11.5 | 3.5 |
| Total arrivals, 2018 (million) | 15.8 | 25.8 | 7.1 | 18.6 | 38.2 | 15.5 |
| Arrivals from China, 2005 | 2.2% | 2.6% | 5.4% | 9.6% | 6.7% | 21.7% |
| Arrivals from China, 2018 | 13.5% | 11.4% | 17.7% | 18.5% | 27.6% | 32.0% |

* 2007 for the Philippines

Source: Ministry of Tourism, Republic of Indonesia; Ministry of Tourism, Arts and Culture Malaysia; Department of Tourism, Philippines; Singapore Tourism Board; Tourism Authority of Thailand; Vietnam National Administration of Tourism; Rabobank 2020

## Food & Beverages

For packaged food companies in SEA with factories and procurement from China, any plant closures for an extended period of time will necessitate sourcing from factories in other countries. Some companies have temporarily closed some of their factories in China, and alternate sources have to be considered. However, most food companies have factories located in SEA and other geographies, and they should be able to procure from other countries. Supply disruption to SEA from China is expected to be minimal and short-term, unless there are outright bans on exports of food from China. Outside of China, the repercussions are limited to the consequential effect of the slowdown in Chinese activity, but the virus will have an otherwise limited direct (health and, therefore, free movement) impact.

We should also see limited impact on ASEAN domestic beverage demand. There will be a near-term effect on out-of-home beverage consumption and cafes, owing to travel restrictions, but the extent will remain limited to low single digits on an annual basis.

The impact is projected to be higher in countries in which:

- Dependence on tourism is higher vis-à-vis the domestic resident population, and
- There are significant inbound (from China) tourist arrivals.

In Singapore, for example, tourists make up to a third of the local population. Also, Chinese inbound arrivals account for ~20% of average monthly arrivals. According to the Singapore Tourism Board, spending on food & beverages (F&B) was the second-most popular item for Chinese tourists. Similarly, the number of inbound tourists at the two Bangkok airports was down 17% in January 2020, nearly three-quarters of which was driven by fewer arrivals from China. However, unlike Singapore, on-premise forms a relatively small part of annual beer consumption in Thailand, implying that the impact would be smaller. On the other hand, Vietnam has a similar consumption structure to Singapore, but an even higher dependence (~32%) on Chinese tourist arrivals.

Further, ASEAN trade (in the beverage-related category) with China is limited, and any temporary loss could recover in the back half of the year. Major products likely to be impacted are brandy exports from ASEAN and malt imports from China. However, these will only become relevant in a situation in which travel and trade restrictions are sustained beyond Q1 2020.

China is emerging as a major buyer of coffee – and therefore, disruption in domestic Chinese demand will have consequence for global S&D. However, most of the coffee imports in China are arabica; therefore, this will have little impact on Asian demand, which is mostly for robusta.

## Grains & Oilseeds

The impact on Southeast Asian G&O industries is expected to be limited due to strong domestic private consumption in the region. Countries such as Thailand, Malaysia, and Singapore – all traditionally popular destination for Chinese tourists – will see much fewer Chinese tourist arrivals. This might impact foodservice industries and demand for meat in these countries, which will affect demand for G&O for animal feed and cooking oils to a certain extent. We expect to see a rebound in private spending when the coronavirus outbreak is brought under control in SEA. Consumers may compensate for their reduction in consumption by subsequently increasing their spending. Meanwhile, domestic consumption could quickly change once confidence resumes.

Palm oil exports to China from Indonesia and Malaysia may be negatively affected in the short term, due to domestic transportation limitations in China and possibly shipping restrictions. Demand for staples such as cooking oil is still expected to be stable in China in this scenario. In China, palm oil is mainly used in foodservice, catering, and for industrial use. Prior to controlling the outbreak, we expect China to consume its palm oil inventories. This will drive additional palm oil import demand once the outbreak is under control. The global palm oil price, however, is still expected to be stable in 2020, as the seasonal palm production cycle in SEA is expected to shift to a seasonal uptrend from Q2 2020 onwards. We expect this to result in lower palm oil prices in Q2 2020 to Q4 2020, compared to Q1 2020. We forecast the palm oil price to average MYR 2,600/metric ton in 2020, compared to an average price of MYR 2,245/metric ton in 2019. The higher year-on-year price is mainly caused by a combination of the implementation of the B30 mandate in Indonesia and a sub-optimal palm oil production increase in SEA.

## Animal Protein

China is currently expanding poultry imports from Thailand in response to a pork shortage, a result of African swine flu outbreaks. Potentially weaker demand from foodservice (i.e. through closures of outlets throughout Hubei or more provinces) could dampen the pace of such imports in the short term. The wholesale and live markets remained closed for the Chinese New Year. It is not clear, however, if they will re-open, given a government ban on wild-animal trade (believed to be the source of the coronavirus). Should there be a prolonged closure in live-bird markets, demand for poultry imports may rebound. Within SEA, Thailand is a key beneficiary in such an event.

# Imprint

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