THE VIETNAM SWINE MARKET

A Bumpy Road Ahead

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In order to produce the paper, the consultant team took into account sow herd population of integrated farms, commercial farms and backyard farms. Total hog supply was calculated considering different aspects governing the hog outputs of each type of farms including sow productivity, survival rates by stages of growing piglet, and number of piglet consumption by each year. Total market demand was studied based on various sources from available data to interviews with Key Opinion Leaders. Produced data was refined throughout many rounds of discussion with market experts, government officers and senior market managers, technical managers in leading feed and animal health companies in Vietnam.

For the purpose of the paper, integrated farms are referred as organizations that have their business in the entire value chain from producing feed to farming operation and, for some cases in Vietnam, processing foods. Commercial farms are defined as farms that have been upgraded with modern facilities, operated with structure as a company and applied modern farming practice with medium to large scale productivity. Backyard farms are those remaining.

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INTRODUCTION

In the months from November 2016 to July 2017, Vietnamese swine farms faced increasing challenges due to a steep decline in the farm gate price. Many have argued that the main culprit for this loss in income is China’s sharp reduction in the import of live hogs. However, as the Chinese swine industry is currently restructuring to improve its international competitiveness and lessen its reliance on foreign pork imports, the question remains for Vietnamese farms: Will the farm gate price rise once again?

In this paper, Ipsos Business Consulting explores the prospects for Vietnam’s swine industry in 2017 and beyond, by examining the swine supply versus demand during the period 2013-16. We have exhaustively collected and analysed historical data of local pork consumption, as well as official and undocumented exports, to investigate the trends that are likely to influence swine output. We also discuss the oversupply of swine and its impacts in 2016 based on primary and secondary research with multiple industry experts as well as swine farmers. From this analysis, we examine two potential scenarios facing Vietnam’s swine industry this year. Collectively, the findings from this paper provide feed and animal health players with a solid industry outlook which can serve as a useful input in developing their future strategies.
Swine farming has played an integral part in Vietnam’s agriculture, as pork production comprises approximately two-thirds of total meat production. Major epizootics of FMD, PRRS, porcine high fever disease and others from 2006-10 caused devastating losses to the Vietnamese swine sector and raised extreme concern among consumers. The industry rebounded after the government set initiatives to enforce vaccination against the deadly FMD and PRRS diseases. Between 2013 and 2016, Vietnam’s local hog population has grown at a faster pace than the sow population, as its CAGR of 11.0 percent has led to a supply of 54.46 million head or the equivalent of approximately 4.01 million tonnes of carcass weight. This suggests a dramatic increase in the number of sows as well as improvement in sow productivity, as small-scale farms’ sow productivity reached nearly 17 hogs per sow per year in 2016 while the sow productivity of commercial farms and integrated farms was 20 and 22 hogs per sow per year respectively.

Historically imports had a minimal share of total hog supply in the Vietnam market, representing only 0.1% of the total over the years from 2013 to 2015. However, the volume of imported pork increased dramatically from 5,482 tonnes in 2015 to 40,872 tonnes in 2016 (equivalent to 583,886 hogs) raising the proportion of imports to 1.06% of total supply. This escalation of imports can mainly be attributed to the European Union Vietnam Free Trade Agreement (EVFTA) and the ASEAN Economic Community (AEC) going into effect in early 2016, as they effectively eliminated the tax on imported meat. Several EU countries, notably Italy, Ireland, the Netherlands and Germany, have all started exporting pork to Vietnam due to the impact of EVFTA.
Vietnamese swine farms often fatten their hogs to above 100kg to satisfy demand from China, where many consumers have a strong preference for fatty pork. During the high seasons, traded hog volume can reach approximately 33,000 hogs per day; and the swine farms can bargain for relatively rewarding farm-gate prices.

However, when the trading volume with China drops significantly as happened from May 2016, or even stops completely, as it did from November 2016, it causes total supply in Vietnam to substantially exceed demand. The resultant glut of hogs on the market forces prices down and farmers struggle to sell their hogs profitably. The dangerous downside of this dependence on the Chinese market is the uncertainty surrounding all undocumented cross border trading activities. Trade can be halted, without notice, as has happened periodically since 2011.

Undocumented hog trades to Cambodia are unable to make up for lost revenue during these periods of depressed demand from China, since the volume of exports to Cambodia is relatively small compared to China.

Pork remains the dominant meat in the Vietnamese diet, accounting for 68% of total meat consumption in 2016. Driven by rising incomes and population growth, the demand for pork and the consumption of pork has risen steadily. Over the period 2013-2016 per capita consumption of pork rose from 25.3 to 26.5 kilograms per year.

The total consumption of locally produced pork in 2016 was 2.50 million tonnes, the equivalent of 35.76 million hogs. Domestic pork demand continues to account for around 75% of Vietnam’s pork output. A small portion of Vietnam’s output is officially exported to neighbouring markets, among which the most significant are Hong Kong and Malaysia, accounting for 13,695 tonnes of carcass weight (around 195,643 hogs) in 2016.

Additional trade takes place daily at the China-Vietnam border leading to Guangxi and Yunnan provinces, where China imports large numbers of Vietnam’s live hogs. Middlemen purchase the hogs from different farms and transport them by land to the borders. In some reported cases, hogs are sold to Chinese buyers through tunnels built between the two countries.

Vietnam’s Demand, 2013-2016

<table>
<thead>
<tr>
<th>Year</th>
<th>Local consumption</th>
<th>Undocumented export</th>
<th>Official export</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>33.1</td>
<td>0.2</td>
<td>6.2</td>
</tr>
<tr>
<td>2014</td>
<td>34.0</td>
<td>0.2</td>
<td>9.1</td>
</tr>
<tr>
<td>2015</td>
<td>34.8</td>
<td>0.3</td>
<td>10.0</td>
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<tr>
<td>2016</td>
<td>35.8</td>
<td>0.2</td>
<td>12.0</td>
</tr>
</tbody>
</table>

Unit: mn head

Note:
For the purposes of this paper, Total Demand for pork is defined as 1+2+3+4, where 1. is domestic demand in Vietnam, 2. is cross-border trade with China, 3. is legal exports to other countries such as Hong Kong and Malaysia and 4.is cross-border trade with Cambodia.
As the world’s largest pork producer and consumer, China’s pork market is of great interest to exporters all around the world, notably top suppliers like Germany, the United States and Spain. In recent years, China’s declining domestic pork supply and growing domestic demand have made the country an even more attractive market. Exporting countries, including Vietnam, reaped rewards from a dramatic increase in the volume of Chinese pork imports in 2015 and early 2016.

During the 2014-16 period, Vietnamese swine farms saw surging farm-gate prices for hogs as a positive signal for earning handsome profits. They rushed to increase the sow herd and overlooked previous incidents when the borders were arbitrarily closed due to the erratic nature of undocumented trades.

Vietnam had 3.70 million sows in 2014, producing around 43.43 million hogs. The sow population peaked at 4.00 million head within two years, as farms received exceptionally high ex-farm prices of between USD 2.00 (VND 45,000) and USD 2.60 (VND 50,000) per kg. This bonanza encouraged many swine farmers to invest in raising more sows, leading to a rapid growth in the hog population to 54.46 million at the end of 2016.

Although exports to China were expected to remain strong, it was not the case, instead the middlemen reduced their purchasing drastically, resulting in an excessive oversupply of hogs in the Vietnam market towards the end of 2016. As China’s imports of pork began to decrease in the latter half of the year, it strongly impacted not only the Western world’s pork production but also Vietnam’s. The resulting losses were another indication that continuing strong sales to the Chinese market are not guaranteed. The peak demand was the result of market conditions, several of which are subject to change. When planning for the future, it is crucial to analyse and understand the factors that had driven the original escalation in China’s pork import demand:

**Low sow inventory:**

Swine production in China has been declining for several consecutive years due to a falling sow inventory. Government initiatives to curb the pollution caused by swine production and to consolidate swine farms, both contributed to bringing China’s sow inventory to a historic low in 2016.

1. **Environmental initiative:** Swine farming is a major source of water pollution, adding to the already worsening environmental problems in China. To curb pollution, the Chinese government decided to implement stricter regulations relating to the permitted locations of farms and standards for disposal of waste. Farms were forced to relocate away from coastal and riverside areas and areas close to large human populations by the end of 2017. Thousands of farms were reportedly forced to shut down because they failed to comply with the new requirements.

2. **Consolidation initiative:** In order to achieve the goal of becoming self-sufficient in pork production, the Chinese government released a five-year plan to modernise the pig sector between 2016 and 2020. The plan aims to reduce the number of small and medium-sized pig farms, and promote large-scale, industrial farms that can capitalise on modern practices and technology to improve sow productivity. Together, these two initiatives led to the destocking of China’s sow inventory in 2014 and 2015. Tightening hog supplies boosted China’s imports of frozen pork and pork products from European countries and the US, as well as live hogs from Vietnam, to fill the widening gap between supply and demand.

**High local pork price:**

The retail price of pork in China has increased dramatically, reaching an all-time high of just over USD 4.50 (RMB 31.29 or VND 102,000) per kilogram in June 2016. Competitively-priced imported pork from the United States and European countries served as one solution for Chinese consumers.

In China the retail price of Vietnamese pork is USD 0.60 (RMB 4 or VND 13,000) per kilogram cheaper than China’s domestically produced pork, adding to the surging demand for fatty live hogs from Vietnam.
These favourable sales conditions led to a near-doubling of Vietnam’s undocumented hog exports to China over the period from 2013 to mid-2016. In 2013 daily sales were approximately 17,000 hogs, this had risen to around 33,000 hogs per day by early 2016, the increase added up to 12.04 million live hogs in unrecorded sales for the entire year.

In mid-2016 China reduced hog trading with Vietnam. Many farms failed to adjust their sow herd in a timely manner. The oversupply of hogs in Vietnam increased exponentially to around 7.05 million in late 2016. Inevitably, the escalating oversupply of hogs brought a steep decline to ex-farm prices and depressed swine farming significantly.

The reported ex-farm hog price in Southern Vietnam, before trading with China started to shrink in May 2016, was at an average of USD 2.25 (VND 51,000) per kilogram and from there the price plummeted to around USD 1.70 (VND 39,000) per kilogram in December 2016. Many swine farms have been struggling to cope with the aggressive drop in farm-gate prices and small-scale farms, in particular, bear a substantial risk of losing their investment. They have been forced to minimize their losses by selling their overweight hogs to middlemen at a rock bottom price which are below the break-even point. At the current ex-farm price, farmers incur a minimum loss of USD 30.75 (VND 700,000) per hog. Feeling pessimistic about the prolonged low ex-farm price, many small-scale farms have decided to reduce their sow numbers or even stop replenishing their sow inventory and halt production until the price picks up. Medium and large-sized farms are generally better placed to withstand these difficult times as they have lower break-even price and stronger financial backing.
2017 AND BEYOND: A GLOOMY OUTLOOK

As China’s five-year swine sector plan aims to complete its restructuring of the industry by the end of 2017, it is uncertain whether Vietnam’s production can be expected to recover any time soon. Rabobank anticipates that import volumes for the near future will remain similar to 2016 due to the time required for China to fully restore production. Hog trading activities across the border have recently restarted but, for reasons which are unclear at present, the volume remains at a considerably lower figure than in previous years. It may be that Chinese consumers have become more health-conscious and have started to favour clean meat with traceability and proven provenance. If this is the case there is a real possibility of a significant cutback in the undocumented importation of Vietnam’s live hogs.

From this evaluation of the current situation, as well as interviews with Key Opinion Leaders (KOLs) and Industry Experts, Ipsos Business Consulting anticipates two potential scenarios for Vietnam’s swine sector in 2017 and beyond. In both scenarios, Ipsos Business Consulting assumes that small-scale farms would reduce their sow herd by 32% and commercial farms would shrink their sow inventory by 20%, while integrated farms would retain their sow figures in 2017. Total pork supply (in carcass weight) from local production would decrease considerably to 2.74 million tonnes (approximately 39.19 million head). Both scenario analyses share the same domestic demand, an estimated 2.58 million tonnes in carcass weight (approximately 36.94 million head); and export demand, an estimated 14,000 tonnes in carcass weight (approximately 200,000 head).

<table>
<thead>
<tr>
<th>Year</th>
<th>Total supply</th>
<th>Optimistic 2017</th>
<th>Pessimistic 2017</th>
<th>Total demand</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>39.9</td>
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<td>38.3</td>
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<td>2014</td>
<td>43.5</td>
<td>43.4</td>
<td>43.5</td>
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<tr>
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<td>46.7</td>
<td>45.1</td>
<td>46.7</td>
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</tr>
<tr>
<td>2016</td>
<td>48.0</td>
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</tr>
<tr>
<td>2017</td>
<td>55.0</td>
<td>39.5</td>
<td>38.3</td>
<td>55.0</td>
</tr>
</tbody>
</table>

Note:
- Chart is drawn to demonstrate the gap between supply and demand.

Demand:
- Please note that when we talk about Total Demand for pork we are talking about the sum of: domestic demand in Vietnam, cross border trade with China, legal exports to other countries e.g. Hong Kong and Malaysia and cross border trade with Cambodia.
**Pessimistic scenario:**

In the pessimistic scenario, we assume that hog trading activities will remain at a low level of around 3,200 hogs per day. This assumption leads to an estimated export volume of 1.17 million live hogs to China, a dramatic 90% reduction relative to 2016. Vietnam’s hog residue would then be approximately 1.34 million hogs for 2017. If correct, many small-scale farms would be deterred from resuming swine production as the operation would no longer be profitable.

**Optimistic scenario:**

In the optimistic scenario, the rate of Chinese imports would increase to around 6,600 hogs per day, or 2.41 million hogs this year. Under this scenario, the supply and demand gap becomes narrower with an approximate residue of 104,750 hogs in the market at the end of 2017.
Looking forward, Ipsos Business Consulting forecasts that local pork consumption in Vietnam will rise steadily to around 2.68 million tonnes of carcass weight in 2018.

With the constraints required to meet the strict standards of GLOBALG.A.P. (The internationally recognized standards and procedures for farm production), Vietnam swine farming faces several challenges to export competitively. Export to neighbouring markets is expected to remain a small proportion of total local production, holding steady at approximately 18,000 tonnes of carcass weight over the next year. The struggles of undocumented exports are expected to continue and Ipsos Business Consulting forecasts this figure to remain as low as 2.41 mn hogs in 2018 (circa 6,600 hogs per day).

Our analysis predicts that if the commercial and integrated farms replenish and reinvest their sow herds at a slower pace next year, as expected, the hog supply would rise to 40.48 million head and the excess number of hogs would be minimised to approximately 100,000 head. If this happens farms could expect less pain from the oversupply.

### Vietnam’s Supply vs. Demand, 2013 - 2018

#### Note:
- Total Demand used for 2017 in this chart is the Demand for “Optimistic 2017”
- This graph is drawn to illustrate the supply-demand
- For the purposes of this paper, Total Demand for pork is defined as 1+2+3+4, where 1. is domestic demand in Vietnam, 2. is cross-border trade with China, 3. is legal exports to other countries such as Hong Kong and Malaysia and 4.is cross-border trade with Cambodia.
HIDDEN OPPORTUNITIES

Ex-farm hog prices will most likely remain low and any price recovery is expected to be at a slow pace next year. In April 2017 the ex-farm price hit rock bottom at USD 1.10 (VND 25,000) per kilogram. It will be interesting to watch what happens with demand from China over the next few months but all the stakeholders engaging in pork production should balance their investment to minimise the impact of ex-farm price fluctuations, particularly since KOLs and industry experts have predicted a low probability of a return to the record prices of 2014 to mid-2016. It is also worth noting that semi-industrial and industrial farms will account for a larger share of total hog supply in the coming years and this shift may occur more quickly. Multiple challenges lie ahead for small-scale farms and many may be discouraged from resuming swine production until they see a rosier outlook and increased ex-farm prices.

Given the uncertainty surrounding any potential ex-farm price increase, small-scale farms and larger farms are expected to improve the productivity of sow herds and pursue their quest for farming cost reduction by altering their practices. Breeders, feed, and animal health products are the major components of swine production costs. Small-scale farms rely predominantly on high quality breeders supplied from major FDI (Foreign Direct Investment) businesses like CP, Japfa, and Emivest. Cost-cutting from breeders seems to be difficult to achieve, although reducing feed costs is another potential solution. According to industry experts feed accounts for 65 to 70 percent of the total expense of swine farming. From nursery to the early stage of growing and finishing, piglets need to be fed with quality manufactured feed to ensure healthy growth. Once their digestive system has become stronger by the growing and finishing stage, small-scale farms can reduce their feed cost by mixing it partially with cheaper ingredients. By doing this, small-scale farms can potentially cut 15 to 20 percent of the per kilogram cost of feed. However, small-scale farms are not able to greatly reduce their use of animal health products such as additives, vaccines, and antibiotics. They might switch to less expensive brands to lessen their cost burden. Farms could also seek other potentially effective solutions such as improving the herd quality as well as bringing down farming costs through biosecurity practices. According to industry experts applying a good biosecurity system is affordable and manageable, farms are required to implement strict rules to prevent the transmission of pathogens from outside sources. Some notable examples include using environmental science products to prevent pests and requiring visitors to change into special and disinfected clothing before entering the farms. Although these steps are, in reality, cost-effective and simple to implement, some Vietnamese farms are reluctant to apply biosecurity to their farming practice as they perceive it to be expensive and complicated. It would be highly advantageous for farms to overcome this reluctance and practice comprehensive biosecurity to minimise disease occurrence. If they were to do this it would alleviate the financial burden they face when outbreaks of disease occur.

Although sensible improvements like these are within reach, it seems an optimistic scenario for the Vietnam swine industry is unlikely to materialise either this year or in the near future. Ipsos Business Consulting advises feed and animal health players to monitor the market carefully and continuously, as the shifting trend away from small-scale to semi-industrial and industrial farms in the short term is more likely to have a significant impact on organisations growth strategies. Acquiring fact-based and timely market information will provide the feed and animal health players with a transparent picture of the market, allowing them to formulate feasible plans to approach their customer portfolio. Supporting farms to look for long-term and low-cost solutions during these challenging times, such as applying biosecurity, can promote the company’s image and build long-term trust with farmers. By doing this feed and animal health players could capture the opportunity to develop competitive positions for increased market penetration.
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- Pricing
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- B2B Customer Segmentation

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