The global pork market will likely cool down in Q4 2014, as the buoyant market circumstances from the first three quarters are now disappearing. Although the impact of porcine epidemic diarrhoea virus (PEDv) is slowly fading on the back of higher slaughter weights, the Russian trade ban will increasingly weigh on the market, especially the European Union (EU).

The EU pork market has been severely affected by the Russian import ban, which, in combination with declining domestic consumption, resulted in rapidly declining prices in Q3. This trend is not expected to improve in the short term, barring further decline of the euro to US dollar exchange rate, which would boost the competitiveness of EU pork abroad.

China’s pork market and demand for imports are expected to further improve, driven by subdued supply and rebounding demand leading up to the seasonal high expected in Q1 2015. This comes after the market bottomed out at the start of Q3, which resulted in rising prices thereafter.

In the US, strong domestic consumption—despite historically high prices—and increasing exports will continue to support the market for the near term. The situation for the medium term is unclear, as PEDv is likely to return in the cooler months.

Whether or not PEDv will return and, if it does, how strong its effects will be, are the big questions in the US, Japan, Korea and some other countries. With vaccines coming to the market—although most have yet to be proven effective—and knowledge of the virus increasing, Rabobank expects the impact to be limited. In addition, the higher production induced by lower feed costs and the increased impact of the Russian trade ban will likely pressure prices.

**Diseases and Russian ban continue to play important role**

**China**
After bottoming out in Q3, the Chinese market is rapidly recovering in the run-up to the festival season in the first months of 2015, which will boost imports and support herd rebuilding.

**US**
The US saw record-high hog prices and producer profitability in Q3, while global and domestic demand remain robust.

**EU**
Prospects in the EU market remain very weak, with rising supply, declining consumption and increasing competition in the export market heavily pressing prices and profitability.

**Japan, South Korea**
Lower-than-expected PEDv-induced supply drops and high imports resulted in rapidly growing stocks in Japan and South Korea, which will loom over the market, pressuring prices and imports going forward.
Global outlook

With the peak of 2014 PEDv outbreaks in the past, the global pork industry faced another challenge at the start of Q3, as Russia banned imports from the EU, US and Canada, among others. Along with strong swings in exchange rates, the ban resulted in a rapidly changing trade landscape and significant price swings in the affected countries, particularly Russia and the EU (see Figures 1, 2 and 3).

PEDv’s impact on production volume was smaller than initially expected, resulting in downward price pressure in all affected countries in Q3. Only in Mexico has volume dropped considerably, with an estimated decline of 11% in 2014. In the US, the expected decline in slaughter numbers, down 14% from January and August, was largely offset by higher slaughter weights, resulting in a 5.5% decline in volume. In Japan and South Korea, the production decline was smaller than expected, ranging from 2% to 4%, due to a combination of higher slaughter weights and enhanced bio-security measures. PEDv’s positive impact on prices will continue to fade over the coming months. Into 2015, the wildcard is the possible return of PEDv this coming winter, which would cut back hogs for slaughter in 2015. Should we see modest outbreaks of PEDv this winter, production will likely run ahead in 2015, especially in the US, due to very attractive feeding margins.

The Russian import ban has supported Brazil, where prices surged 30%/kilogramme between June and August. Brazil is Russia’s last resort for sourcing pork. Brazilian prices will continue to rise due to slight growth in production and seasonally increasing domestic consumption.

In contrast, EU pork prices dropped 9% between July and September, with no sign of recovery. With the EU locked out of the Russian market since January, after the discovery of African swine fever (ASF) followed by the Russian import ban and declining domestic consumption, the European industry has been unable to profit from positive trends in the global pork market. Even with the positive impact of declining feed costs, it will be a disappointing year for the EU pork industry. With few signs that this situation will improve into 2015, many players in the industry face challenges ahead. They can only hope for further depreciation of the exchange rate, which will further increase the EU’s competitiveness globally, or recovery of domestic consumption, which requires joint efforts along the EU pork value chain.

In China, the forecast recovery of the market will continue in the coming months towards the seasonal demand peak, supporting strong import growth because of the time lag between the growth of the sow herd and pork production.
Regional outlooks

China

During Q3 2014, China’s pork prices increased steadily, driven by tight supply after sow liquidation in 1H. Pork prices climbed from USD 3.5/kilogramme in June to USD 3.9/kilogramme in September, up 11.4%, with live hog prices showing the same pattern (see Figure 4). Prices are expected to rise further in Q4, coinciding with the festival season.

Despite rising pork prices, Chinese farmers are not making money because—although global feed prices are declining—local feed costs reached the record high of USD 43/tonne in August, a level not seen since 2006. As a result, the hog-to-corn price ratio failed to exceed the breakeven point of 6 to 1, causing farmers’ profitability to remain negative for 23 consecutive weeks. In September, the situation began to improve, with integrated sow-hog fattening farms breaking even, although specialised fattening farms still made a loss of around USD 9/hog.

In August, total inventory was 432 million head (-6.2% vs. August 2013), while sow inventory declined 10% to 45 million head, the lowest level since January 2009 (see Figure 5). This reflects farmers’ cautious reaction following previously negative profitability and the growth in hog productivity, as fewer sows are needed.

China’s pork imports from January to August increased only 1.2% YOY due to strong international and depressed domestic prices. The US is the number one supplier, with 24% of total imports, and volumes up 29% YOY. Germany fell to the number two position, with its share rising from 12% in the first five months to 16%, despite volumes sinking 24% YOY. Spain’s shipments increased strongly by 36%, though the growth pace has slowed in July and August. Denmark’s export volume decreased 7.4% YOY in the first eight months. Rabobank expects China’s imports to continue to grow strongly towards the end of the year and into 2015, on the back of tight domestic supply.

Regarding exports, the opening of Russia’s pork market is positive. Two Chinese pork companies (WH Group and Beidahuang) have obtained approval to export to Russia and three more are being inspected. Although Russia’s strict requirements regarding food safety and traceability limit export volumes, they will be a stimulus for many other Chinese pork players to review their operations and improve food safety and traceability.

Looking forward, Chinese pork prices will likely increase further in the remainder of the year. As a result of higher prices combined with feed costs likely declining, hog farmers are expected to finally make money. The market depression in 2014 has already shaken out many small and even mid-sized individual farms. The hog farming structure will witness further consolidation and large commercial farms will benefit from these structural changes.

Figure 4: Prices of piglets, live hogs and pork in China, 2010-2014

Figure 5: Hog and sow inventory China, 2010-2014

CNY/tonne-cwe

Source: Ministry of Agriculture of China, 2014

Source: MOA, Rabobank, 2014
US

After a very profitable year for many US hog producers, margins averaged USD 76/head in Q3, one of the highest periods in the industry’s history (see Figure 6). PEDv-related losses drove hog futures to all-time highs in July and will keep prices and margins well above year-ago levels for the rest of 2014—the futures curve indicates margins of USD 52/head in Q4. High prices were not only supported by the PEDv-induced drop in production, but also by much lower beef production, resulting in higher beef prices, causing consumers to trade down to pork.

With such favourable conditions, producers are looking to increase production in 2015, as indicated by September’s 1.8% breeding herd, which is higher than average analyst estimates of 1.4%. Farrowing intentions for September through February 2015 indicate a 3.8% to 4.0% increase, which is higher than the consensus of 1.5% to 3.2%, providing a significant increase in US pork supplies in the summer of 2015. These growth indications are tempered by the possible return of PEDv this coming fall and winter. If PEDv cases pick up as temperatures cool, producers may be overshooting to offset possible PEDv losses.

Despite the recent signals of US pork supply growth, the futures curve for hogs and feed point to average production margins of USD 31/head in 2015; well above the historical average of USD 10/head. A key driver is the expected lower feed prices, driven by the rebuilding of US corn and soybean inventories. Hog raising costs averaged USD 87/head in 2014, but lower corn and soymeal prices will drive costs down to near USD 60/head 2015, incentivising producers to increase production in 2015/16.

Pork processing margins were challenged early in Q3, when hog prices reached all-time highs, testing pork cut-out and US consumer demand. Processing margins improved in September as hog prices fell and the cut-out stabilised. Pork prices were pressured by the announcement that Russia had banned imports of pork from the US and other markets. With Russia only recently reopened for US imports after the ractopamine ban in 2012, Smithfield Foods’ accounted for 10% of US pork exports to Russia in July, making Russia’s recent ban as an important driver of the cut-out decline in August. The pork cut-out stabilised in September, driven by continued strong domestic demand and increased export demand from Mexico, where pork prices continue to climb to all-time highs (see Figure 7).

Looking to 2015, the major X Factor is PEDv, which we expect the industry will have to battle for a second time this winter. While the virus is a formidable opponent, producers have gotten to know their enemy. In addition, recent releases of PEDv vaccines by animal nutrition companies seem to help reduce the impact of the virus, potentially driving PEDv hog losses for 2015 down far below levels of this year. With the first day of winter being more than a month away, it is too early to estimate the significance of PEDv in 2015, but the signals of a growing breeding herd and rising farrowing intentions indicate US pork production will likely return to 2013 levels next year.

Figure 6: US hog production margin per head, 2013-2015

Figure 7: US Hog prices and cut-out value

Source: Bloomberg, Rabobank, 2014
The EU pork industry has experienced a very disappointing Q3 of 2014, with rapidly declining pork prices resulting from the Russian ban on exports and declining consumption (see Figure 8). North western Europe was hit hardest: prices dropped considerably due to the relatively high dependency on export to countries outside the EU compared to southern Europe. In week 38, hog prices in Germany and the Netherlands declined by EURc 10/kilogramme, a level not experienced since 2001, during the last outbreak of foot-and-mouth disease (FMD) in the EU.

Up until July, the effects of the Russian export ban on EU prices could be partly compensated by increased exports to other destinations because of the lower production due to PEDv in both the main exporting (US) and importing countries (Japan, South Korea) (see Figure 9). EU prices more or less stabilised, also as a result of the almost finalised negotiations for the reopening of the Russian market for EU countries not located next to ASF-affected countries and a 1.2% lower pork supply in the EU in the second quarter. This price stabilisation occurred despite the 9.6% export decline between January and July, the strong euro limiting the export value and the 2% drop in EU pork consumption, the latter caused by more consumers favouring convenience foods, which predominantly use poultry and generally contains less meat. It resulted in the build-up of an estimated 300,000 tonnes pork in stocks until July.

The EU pork industry’s situation deteriorated from July onwards, with the Russian ban extended to competing exporters, the US and Canada, among others. The increased competition in other export markets, combined with the knowledge that the Russian market would not reopen before July 2015, high stocks, and seasonally higher supply-pressed confidence in a quick recovery of the EU market, resulted in rapidly falling prices.

For the remainder of the year, both consumption and export levels will remain under pressure, the latter because of high stocks in its main export destination countries in Asia (South Korea, Japan). As a result, hog prices will stabilise at a clearly lower level over the course of the quarter. Lower prices are also expected because the latest herd figures from June showed a 1.5% increase of pigs smaller than 50 kilogramme, implying an approximate 1.5% increase in production in Q4 2014. Only a clear drop of retail pork prices, improving consumption and a further decline of the value of the euro might limit the price decline.

In 2015, prospects remain weak, with the sow herd up 0.9% last June. Combined with rising productivity, this will support further production growth, while exports will remain under pressure from the Russian ban until at least July 2015.

Only a strong recovery of domestic consumption could improve this rather negative forecast. For this to happen, the whole value chain across Europe, from farmer up to retailer, must come together to boost sales via targeted strong marketing.
New record pork prices were registered in the Brazilian market during Q3. In August, pork carcass prices were, in inflation-adjusted terms, 26% above August 2013 levels and 20% higher than in July 2014 (see Figure 10). This is a result of limited supply as well as positive export demand coupled with high prices for competing meats in the domestic market, particularly beef. Despite the 0.6% growth in slaughtering during Q2, the official numbers show that as a whole, the number of hogs slaughtered in 1H 2014 fell 0.4% versus 1H 2013.

Export prices have been significantly higher than last year, despite a 7% decrease in volume, while export value increased by 10% compared to 2013 (January to August). This reduction in volume has been a reflection of the drop in Ukraine imports YTD—Brazil’s third most important export destination in 2013. On the other hand, Russia has increased its Brazilian pork imports by 18% in volume and 70% in value from January to August, driven by the Russian trade ban affecting the US, Canada and Europe (see Figure 11). However, with Russia representing almost 50% of Brazil’s pork export value, this might pose a significant risk in the future if the situation normalises.

In the medium term, Japan could be a promising destination for Brazilian pork. The country has been wrestling with the PEDv issue and, as a result, has increased its pork imports from countries such as Brazil. The volume is still modest, but reached 2,105 tonnes between January and August, up 971% compared to the same period of last year, when Japan opened its market to Brazilian pork.

Rabobank sees a positive outlook for the Brazilian pork sector in the remainder of 2014. Regarding the internal market, the Brazilian Animal Protein Association (ABPA) expects a positive outlook for Q4, considering the current balance between supply and demand, which should support firm prices. Moreover, given the assumption that grain prices in 2H will remain lower than in 1H, the outlook for Q4 is strongly positive for the Brazilian pork sector.

Rabobank believes that high international prices coupled with stable supply and a seasonal improvement in domestic consumption due to the holidays at the end of the year will support firm prices for the remainder of the year. In addition, if grain prices stay low, the outlook for farmers’ margins is strongly positive. However, the current economic situation in Brazil, with reduced income growth and persistent inflation, points to inferior consumer spending power, which potentially limits the scope for further record price levels to be achieved.

Looking forward, 1H 2015 will likely be very positive for the Brazilian pork industry. Next to the fact that Russia is expected to continue to increase its pork imports from Brazil, PEDv will likely continue to negatively influence world pork supplies, which supports the competitive position of Brazil on the export market. In addition, with feed costs expected to further decline, this will be positive for the industry’s profitability.
Canada

Canadian hog production margins were quite strong in Q3, averaging USD 57/head, but declined at the end of the quarter as hog prices fell dramatically. The main driver is Russia’s ban on Canadian pork imports, which was introduced in early August. Despite Russia accounting for only 6.5% of Canada’s pork export market, rising competition in other markets pressured prices—a situation which will likely continue at least until the ban is lifted.

Looking to 2015, the dark horse for Canada’s hog market is the possible impact of PEDv. While the US and Mexico have both seen many cases of the virus over the last 18 months, Canada has largely dodged PEDv, a testament to Canadian farmers’ strong biosecurity. On the other hand, it may be just a matter of time before PEDv sweeps across Canada, mimicking the hog losses seen in the US. We see two factors driving the spread of PEDv: (1) temperature—PEDv can hibernate in freezing temperatures, and very high temperatures are needed to kill the virus—and (2) hog density—the movement of hogs and feed in regions with high hog concentration makes containing PEDv very difficult and eradicating it even harder. Clearly the temperature factor is not on Canada’s side, but with a less dense hog production profile than the US, Canada may be better equipped to keep PEDv at bay, but only time will tell.

Given the relatively few cases of PEDv across Canada, we expect many producers experienced few losses and had very favourable margins throughout 2014 (see Figure 12).

Japan

The Japanese pork market is doing well (see Figure 13). Despite higher retail prices for both domestic (loin +4.9%) and imported pork (loin +8.8%) in August compared to January, consumption stabilised at 963,000 tonnes between January and July. In addition to the high-priced competing proteins, such as beef, the depreciation of the yen against the US dollar also played an important role. Due to the depreciation, imports, which were already relatively high-priced, became more expensive, thus supporting higher retail prices.

The high prices are even more remarkable because total supply increased 5.1% between January and July, driven by the surge in imports which jumped 13.6% in the period January to July. This was due to uncertainty about the impact of PEDv on production, with forecast declines up to 5%. In reality, pork production from January to August declined by just 1.8%, with slaughter numbers decreasing 2.2% between January and July. This resulted in rapidly growing stock, which increased by 25% in July compared with January.

With this level of stocks and further recovering domestic availability, prices will remain under pressure, while we expect imports to decline towards the end of the year and into 2015. The decline can be explained by the fact that there are no signs that the yen will strengthen in the near future.

Figure 12: Canadian hog production margins, 2006-2014  Figure 13: Japanese wholesale carcass prices, 2007-2014

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Source: Bloomberg, Rabobank, 2014

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Source: ALIC, 2014
**Mexico**

As expected, Mexico experienced the biggest PEDv impact this summer, with slaughter numbers gradually recuperating towards the end of the year. Total 2014 slaughter numbers are expected to decline around 1.7 million head, -11.1% compared with 2013, which is slightly higher than what we anticipated at the beginning of the outbreak. Despite a decline in feed costs, slaughter weights remain close to 2013 levels, which is in contrast with the US situation. Notwithstanding some large hog producers increasing hog weights, most medium and small producers have sold their pigs at lighter weights, cashing out their hogs at an earlier stage. As a result, we revised our 2014 pork production forecast to decline around 11%, which is up from the 9.7% estimated at the beginning of the year.

Imports have increased around 10% during H1. FAR expects imports to intensify during H2 and to close at around 900 thousand tonnes, up about 13% YOY.

At the beginning of the PEDv outbreaks, we forecast hog prices to reach MXN 30/kilogramme in Mexico City this summer. However, with the impact higher than estimated, prices surpassed MXN 31/kilogramme in August (see Figure 14). We stick to our expectation that prices will drop to somewhere between MXN 28.5/kilogramme to MXN 29/kilogramme at the end of the year.

In line with our expectations, 2014 per capita consumption will decline to 16.3 kilogrammes, down from 16.6 kilogrammes in 2013. Supported by both high prices and declining feed costs, hog producers’ margins will set a record high in 2014.

**South Korea**

Pork imports in South Korea surged 27% between January and August, driven by the expected drop in pork production due to the expected up-to-5% lower domestic production from PEDv losses at the beginning of the year. With the year moving to its end, it is becoming clear that the impact of PEDv will be far smaller than anticipated, with total slaughter numbers January to August down by just 1.3%.

This higher-than-expected supply resulted in a relatively large drop of both hog and wholesale pork prices. After peaking in June, prices were down 11% in August, which is still 24% above the level in August 2013 (see Figure 15). This decline of pork prices will continue in the coming months, but likely at a slower rate. Not only did August pork imports, at 15,000 tonnes, constitute almost half the volume of April, when import peaked just below 29,000 tonnes, but the pork herd in June was also 4.9% smaller YOY.

Going into 2015, prices will remain relatively firm, with the sow herd in June clocking in at 977,000 head, which is 2.3% smaller YOY. However, with the number of gilts up 13% compared to 78,000 head in June, South Korean producers are preparing to increase production, which will enter the market over the course of Q2.

**Figure 14:** Mexican hog prices (cwe), 2009-2014

**Figure 15:** South Korean pork prices, 2012-2014