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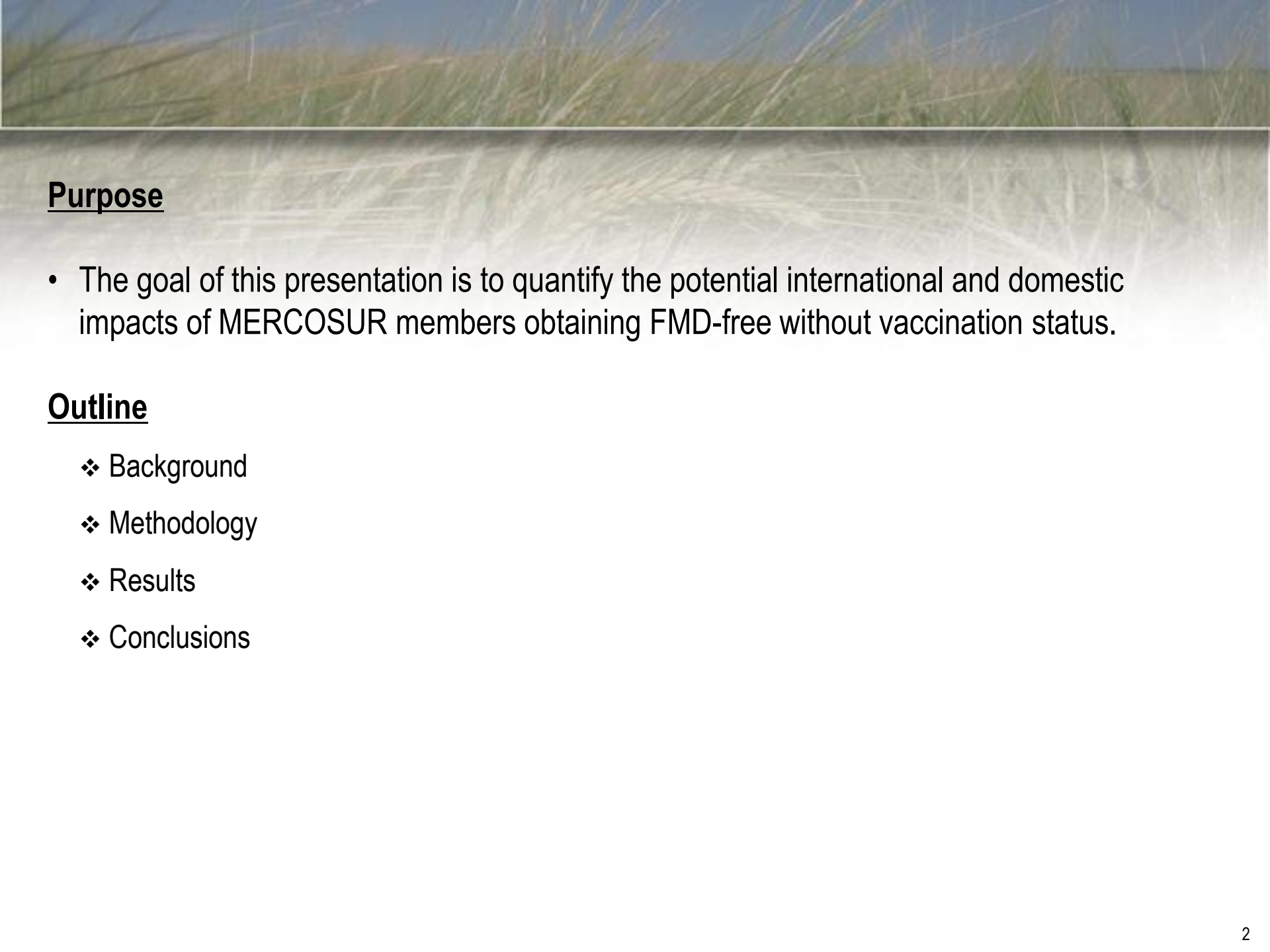
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Potential implications of MERCOSUR obtaining “Foot and Mouth Disease free status”

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Purpose

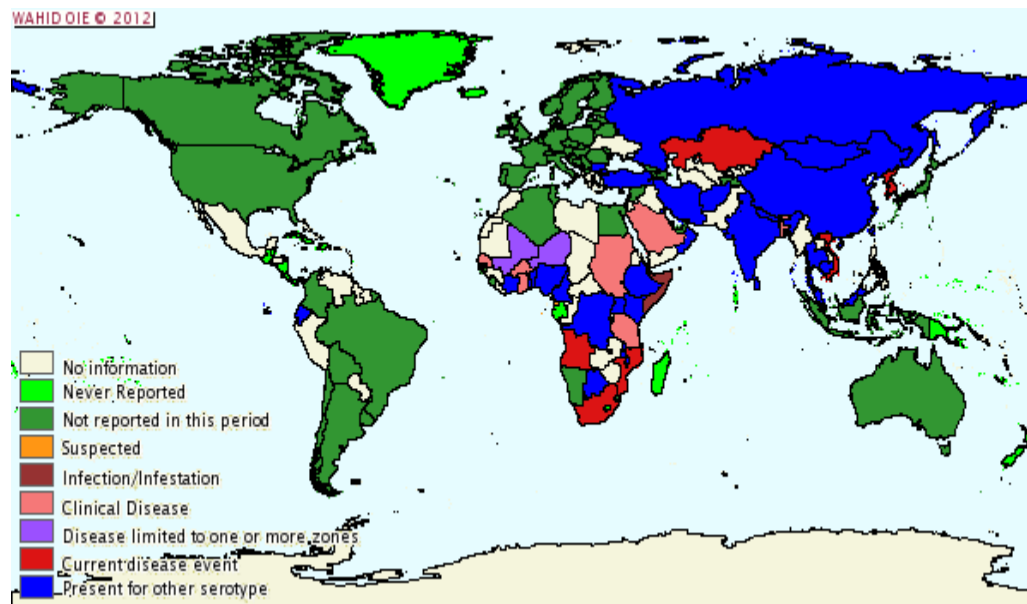
- The goal of this presentation is to quantify the potential international and domestic impacts of MERCOSUR members obtaining FMD-free without vaccination status.

Outline

- ❖ Background
- ❖ Methodology
- ❖ Results
- ❖ Conclusions

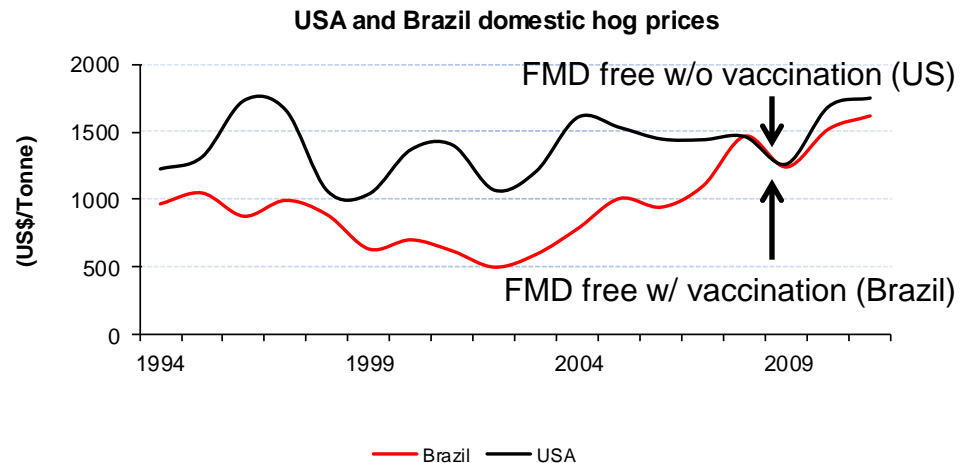
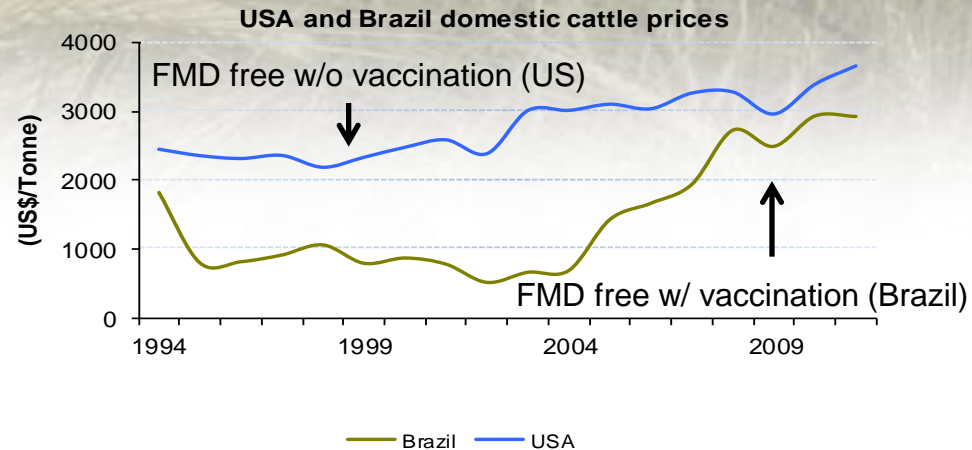
Background

- World red meat trade is approximately divided among countries whose animals are:
 - ❖ 1) suffering from FMD;
 - ❖ 2) FMD-free but vaccinated;
 - ❖ 3) FMD-free without vaccination (known as the “Pacific Rim” market).



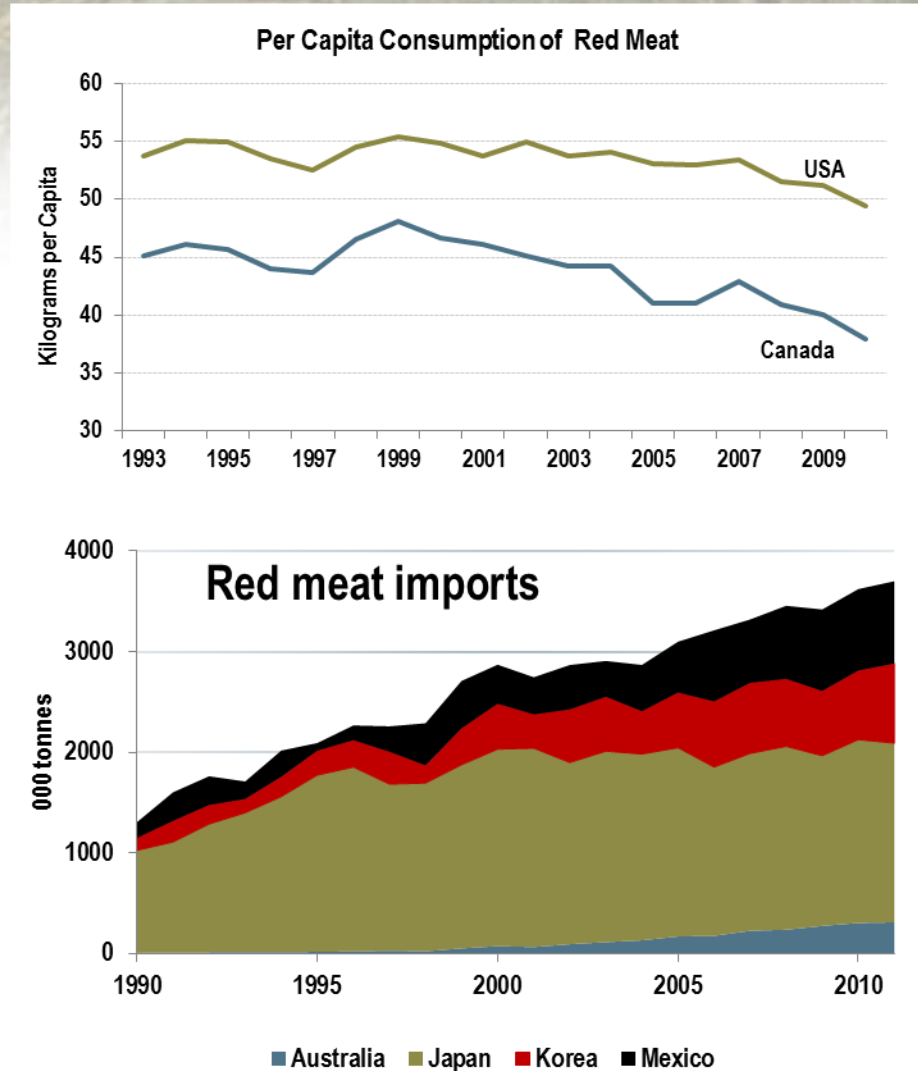
Global meat markets are segmented

- Canada and US belong to the group of countries which can export into the Pacific Rim markets, which generally provide higher prices.
- Other lower valued markets include countries that have FMD issues.
- Price differences between these two markets are declining due to increasing demand in markets with FMD issues.



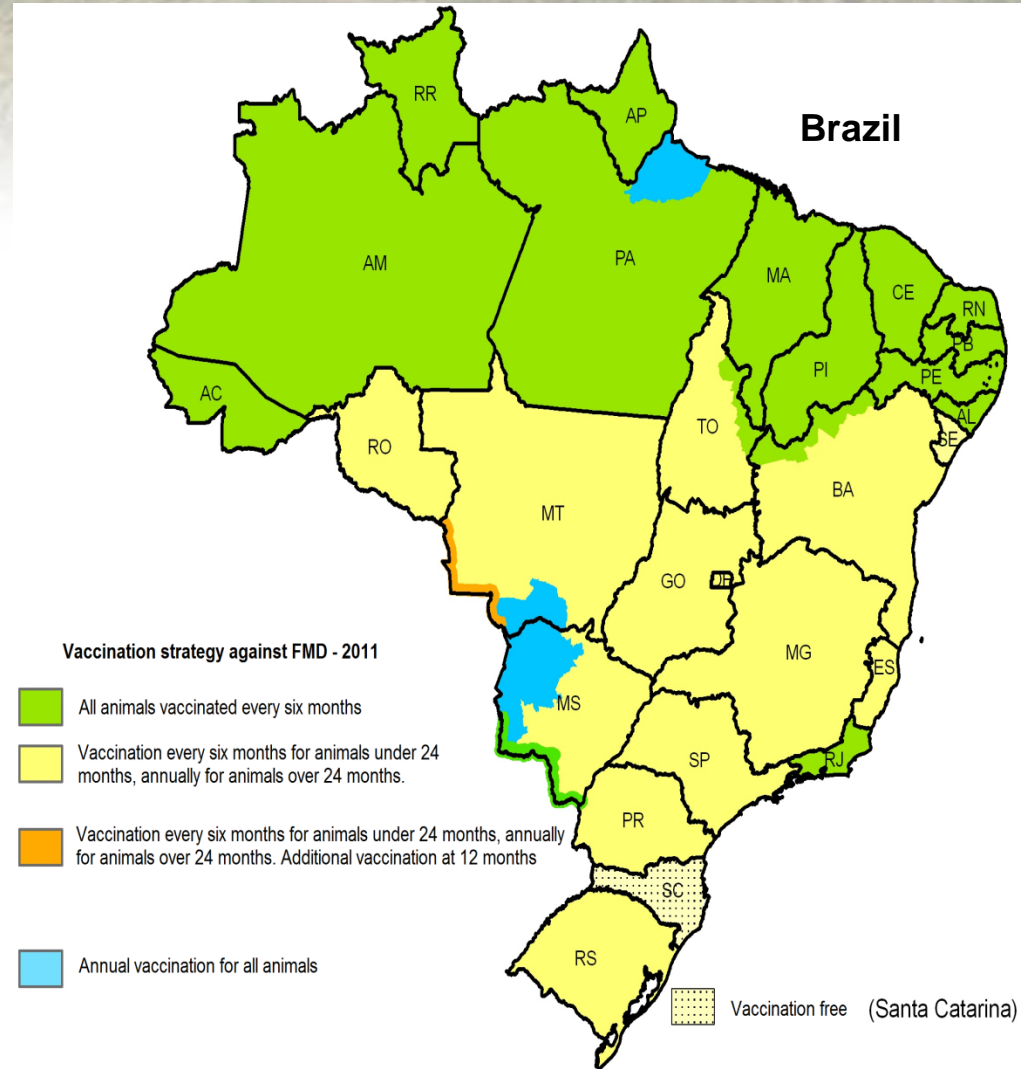
North America – high reliance on export markets

- Income, population growth, and urbanization are key meat demand drivers.
- North American red meat markets are relatively mature and producers benefit from higher prices in Pacific Rim market.
- High proportion of total Canadian pork and beef exports shipped to other “Pacific” countries.



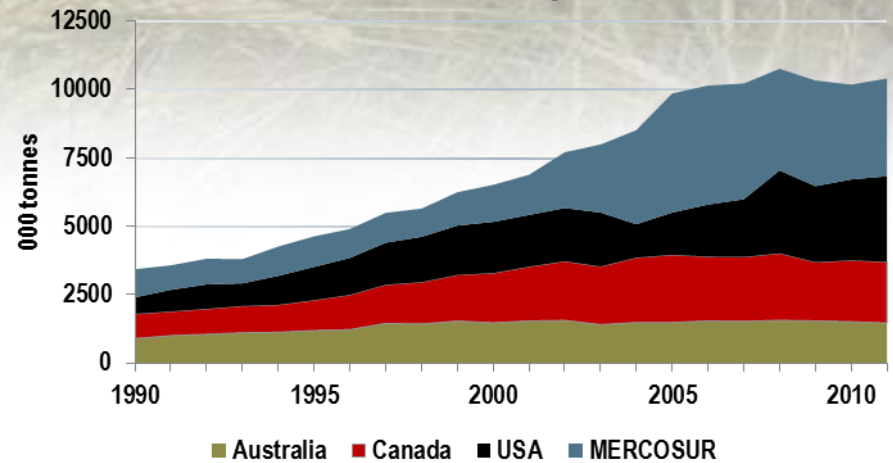
Potential for new competitors in segmented markets

- MERCOSUR (Brazil, Argentina, Uruguay, Paraguay)
 - A red meat sector with high growth potential.
- Brazil is a top red meat supplier and is making significant investments to eliminate/reduce risk of FMD.
- The US and China has approved pork imports from certain slaughterhouses in Brazil.
- Brazil is making headway towards accessing the lucrative Japanese market.

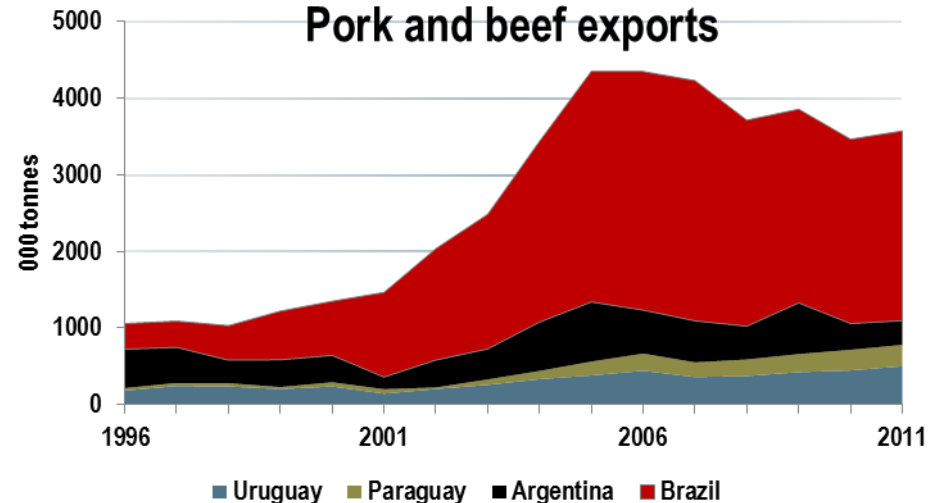


- MERCOSUR member's red meat exports have increased four-fold in the past decade.
- Brazil is the largest exporting country in the MERCOSUR region.
 - ❖ Brazil has ample arable land allowing for significant production expansion.
- Factors that may constrain export potential:
 - ❖ A strong and appreciating Brazilian Real.
 - ❖ Rising domestic demand limiting exportable surpluses.

Red meat exports



Pork and beef exports



Methodology

- Model used: AGLINK/COSIMO model of the Organisation for Economic Co-operation and Development (OECD) and of the Food and Agriculture Organization (FAO).
- Analysis was done using the 2011-20 international baseline produced by AAFC.
- Red meat markets are structured to make distinctions between countries by dividing them into four groups.

Pacific market	Atlantic market
Australia, Canada, Japan, Korea, Mexico, New Zealand, United States, Indonesia*, Thailand, Chile**, Philippines**.	Argentina, Brazil, Chile*, EU27*, Norway, Russia, Switzerland, Colombia, Algeria*, Egypt*, Iran*, Israel*, Kazakhstan, Malaysia, Maldives, Peru, Philippines*, Paraguay, Saudi Arabia*, Turkey*, Ukraine, Uruguay, Vietnam, South Africa.
Domestic markets	FMD endemic markets
E27**, China, India.	Most other countries.

**beef only **pork only*

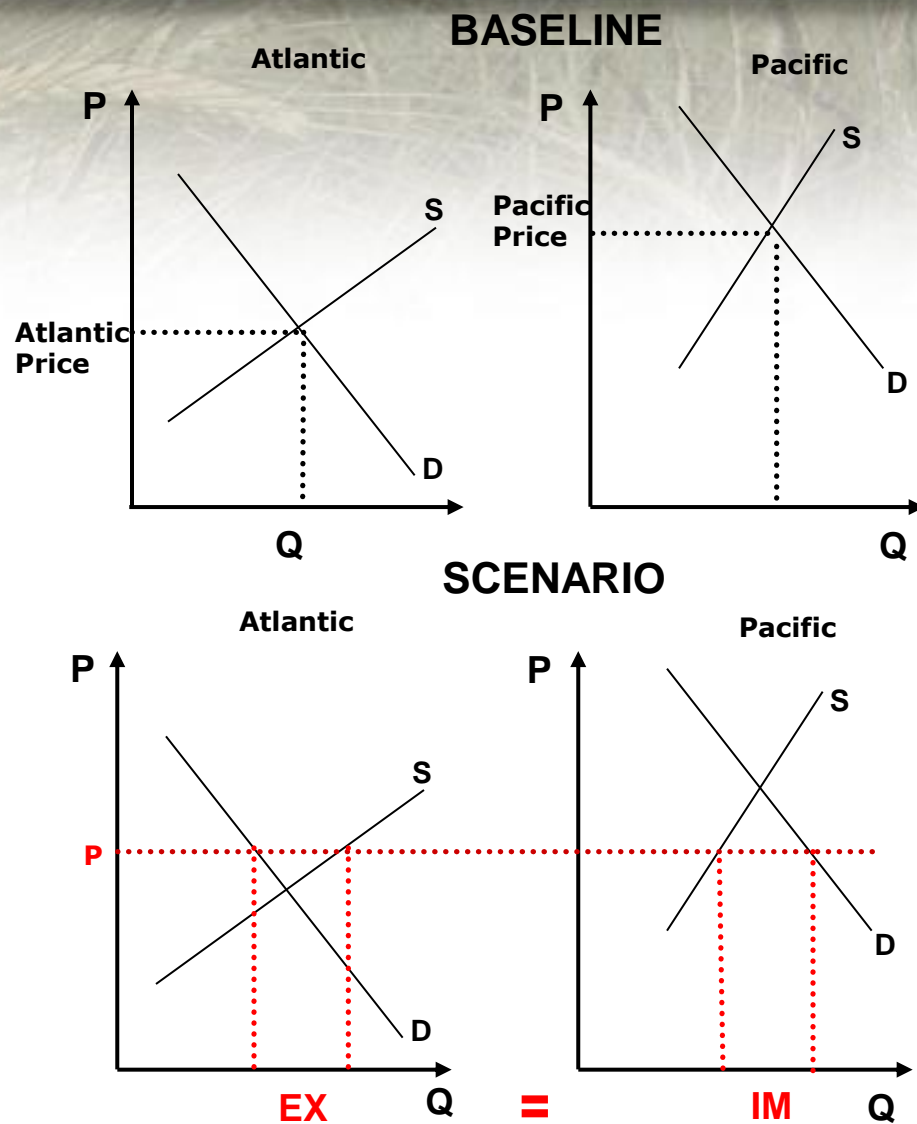
Scenario analysis – impact on markets if MERCOSUR achieved FMD-free without vaccination status

- Key Assumptions:

- ❖ The World Organization for Animal Health (OIE) confirms the “FMD-free without vaccination” status for MERCOSUR countries.
- ❖ MERCOSUR and Pacific beef and pork are assumed to be perfect substitutes.
- ❖ This forces market consolidation and price convergence between the Atlantic and Pacific red meat markets.
- ❖ Atlantic and Pacific market consolidation results in structural change within each market.
- ❖ US and Canadian beef imports fill the tariff-rate quota.

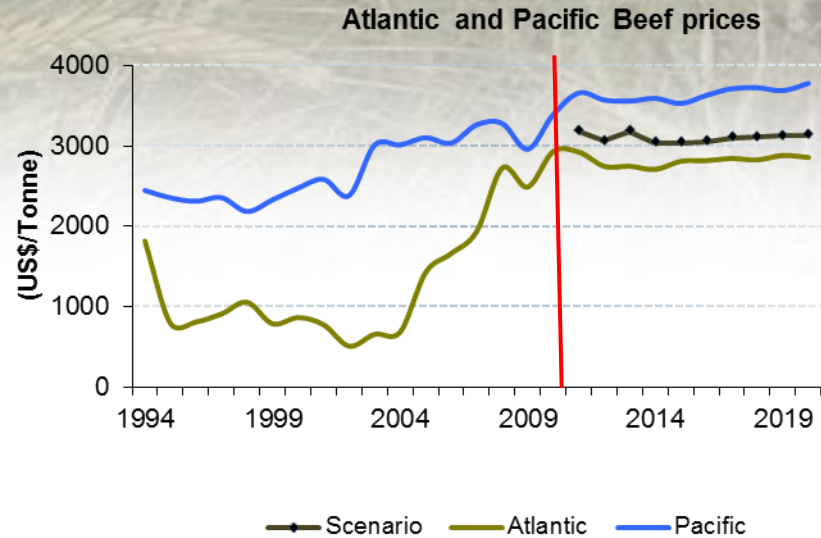
Atlantic & Pacific market integration dynamics

- The elimination of trade barriers between the two markets exposes arbitrage opportunities.
- Arbitrage of a perfectly substitutable product equalizes prices and unifies the markets.
- This leads to significant trade between MERCOSUR and the Pacific market for both beef and pork.

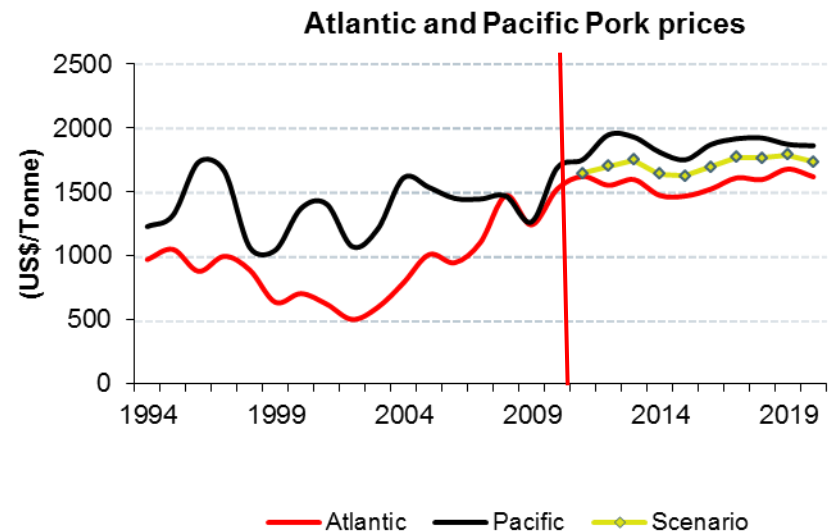


Pacific and Atlantic price impacts

- The Pacific market prices for beef would decrease by 15% while Atlantic beef prices would increase by 10.2%, on average, over the outlook.



- The Pacific market prices for pork would decrease by 8% while Atlantic pork prices would increase by 8.9%, on average, over the outlook.



National price impacts

- Price impacts for beef would not be fully realized in Canada and the US as there are TRQs in place.
- However TRQs or a “second line of defence” is not in place for the Canadian and US pork sectors, so the full price impacts are largely felt at home.
- The smaller impact on Argentinian beef and Russian pork is due to trade policies in place.

Price differences in percentage, annual average 2011-2020.		
	Beef	Pork
Pacific		
Australia	-12.5	-6.9
Canada	-11.5	-7.6
Mexico	-12.4	-6.8
New Zealand	-14.6	-7.2
United States	-12.5	-7.6
Atlantic		
Argentina	4.5	7.4
Brazil	8.0	7.5
Russia	10.2	3.9
Uruguay	9.5	7.1

Consumption and production impacts

- Atlantic red meat sector ramp up production while total domestic consumption decreases in lower income countries due to higher prices.
- Inversely, Pacific red meat production contracts while total domestic consumption in higher income countries increases due to lower prices.
- Because of lengthy biological lag, impacts on production by 2020 are much larger.

	Consumption (2011-20 avg)	Production (2011-20 avg)	Production (2020)
Atlantic	-1,909 kt -1.3%	575 kt 0.4%	2,834 kt 1.8%
Pacific	1,912 kt 2.7%	-446 kt -0.7%	-2,740 kt -3.7%

Pacific markets see an influx of red meat imports

- Market integration decreases Pacific red meat exports and increases imports. While in Atlantic markets, red meat exports increase and imports decrease.
- Red meat trade imbalances result in a global annual net-trade redistribution of up to 2.5 million tonnes, on average, over the outlook.

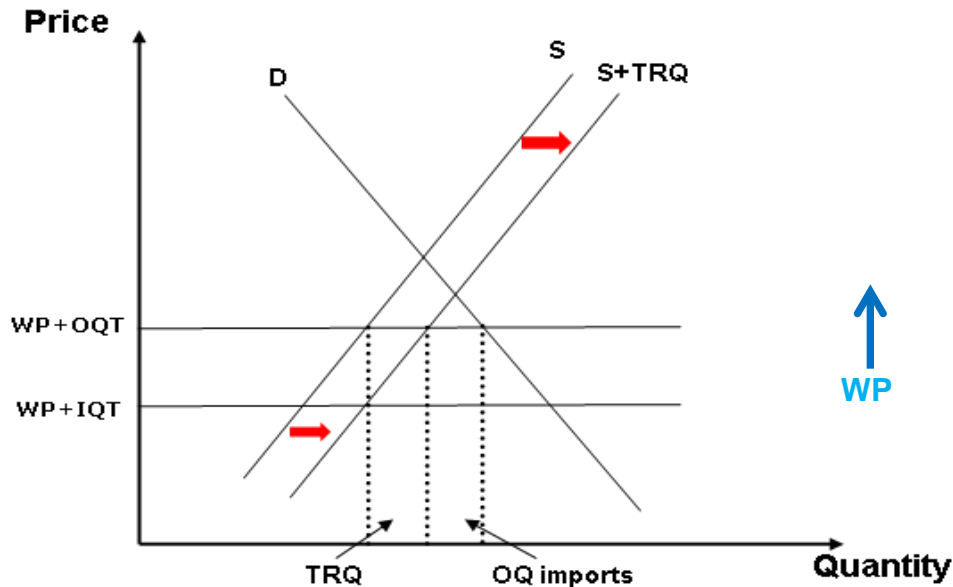
Total red meat exports (000 tonnes), annual average 2011-2020			
	Baseline	Scenario	%
Pacific			
Australia	1572	1473	-6.3%
Canada	2242	2081	-7.2%
New Zealand	531	512	-3.6%
United States	3578	2211	-38.2%
Atlantic			
Argentina	422	556	32%
Brazil	2703	4003	48%

Total red meat imports (000 tonnes), annual average 2011-2020			
	Baseline	Scenario	%
Pacific			
Canada	424	485	14%
Mexico	872	1121	29%
Korea	804	885	10%
United States	2413	2564	6.3%
Japan	1875	1947	4%
Atlantic			
Russia	1657	1527	-8%
Other Atlantic	4376	4033	-7.8%

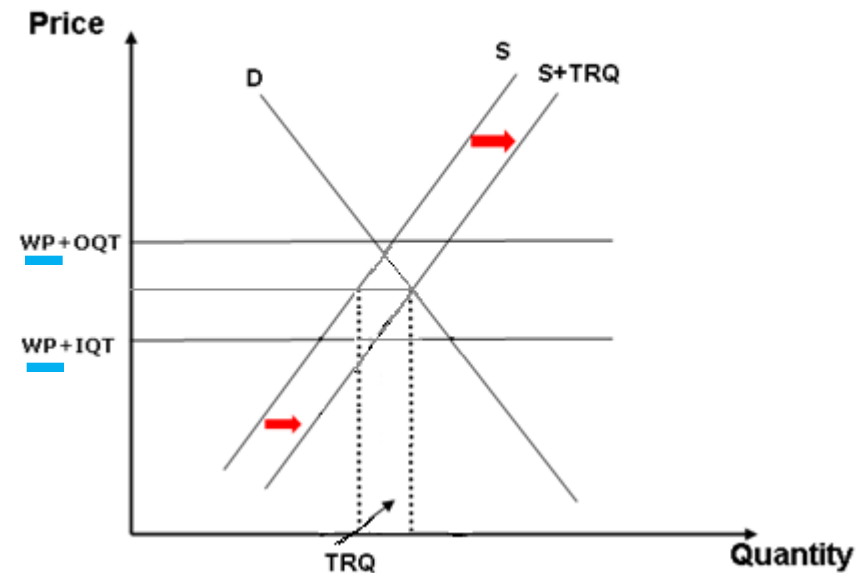
Illustration of importance of policy approaches in global markets: Changes in Russian pork pricing structure

- Increases in Atlantic pork prices change the Russian market structure from being influenced by the over-quota tariff to an internal domestic market clearing with a binding TRQ.
 - The Russian pork price detaching from world markets can be noted by its relatively lower price increase (3.9% p.a. increase in Russia compared to 8.9% p.a. increase in Atlantic market).

Russian pork imports



Russian pork imports after world price increase



Conclusions

- This hypothetical analysis illustrates the potential impacts of MERCOSUR members obtaining FMD-free without vaccination status and increasing competition for higher valued markets.
- Such a scenario could lead to prices decreases in Pacific Rim beef and pork markets and increases in Atlantic beef and pork markets.
- Trade flows could be redefined as the market becomes more competitive.



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Annex

Outlook period – market perspectives, trends, & highlights

- Market perspectives for 2010
 - The OECD as a group is recovering slowly from the recession.
 - The BRIC (Brazil, Russia, India and China) countries are still growing at rapid rate.
 - The Russian Federation imposed a grain export ban in 2010 as a result of a drought.
 - Low supply/inventories, incessantly growing demand, and high crude oil prices, have collaboratively caused 2010 international coarse grain prices to surpass 2008 records.
- Trends that mold the 10 year baseline
 - Recent trends in world agricultural markets include: increasing domestic production from many importing countries, slowing growth in traditional exporters, and higher transportation costs.

Key domestic market protection mechanisms

- To protect domestic markets, the Russian Federation implements tariff-rate quotas (TRQs) on meat imports.
 - Poultry – 350,000 MT
 - Fresh cattle meat – 30,000 MT
 - Frozen cattle meat – 530,000 MT
 - Pork, fresh, chilled, and frozen – 472,100 MT
 - Pork trimmings – 27,900 MT
- Canada and US beef TRQs.
 - Canada: Fresh and frozen cattle meat – 76,430 MT
 - USA: Fresh and frozen cattle meat – 697,140 MT
- To protect domestic consumers, Argentina imposes beef export limit.
 - Fresh and frozen beef exports – 600,000 MT

Atlantic & Pacific market integration

- Could MERCOSUR be extracted from the Atlantic red meat market altogether and inserted into the Pacific?

Preliminary analysis results:

- MERCOSUR, significant Atlantic supplier
- Extraction cues supply shifts
- Atlantic prices rise above Pacific prices
- Market with FMD issues yielding a higher price than FMD free market?

