

Does Australia Overlook A Potential Trade Opportunity?

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Abstract

With growing number of Muslim population and improved purchasing power in Muslim community in Asia-pacific zone, Halal food market appears as a potential opportunity for meat producers. The strict requirement of Halal standard, however, makes the entry to this potential market often challenging. This study analyzes trade potential in Halal bovine meat industry; and finds that India and Brazil have successfully entered the market and grabbed substantial portion of the market. Australia, being a leader in global bovine meat supply, stays far behind in the race. The study suggests that collaboration with countries like Malaysia, who have advanced in developing acceptable Halal standard, would help Australia to take lead in the Global Halal Bovine meat market.

Key Words: Halal Market, Bovine meat trade, Bovine meat producers

JEL Classifications: F14

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1. Introduction

Halal food trade emerges as a potential trade opportunity in recent years. With a Muslim population of over 2 billion, the estimated value Halal food demand is about USD 2.1 trillion per year (Nakyinsige *et al.* 2012). With this growing high demand, the Halal issue becomes significant from economic and business perspective beside the religious and social perspective. However, the literature on Halal issue is at an initial stage, making this growing and highly prospective market appears as an unexplored opportunity.

Meat is one of the main commodities which primarily fall under Halal consideration. In general, Muslims are very particular about Halal meat compare to other food products. A general misconception often leads to an idea that pork is a non-Halal meat item, while other red meats and some birds are accepted as Halal food. The actual Halal standard, however, is guided by the Islamic shariah and much more complex. The process includes different stage of meat production and processing, for example, feeding slaughtering, meat processing and packaging of the granted animals and birds (Nakyinsigea, Mana and Sazilic, 2012). Thus, a number of major meat producers find difficulty to penetrate the Halal market.

This article emphasizes the growing demand of Halal bovine meat and analyses the responses of major global exporters to this demand. Here we observe that a major growth of Halal bovine meat market takes place after 2000. Only Brazil and India were able to take this opportunity by supplying 80 percent of this growing demand; where as, being a leader of global bovine meat suppliers, Australia is able to penetrate only 5 to 10 percent of this potential market. This study suggests for collaboration with countries like Malaysia, who are expert in Halal knowledge and standard. Such collaboration would help Australia to cope with the guideline of Halal requirement and thus increase their share in this potential Halal bovine meat market.

Organization of the paper is as follows. Section 2 discusses existing literature on Halal market and its potential. Section 3 explain the theoretical framework, followed by a discussion on analysis and results in Section 4. Section 5 points out some challenges to enter Halal market and possible wayout. Last section concludes the paper.

2. Halal Market and its Potential: Some Literature

The market for Halal food becomes increasingly important with the growing Muslim population across the world. Current Muslim population accounts for approximately 25% of the world population, and it is heavily concentrated in areas such as South East Asia (Malaysia and Indonesia), the Middle East (Saudi Arabia and Iran) and North Africa (Egypt and Morocco). However, the Muslim population in predominantly Christian areas such as Oceania and Europe is expanding. A major concern of this growing community worldwide is Halal food, particularly when living in a non-Muslim country (Esfahani and Shahnazari, 2013).

The concept of Halal food is the significance of cleanliness of food and beverages. These foods and beverages must be approved before being served and consumed according to three guidelines; food and

food products consumed must be Halal, must be obtained through Halal means, and must not be in contact to material harmful to health (Tieman, 2011).

As the Muslim population is ever spreading, broadening and changing, there are new opportunities for Halal food producers to explore. The purchasing power of Muslim population in areas such as Northern Africa and the Middle East are improving and growing, and it presents a big market for Halal food producers. Likewise, in Oceania and the Americas, the incomes of Muslim populations are moderate and are higher than in North Africa and the Middle East; however, the population of the Muslims living in those areas is small.

According to the International Markets Bureau Report (2011) and the Global Halal Food Market Report (2011) by the Government of Canada, the Muslim population in Oceania is 500,000 people and 5.3 million in the Americas. It is no surprise, therefore, that the Halal food market size of these two regions combined add up to just US\$ 18.3 billion as of May 2011. This is a small fraction of the world's Halal food market size of US\$ 643.5 billion. There is, however, one catch in the findings. Oceania's Muslim population stands only at 500,000 people and their Halal food market size is just US\$ 1.6 billion, though their Halal food market had experienced a 33.3% increase. This clearly is a market which Halal food producers can explore. The contrast of the Northern African and Middle East to the Oceania and Americas Halal food market couldn't be starker, and the challenge posed to Halal food producers to meet the demands of these four regions are high and risky.

The four regions stated in the previous paragraph account for 327.7 million of the 1.6 billion Muslims present today. For the Halal food producers, there lie big opportunities in those areas. However, the Asia-Pacific region lays a bigger opportunity for them. The Asia Pacific is home to 1 billion Muslims, more than half of the total Muslim population. Notable Muslim countries in the Asia-Pacific region are Malaysia, Indonesia, Bangladesh, India and Pakistan. All these countries have one common ground, that is, they are all emerging economies with a maturing Muslim population base. Not only are the populations of the Muslim communities in these countries increasing, but so as their purchasing power. This brings about a huge market in which Halal food producers can take advantage of. These regions are also slowly becoming the centers for Halal research, testing and trading.

The European market for Halal food is minor compared to the Asia-Pacific region. The population of Muslims in Europe is increasing although the Christian communities are larger. Nevertheless, there is demand for Halal food in Europe. The demand does not arise from the Muslim population, but rather the affluence of Europeans who may not necessarily be Muslims. Due to the perception that Halal food is safer and cleaner, many Europeans prefer Halal food products today.

Some challenges, however, makes entry of Halal market difficult for non-Muslim producers, for example, achieving consumer confidence and understanding consumer behavior. In general, Muslim consumers exhibit some common attributes in their daily life style which are guided by the applied religion of Islam (Esfahani and Shahnazari, 2013). Knowledge and expectations about Halal standard, though, are often diverged among Muslims from different parts of the world. Some researchers (for example, Ismaeel and Blaim, 2012) even propose for multi-level Halal certification approach under multi-level Islamic ethics framework. Hashim and Othman (2011) finds stronger inclination among non-Arab Muslims towards Halal perception compare to Arab Muslims, particularly for food products.

Halal market is no more confined within the Muslim countries, rather spreads over non-Muslim countries as well (Kurokawa, 2011). Migration to non-Muslim countries work as another important factor for incremental Halal demand, particularly for meat (Bonne *et al.* 2007). Muslim population growth in UK, for example, the second generations of the Asian or Middle Eastern migrants create high demand for Halal meat. However, research shows UK Muslims have more confidence on the local shops more than supermarkets for finding Halal meat (Ahmed, 2008). Besides, Halal industry is also influence in tourism in some places. Muslim tourists now consider availability of Halal food as a factor for selecting their vacation destination (Bon and Hussain, 2010).

Expectation about Halal standard among Muslim consumers is quite diverged. It varies from proper way slaughtering of the animal to processing and handling of the product in a manner accepted by Islam. The standard cannot be ascertained at consumer level. Hence consumers' confidence on producer and certifying body plays vital role in Halal industry and Halal supply chain. Meat producers from non-Muslim countries often find this as a challenge and are discouraged to enter Halal market (Tieman, 2011; Nakyinsige *et al.* 2012). However, Wilson (2012) explains Halal industry as quite simple and similar as other industries except incorporating some restriction and specific standard in the production process. The major drawback, however, is the lack of knowledge about Halal issues and diverged opinion.

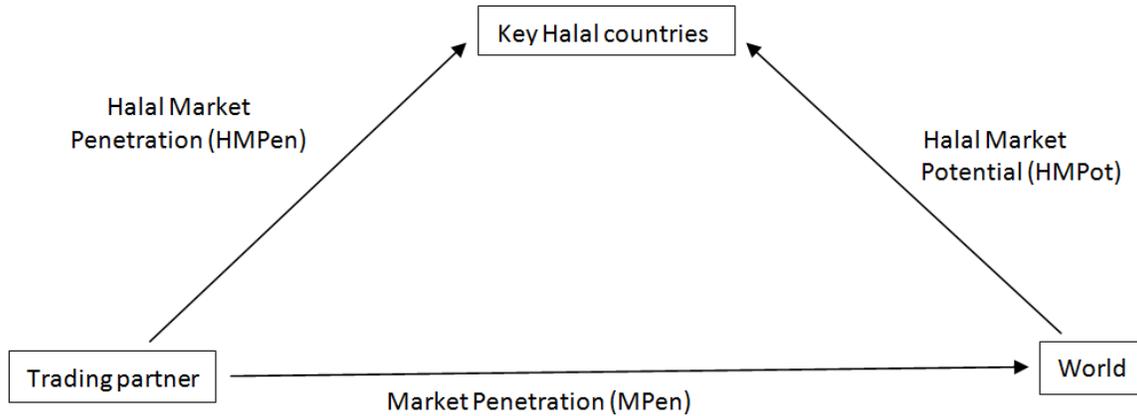
Hence, Halal market offers trade potential for non-Muslim food producers. However, the question is, who steps forward to take the opportunity of fast growing Halal food processing and supply chain and successfully capture the emerging Halal food market. Working in collaboration with Muslim countries would be an effective strategy for doing this.

3. Study on Halal Market Potential: Theoretical Framework

Halal food is a wide area of research. This study focuses to portion of this market, the bovine meat market, which carries special importance for Muslim community due to taste, food value and religious and cultural tradition. Besides, in a recent report, the Government of Canada identifies 19 Muslim countries as the key Halal markets (International Markets Bureau Report, 2011). These countries are Algeria, Bahrain, Egypt, Indonesia, Iran, Iraq, Jordan, Kuwait, Lebanon, Malaysia, Morocco, Oman, Pakistan, Qatar, Saudi Arabia, Syria, Tunisia, Turkey, United Arab Emirates and Yemen. We concentrate to these 19 countries as Halal market in this study.

The framework of the Halal trade model is developed based on the three directional trade flows. The trade flows are shown in Figure 1. The trade flows originate from two sources, one is the target trading partner or group of trading partners, and the other is the whole world. From the target partner/s, trade flows to two directions. First, trade flows towards the world, which is the total export of the specific trading partner/s. In our model, we term this trade flow as Market Penetration (MPen). Second, trade flows towards Halal market, that is, exports of Halal food to the countries which are identified as Halal market. This trade flow identifies the penetration of the Halal market by the trading partner; hence we term this as Halal market penetration (HMPen). The third direction of the model is from the world towards Halal market. More specifically, this is the total imports of Halal food by the identified Halal market from the world. We term this trade flow as Halal Market Potential (HMPot).

Figure 1: Three directional flows of Halal Trade Model



The first direction of Halal trade model is pretty straight forward. Market penetration can be easily achieved from total exports of the trading partner for any specific commodity. However, calculating the other two directions require concentration to each country of the key Halal market.

The value of Halal market penetration by the trading partner a specific commodity is the summation of exports of that commodity from the trading partner to each country of the key Halal market. Thus, the equation stands as:

$$HMPen_t = \sum_{i=1}^n exports_{i,t} \dots \dots \dots (1)$$

Here, i denote to the country that belong to the key Halal market, n is total the number of countries that are included in key Halal market, and t is the specific year.

Similarly, the value of Halal market potential of any specific commodity is the summation of imports of that commodity by each country of the key Halal market from the world. Thus, the equation for Halal market potential stands as:

$$HMPot_t = \sum_{i=1}^n imports_{i,t} \dots \dots \dots (2)$$

Here, i denote to the country that belong to the key Halal market, n is total the number of countries that are included in key Halal market, and t is the specific year.

After calculating the Halal market potential for a specific commodity and the Halal market penetration of that commodity by a trading partner, next concentration should go to two questions. The first question is, how much is the Halal market penetration of the trading partner as a percentage of market penetration for that commodity. We term this ratio as Halal Market Focus (HMFoc). Mathematically we define this term as:

$$HMFoc_t = \frac{HMPen_t}{MPen_t} \dots \dots \dots (3)$$

HMFoc interprets that out of each dollar of total export to the world, what value of exports goes to the key Halal market.

The second question is, how much is the Halal market penetration of the trading partner as a percentage of Halal market potential. We term this ratio as Realized Halal Market Potential (RHMPot). Mathematically the term can be defined as:

$$RHMPot_t = \frac{HMPen_t}{HMPot_t} \dots \dots \dots (4)$$

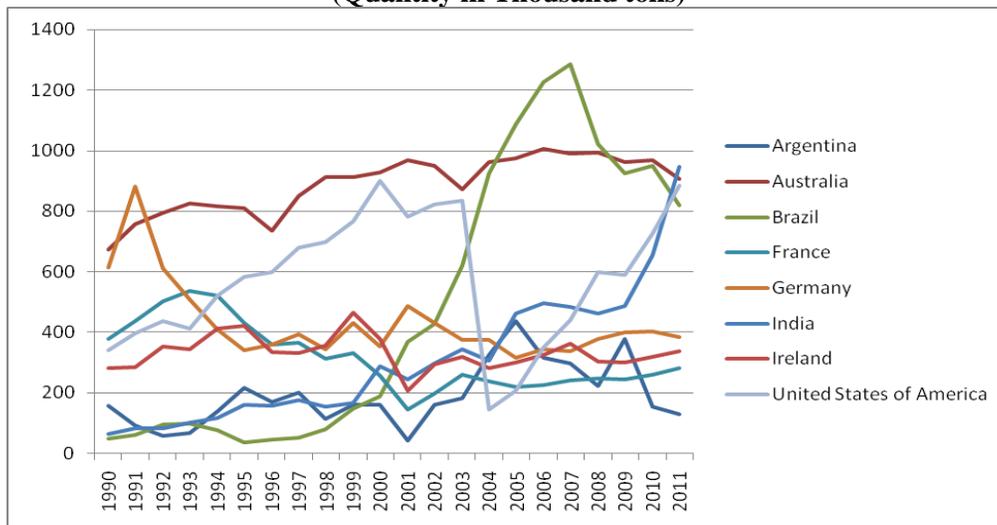
RHMPot interprets that out of every dollar of import of a commodity by the key Halal market, how much the selected trading partner was able to realize the trade opportunity.

4. Analysis of Halal Market Potential of Bovine Meat and Its Realization by Major Exporters

4.1 Selection of major bovine meat exporters

In this study, we select 8 major Bovine meat exporters of the world as the trading partners for the key Halal markets; and calculate each of Equation 1 to Equation 4 for each of these trading partners. The major 8 bovine meat exporters are Argentina, Australia, Brazil, France, Germany, India, Ireland and USA. The total volume of meat exports by each of these meat exporters from 1990 to 2011 are presented in Figure 2. Among the meat exporters, Australia consistently maintains high volume of exports which gradually increases. During early 1990s, Australia exported about 800 thousand tons of Bovine meat which increases to nearly one million tons by recent years.

Figure 2: Total Bovine meat exports to the world by the major meat exporters (Quantity in Thousand tons)



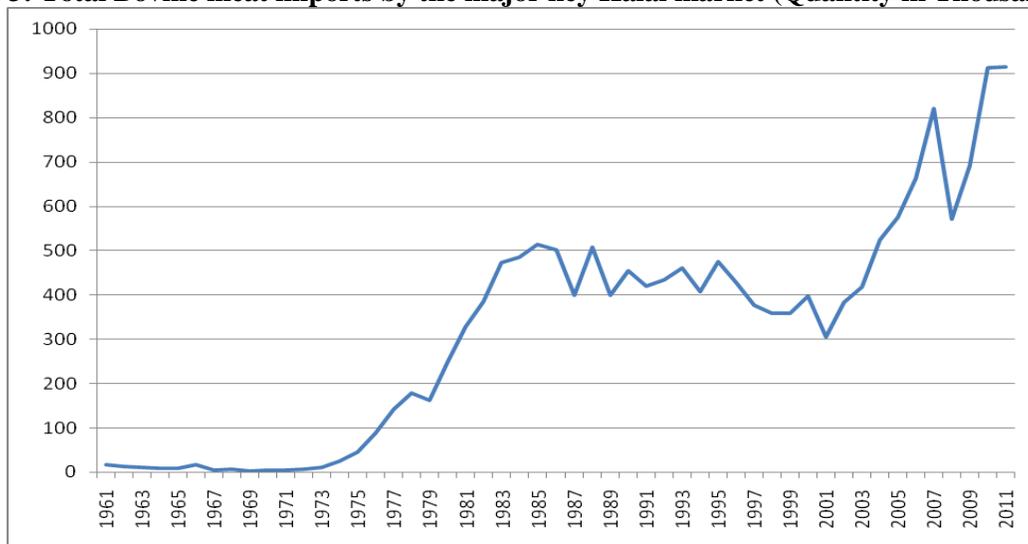
Source: Authors' calculation based on FAOSTAT data

After 2000, Brazil gradually appears as the second largest exporter of Bovine meat. During 2005 to 2008, Brazil's meat export was above one million tons, which is even higher than Australian exports. In fact, Brazil's Bovine meat export peaks at 2006 and 2007 amounting above 1.2 million. Among others, USA appears as the third largest Bovine meat exporter with above 600 thousand tons; though their exports highly fluctuates 2000 onwards. During 2000 to 2003, US meat exports was above 800 thousand tons, which suddenly falls to below 200 thousand tons in 2004. Their exports, however, gradually increase and reach above 800 thousand tons in 2011. Apart from these 3 countries, India appears as another key exporter of Bovine meat in recent years with above 900 thousand tons of export in 2011. Other 4 countries maintain a moderate level of Bovine meat exports amounting above 200 thousand tons.

4.2 Halal Market and its potential in bovine meat market

Halal market potential is calculated by using equation (2); results are presented in Figure 3. The Figure shows that the key Halal market emerges, or the market has been identified during mid 70's, and by 1985, import demand for Bovine meat by this market increases to 500 thousand tons. The market demand is stable with occasional fluctuation till 2001, however, shows high growth during 2000 onward and reaches to 900 thousand tons in 2011.¹

Figure 3: Total Bovine meat imports by the major key Halal market (Quantity in Thousand tons)



Source: Authors' calculation based on FAOSTAT data

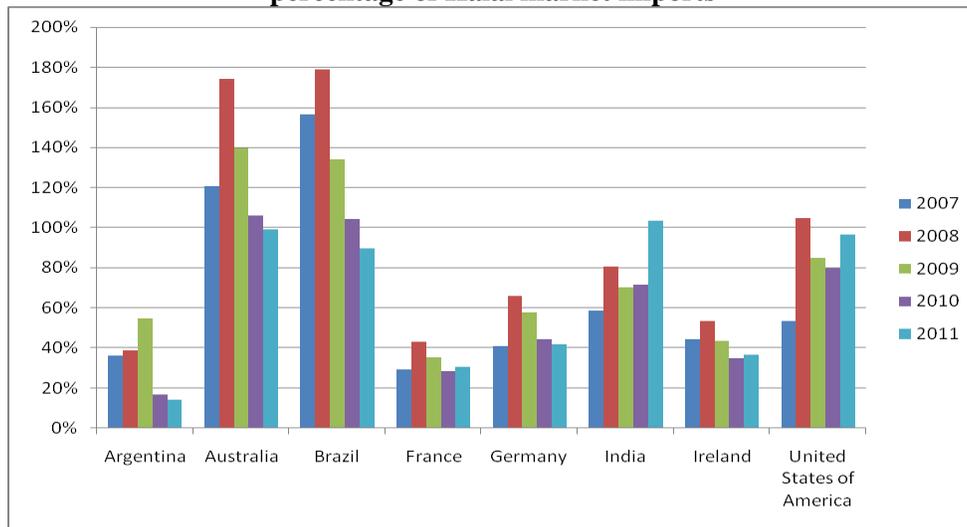
We compare the size of the potential emerging Halal market with the total Bovine meat exports by each of the major exporters. The comparison is shown in Figure 4. In 2007, Argentine, German, French and Irish exports of Bovine meat were only 30 to 40 per cent of total Bovine meat imports by the key Halal market, while Indian and US exports were about 50 to 60 per cent. As exception to this, Australian and Brazilian total Bovine meat export was 120 per cent and 150 per cent respectively of Bovine meat imports by the key Halal market. In 2008, however, the ratio improves for most of these countries due to sharp

¹ Some early period fluctuation would have occurred due to missing data for a number of countries

drop in Halal market's import. The ratio declines after 2009 as imports by the Halal market continues to improve again.

In 2011, Australian and Indian exports of Bovine meat became almost equal to Bovine meat imports by the key Halal market, Brazilian and US export were about 90 percent of Halal market imports, Argentine export was less than 20 percent and the rest remained almost unchanged. Several incidents caused these changes. First, Halal market exports drop in 2008 and the starts to revive fast and continues till 2010. Second, Both Australia and Brazil's meat export drops from 2007 with substantially faster rate for Brazil. Third, Indian meat export picks up first after 2009, and US export pick up after its sudden drop in 2004. And lastly, Argentine exports drop from 379 thousand tons in 2009 to 129 thousand tons in 2011.

Figure 4: Comparison of Total Bovine meat exports by each of the major meat exporters as percentage of Halal market imports



Source: Authors' calculation based on FAOSTAT data

Overall, the key Halal market's import of Bovine meat is smaller than Australian and Brazilian exports, nearly equal to US and Indian exports, and much bigger than exports of other four major exporters. Clearly, these key Halal countries offer a potential Bovine meat market which is rapidly growing.

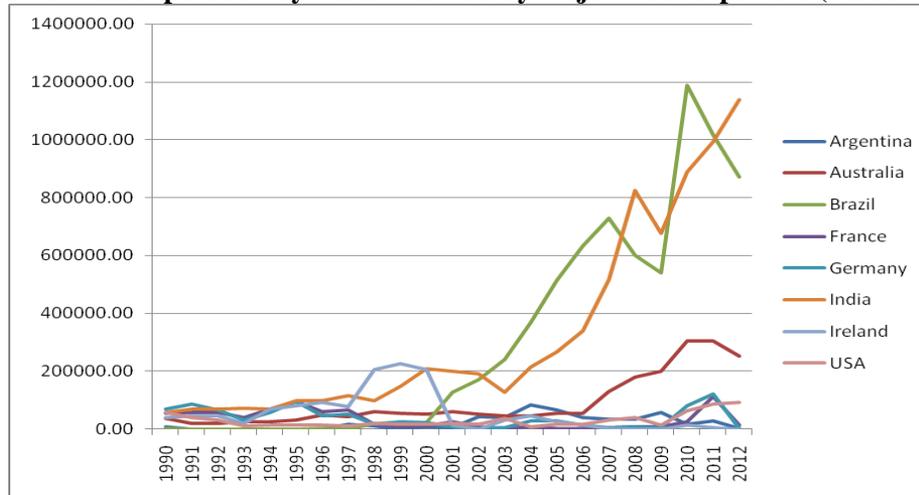
4.3 Halal Market Penetration and Halal Market Focus

Now we look at how much each of the major exporters of Bovine meat has penetrated Halal market. For this, we calculate Halal market penetration using equation 1, results being presented in Figure 5. Brazil and India are observed to export major amount of Bovine meat to the key Halal market. During late '90s, both countries exported about 200 million dollars amounted Bovine meat, which display sharp rise from early 2000s.

Brazilian exports value reach 729 million USD in 2007, followed by a sharp decline till 540 million USD in 2009. Their export again picks up to 1.18 billion USD in 2010, which again drops and reach to 872 million USD in 2012.

Starting from about 200 USD of exports to the key Halal market, Indian export value consistently increases from 2003 and reach 824 million of USD by 2008. The growth was disrupted in 2009 causing Indian meat export to Halal market to drop to 674 million USD, which increased again in 2010 and reach to 1.14 billion USD in 2012.

Figure 5: Bovine meat export to Key Halal Markets by major meat exporters (Value in 1000 dollar)



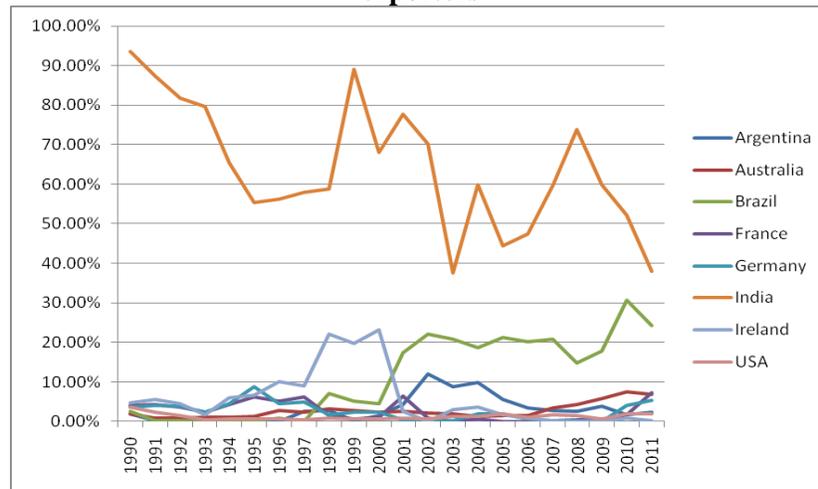
Source: Authors' calculation based on UNCOMTRADE data

An Australian export of Bovine meat to the key Halal market was consistent to a range of 40 to 50 million USD till 2006, followed by a substantial rise afterward. As a result, their export reached to 300 million USD during 2010-2011 periods, which slightly drops to 250 million USD in 2012. Other major meat exporters export below 100 million USD of Bovine meat to the key Halal market. Clearly, India and Brazil are well ahead to penetrate the Halal market compare to other major Bovine meat exporters including Australia.

So, Brazil and India have been successful to penetrate the Halal market compare to other bovine meat exporters. However, the question is, how much focus have they given to Halal market compare to other markets. Calculation of Equation 3 leads to the answer. Results are presented in Figure 6, which shows the Halal market penetration of the major Bovine meat exporters as percentage of their total Bovine meat exports.

Figure 6 shows how much focus is given to Halal market by each meat exporters. These are the calculated results of Equation 3. The results interprets the percentage of Halal market penetration by the major exporters against their total Bovine meat exports. India is observed to be highly focused to Halal market. During the 1990s, Indian Bovine meat export was highly focused to Halal market, 90 percent of their total bovine meat export in 1990 went to the Halal market, which decreases over time. With substantial fluctuation over the years, the ration gradually drops to 70 percent in 2008 and to 38 percent in 2011. This change interprets that India's bovine meat export was initially highly focused to Halal market, and then gradually diverged her focus from key Halal market to other markets. However, Halal market is still a prime focus for Indian Bovine meat export.

Figure 6: Halal market penetration as percentage of total Bovine meat exports by the major exporters



Source: Authors' calculation

Brazil starts to focus on Halal market after 2000. Before 2000, only 5 percent of their Bovine meat exports entered Halal market, while the ratio increases to 20 percent by 2002 which has been consistently maintained. In fact, Brazil exported 30 percent of their total Bovine meat to Halal market in 2010. Notably, Brazil's total meat export also peaks during this period. Hence, when Brazil emphasizes the expansion of bovine meat exports during 2000 onward, they not only looked at world market demand but also prioritized the growing Halal market.

Among others, Irish focus to Halal market increased to more than 20 percent during 1998 to 2000, and then dropped to below 5 percent. Argentine exports to Halal market suddenly peaked to about 10 percent during 2002 to 2004, then dropped back again to below 5 percent. Australian focus to Halal bovine meat market is observed after 2006, however at a low level. Below 10 percent of their total bovine meat exports enter the Halal market. Other exporters do not seem to focus much to the Halal market for their bovine meat exports.

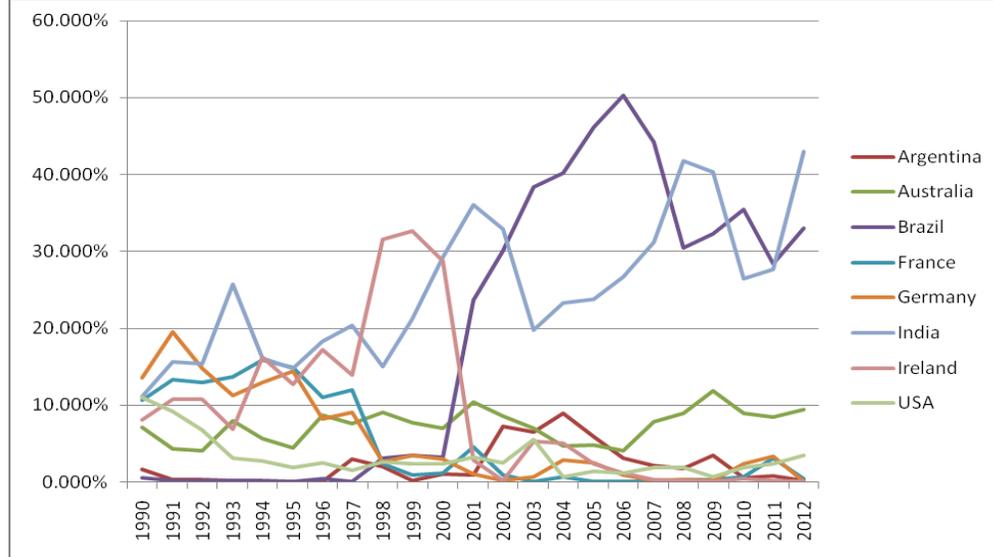
4.4 Realization of Halal Market Potential

Next, we look at how much of the Halal market potential have been realized by each of these Bovine meat industry leaders. We calculate Equation 4 with the idea to see the ratio of Bovine meat exports from major exporters to Halal market as percentage of total Bovine meat imports by the Halal market. Results are depicted in Figure 7.

Major realizations of the growing Halal Bovine meat market are observed by Brazil and India. Brazil starts to realize the Halal market demand from 2000. In 2002, Brazil supplies 23 percent of total Bovine meat demand by the Halal market. The ratio increases over time and reach 50 percent in 2006. However, their realization ratio drops after 2006, and continues supply around 30 percent of total Bovine meat demand by the Halal market. India used to supply 11 percent of total Bovine meat demand by the Halal market in 1990, and the ratio gradually increases over time. The growth of Indian Bovine meat supply to the Halal market was even faster after 1998, and by 2008, they realized more than 40 percent of total

Bovine meat demand by the Halal market. Clearly, Brazil and India are on the way to successfully grab the opportunity created by the emerging Halal market of Bovine meat.

Figure 7: Realization of Halal market potential by the major exporters of Bovine meat



Source: Authors' calculation

Among others, Australia supply about 5 to 10 percent of total Bovine meat demand by the Halal market from 1990 till recent years. France and Germany supplied about 10 to 15 percent of total Bovine meat demand by the Halal market from 1990 to 1997, which dropped to below 2 percent afterward. Irish supply of bovine meat to the Halal market rose to about 15 to 30 percent of total demand during 1994 to 2000, however, they failed to maintain the pace and the ration dropped to below 2 percent afterward. Hence, apart from India and Brazil, other prime bovine meat exporters failed to take the opportunity of high bovine meat market growth in the Muslim dominated countries. Even being the highest exporter of bovine meat, Australia either missed the journey or overlooked it.

5. Barriers in Halal market and possible way out for Australia

From the above analysis, it is observed that a substantial growth of the key Halal market for bovine meat starts from 2001. India and Brazil successfully grab a major portion of this emerging market, while other major exporters fail to take the opportunity or even struggle in some cases (Nakyinsigea, Mana and Sazilic, 2012). The barrier to the market is the Halal standard which is defined by the religion. In Islam, Halal standard is specified with particular restrictions at different stage of meat production and processing. A number of meat exporters find difficulties to meet that standard. India has the geographical advantage of being in Asia where a major portion of Halal market exists. Brazil, in spite of having geographical disadvantage, working closely with the Muslim dominated countries to maintain the Halal standard.

Australia could have similar advantage of working closely with some countries of the major Halal market, for example, Indonesia and Malaysia, who are already considered among important East Asian trade partner for Australia. Both Indonesia and Malaysia are emphasizing on establishing international Halal

hub, either could be an opportunity for setting up a Halal meat processing zone. Besides, Malaysia has taken numerous initiatives to develop an achievable Halal standard (Lever and Miele, 2012). Their advancement in developing is Halal standard is accepted by other OIC (Organization of Islamic Council) members (Rahmana *et al.* 2013).

Halal Development Corporation (HDC) and Department of Islamic Development Malaysia (JAKIM) have been launched in 2006 to support the Halal industry framework. A number of institutions such as Halal Product Research Centre (HPRI), Halal Industry research Centre, Institutes of Islamic Understanding of Malaysia (IKIM) are working to develop Halal knowledge nationally and internationally (Azman & Tajul, 2012). According to the Ministry of International Trade and Industry (MITI), 20 Halal parks have been established in Malaysia to facilitate the Halal industry operation. This could be an opportunity for Australia to take collaborative effort with Malaysia in producing Halal bovine meat and exporting to the Halal market. Othman *et. al.* (2009) suggests for potential international supply chain in Halal meat and meat-based market with Malaysia being involved the high-end processing accomplishments.

6. Conclusion

Halal market is an emerging market for food exporters. This happens due to two reasons, firstly middle class emerges in Muslim countries with higher purchasing power, and second, sense about Halal food becomes stronger among muslimpeople with their growing buying power. Among the Halal food commodities, meat contains an important place. Hence, growth in Halal meat demand also increased in recent years.

Only few global meat producing countries like Brazil and India have taken opportunity of the emerging Halal meat market. Leading meat producers like Australia, USA, Germany are far behind from substantially penetrating Halal meat market. Collaboration with countries like Malaysia, who have advanced in standerdizing Halal criteria, would enable Australia to grab a major portion of protion Halal meat market on future.

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Appendix

Appendix Table 1: Realization of Halal Market Potential by Major Bovine Meat Exporter

Year	Argentina	Australia	Brazil	France	Germany	India	Ireland	USA	Total
1990	1.659%	7.153%	0.52%	10.69%	13.56%	11.11%	8.08%	11.03%	63.801%
1991	0.309%	4.283%	0.15%	13.26%	19.50%	15.63%	10.74%	9.18%	73.048%
1992	0.238%	4.103%	0.18%	12.96%	14.79%	15.40%	10.72%	6.75%	65.128%
1993	0.141%	8.042%	0.14%	13.62%	11.24%	25.69%	6.77%	3.13%	68.770%
1994	0.089%	5.663%	0.15%	15.85%	12.97%	16.04%	16.26%	2.75%	69.784%
1995	0.031%	4.482%	0.06%	14.92%	14.39%	14.78%	12.70%	1.91%	63.276%
1996	0.064%	8.739%	0.36%	10.97%	8.20%	18.28%	17.25%	2.49%	66.339%
1997	2.926%	7.592%	0.02%	11.98%	9.00%	20.40%	13.89%	1.52%	67.327%

1998	1.970%	9.136%	3.01%	2.47%	2.58%	15.02%	31.64%	2.64%	68.460%
1999	0.160%	7.814%	3.39%	1.01%	3.45%	21.19%	32.68%	2.35%	72.037%
2000	1.039%	7.080%	3.21%	1.22%	3.00%	29.24%	28.72%	2.32%	75.843%
2001	0.914%	10.436%	23.60%	4.53%	0.97%	36.08%	2.78%	3.23%	82.551%
2002	7.233%	8.580%	30.12%	0.97%	0.15%	32.82%	0.07%	2.52%	82.461%
2003	6.476%	7.046%	38.28%	0.11%	0.65%	19.72%	5.20%	5.56%	83.033%
2004	8.920%	4.715%	40.17%	0.70%	2.83%	23.27%	4.95%	0.67%	86.230%
2005	5.897%	4.836%	46.16%	0.13%	2.46%	23.78%	2.35%	1.39%	87.001%
2006	3.106%	4.099%	50.26%	0.13%	0.95%	26.66%	1.13%	1.15%	87.473%
2007	2.121%	7.877%	44.20%	0.15%	0.20%	31.15%	0.19%	1.86%	87.749%
2008	1.794%	9.031%	30.41%	0.30%	0.26%	41.71%	0.07%	1.93%	85.522%
2009	3.449%	11.910%	32.23%	0.35%	0.18%	40.26%	0.00%	0.70%	89.074%
2010	0.550%	9.035%	35.43%	0.69%	2.39%	26.45%	0.39%	1.84%	76.778%
2011	0.779%	8.452%	28.34%	3.15%	3.35%	27.61%	0.17%	2.39%	74.233%
2012	0.159%	9.442%	32.95%	0.52%	0.04%	42.96%	0.03%	3.49%	89.583%

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