Diversification of Wood Product Market by Increasing Market Shares in South Korea

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Abstract

The wood product industry in Canada has been one of the most important economic driver. The global financial crisis in 2009 considerably affected the global markets; the US housing market crashed and the demand for wood products dramatically decreased. As a result, the forest industry in Canada, especially in British Columbia, experienced a catastrophic failure; the sawmills had to be shut down and thousands of workers lost their jobs, because most of the forest companies in Canada relied on a single market, the US.

In order to recover from the depression and to reduce the risk of being reliant on the US market, the Canadian wood industry started the market diversification. Currently, the largest importer of BC wood product is China, followed by the US. However, the export trend shows that the Canadian wood product industry is still focusing on these predominant markets and missing valuable opportunities for diversification in the other markets.

To reduce the risk of being dependant on a few large markets, it is important to identify the new or existing markets with high potential for growth in wood product demand and possibilities for higher profit return. The wood product market in South Korea is showing one of the fastest growths with an increasing demand for supply. There are many opportunities for the Canadian forest industry to expand and increase the market shares in South Korea such as wood housing market. In addition, the wood product industry in South Korea is demanding more wood product supply than ever. Hence, Canada should focus on further market diversification through penetrating and expanding into South Korean wood product market.

Keywords: South Korea, Market diversification, BC wood product industry, South Korean wood product industry, Softwood lumber

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1. Introduction

In Canada, the forest industry has been a very important part of the economy. With the abundant amount of natural resources, Canada has been able to export these resources to global markets for many past years. For the wood product industry, the main consumer have been United States' market and until the recession in 2008, the global financial crisis. Kerri Brkich (2010) from chartered accountant of British Columbia stated that the total export in forest sector declined by 24% and displaced thousands of workers in the industry. He describes "in 2009, BC's forest products sector, which accounts for one third of BC's exports, took its worst battering in many years". The damage on the wood product industry in Canada was considerable and the industry has to find a new way of operation. Canada started the market diversification in order to increase the export volume to other countries including China, Japan, and South Korea.

The relationship between the Asian markets and the Canadian lumber industry has been more than 40 years and the Asian wood markets started to show strong growth in recent years; the export volume of BC lumber to the Asian market exceeded the volume exported to US market in recent years (Counil of Forest Industries, 2013). Among many Asian countries, South Korea is one of the 6 largest consumers of BC lumber products and the demand is increasing rapidly (Wahl & Poon, 2012). Referring to Table 1, Canada exported 61.5% of wood product to the US while exporting 22.8% to the three largest Asian importers: China, Japan, and South Korea. Specifically, British Columbia exported 38% of wood products to US while exporting 47.3% to the three countries.

	United States	China	Japan	South Korea	Other
Canada	61.5%	15.5%	5.3%	2%	15.6%
British Colombia	38%	31.9%	11.7%	3.7%	14.7%

Table 1: Export of wood product from Canada and BC to other countries in 2011

(Natural Resources Canada, 2013)

The volume of export to the South Korean market is relatively smaller than the export volumes to other markets such as China; however, the South Korean market is a still valuable consumer to the Canadian wood industry. This particular market allows the BC forest industry to further diversify the target markets, as well as reducing the risk of being relying on dominant market.

2. Global Market Overview

a. World Economic Trend

The global economy is recovering from the great recession. The global gross domestic product (GDP) is expected to grow in the near future. According to International Monetary Fund (IMF), it is suggested that "global growth is projected to increase during 2013, as the factors underlying soft global activity are expected to subside" (International Monetary Fund, 2013). The global economy is not growing as fast as pre-recession; however, it shows a clear sign of recovery. According to IMF, the world GDP growth was 3.9% in 2011 and 3.2 in 2012, but the projection in 3.5% in 2013 and 4.1% in 2014.

As shown in Figure 1, when GDP growth of advanced economies indicated near zero at the end of the first quarter of 2012, emerging and developing economies showed the opposite - an increase in GDP growth. The interesting point of view on the global economic trend is the

high recovery rate of the advanced economies from the first quarter of 2012. However, the growth rate of the emerging and developing economies is expected to be higher in 2013.

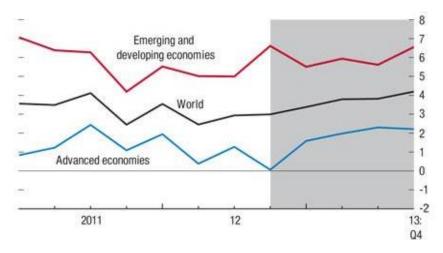


Figure 1: Global GDP Growth

(International Monetary Fund, 2013)

IMF suggests that there are few risks for the future GDP growth due to several economic issues; but "against this backdrop, the projections in this *WEO Update* imply that global growth will strengthen gradually through 2013, averaging 3.5 percent on an annual basis, a moderate uptick from 3.2 percent in 2012, but 0.1 percentage point lower than projected in the October 2012 WEO" (International Monetary Fund, 2013). The economic growth will be slowed down by only a small margin and economies will continue their recovery. Referring to Figure 2, another important trend in the GDP growth is that Asian countries are growing at the fastest rate, showing higher percentage of GDP investment than the average of emerging and developing economies, followed by Eastern Europe and the Commonwealth of Independent States (CIS) (Wahl, A et al. 2012).

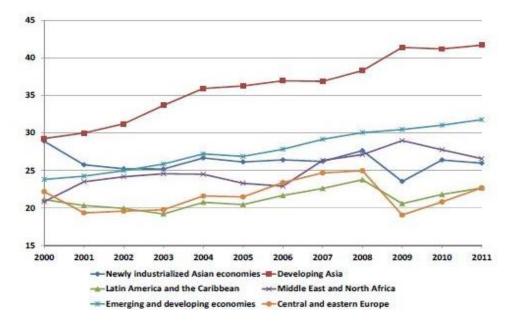


Figure 2: Investment - % of GDP

(International Monetary Fund, 2013)

From the IMF's World Economic Outlook Database made available on October 2012, South Korea and Canada were categorized as advanced economies, and their GDP growth was estimated for the near future. Referring to Table 1, GDP of Canada is expected to slightly grow in 2013 by about 5%, while South Korea is expected to grow significantly by about 31%.

Year	2010	2011	2012	2013
Canada	3.2	2.4	1.9	2.0
South Korea	6.3	3.6	2.74	3.6

Table 2: Real GDP of Canada and South Korea

(International Monetary Fund, 2013) & (International Monetary Fund, 2012)

The updated projections for the near future in "World Economic Outlook" (International Monetary Fund, 2012), shows a slight decrease in Canada and South Korea. Real GDP projection of South Korea was estimated to be 3.6 in 2013 and 4.0 in 2017, which is much higher than the average of the real GDP projection for advanced economies of 1.5 in

2013 and 2.6 in 2017. South Korea is a strong market with high expected growth and possess high potential for increase in both market size and volume; it is an attractive market for global competitors, including Canada.

b. Lumber Market Overview

Since the global financial crisis, the global economy has been slowly recovering from the recession. Wood product demand lowered significantly during this period, but recent trend shows definite increase in demand. However, the debt crisis from Euro zone limited the growth of wood product demand. FPInnovation states that "the recovery in global wood product demand continued in 2011, but it was affected by the Euro zone's sovereign debt crisis" (Wahl & Poon, 2012). Furthermore, from the effect of the crisis, the demand of major export markets for Canada, US and Asian decreased.

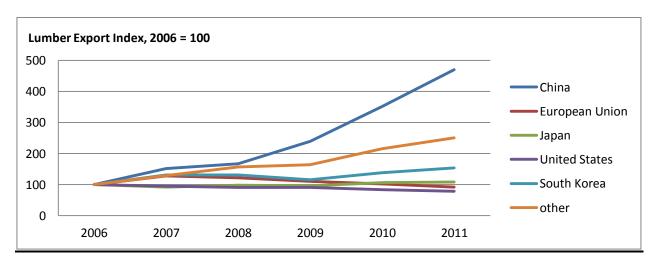


Figure 3: Export of Canadian wood product since 2006

(Natural Resources Canada, 2013)

Figure 3 represents the export trend of Canadian lumber to global market between 2006 and 2011. While the export volume of the US, Japan, and the European Union decreased substantially, the export volume to other markets increased: China and South Korea. This shift

of the exportation of softwood lumber suggests that the most valuable market with an opportunity for diversification is not the traditional dominant markets, but other markets which are mainly China and South Korea.

By studying the global economic trend, it is clear that the emerging and developing economies have higher expected growth, but the advanced economies also shows recovery from the recession. Specifically, South Korea shows the one of the highest growth among the advanced economies with a high increase in Canadian wood products imports.

3. Position of Canada in Global Forest Market

a. Target Markets

The major target markets for the BC wood product export include US, China, Japan, South Korea, and European Union. The US market has been a dominant consumer of Canadian forest products; however, Germain (2012) of Statistics Canada suggested that "the proportion of exports shipped to the United States has also decreased in recent years; 63.1% of lumber exports went to the U.S. market in 2009, compared with more than 80.0% in 2004". This drop in the export volume reflects the low demand of wood products in the US market and increased in demand of other countries.

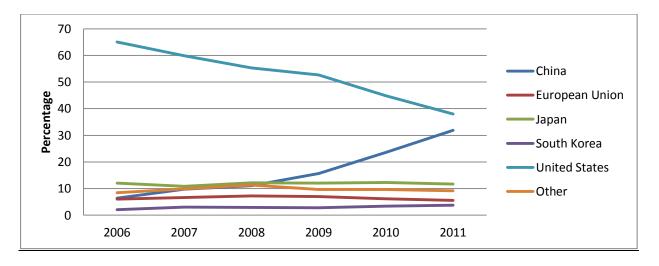


Figure 4: BC forest product export sales from 2006 to 2011

(Natural Resources Canada, 2013)

Referring to Figure 4, the proportion of BC forest product sales from exporting to US dramatically decreased from 2006 to 2011, while China gained significant proportion of the overall sales. The changes in the rest of markets are relatively small compare to these two large markets, US and China. BC wood industry has been continuing to increase the exports volumes since the drop during the recession. In 2011, BC exported 22.8 million m³ of soft wood lumber, which was an increase of 9% from 2010. An interesting fact about this increase is that volume exported to offshore markets accounted for more than the volume shipped to the US (Wahl & Poon, 2012). The market diversification has started and more and more volume of wood products are exported to other markets rather than the US market.

b. Lumber Export and Related Issues

The US hs been one of the most important markets for the BC wood industry. The demand volume was the highest among other global markets for several years and "consumption of softwood lumber was 77.7 million m³ in 2011, up by 4.8% from the previous year" (Wahl & Poon, 2012). This recovering trend of the US market is attractive; however,

from the past few years of experience, the BC wood industry realized that heavy reliance on the US dominant market is an immense risk for the industry to sustain its operations. The US housing market crash in 2007 depressed the housing market in US and the demand for wood products decreased; it resulted in catastrophic failure of the wood product industry in BC. During 2004 and 2009, the number of jobs in the BC lumber industry declined by about 41% which was the highest among other provinces, while about 20% of the sawmills closed across Canada (Germain, 2012). The BC wood industry had to start market diversification to find new market, instead of waiting for US market demand to recover. In addition, as of 2012, the demand for wood products in the US was still low (compared to pre-recession) demand due to the unsold homes left in the market (Wahl & Poon, 2012). Therefore, considering the proportion of BC wood product export to the US market as compare to other, the industry still needs to further diversify and expand its market bases to reduce the risk of dependency on predominant markets.

According the Foreign Affairs and International Trade Canada, the US government has been frequently regulating the imports from Canada by placing restrictions and duties. In 2006, the Canada-US softwood Lumber agreement returned over \$ 5 billion in duty deposits to Canada and it was a very vital opportunity for Canada to increase the export volume of lumber. However, this lumber trade agreement was only extended by 3 years in 2012 and will be expired by October, 2015 (Foreign Affairs and International Trade Canada, 2013). This agreement must be extended or renewed to maintain and increase the exporting volume and gain most profit from the US lumber market. Otherwise, Canadian lumber will not have cost competitive in the US market.

On the other hand, the drop of demand in the US housing market revealed the different market behaviours in other part of the globe. The wood product demand in the Asian market has been recovering much faster than more developed nations including the US and Europe, which is consistent with the GDP growth trend introduced previously. In detail, a few markets such as China, South Korea, and Taiwas, have been identified with a higher increase of lumber demand than others: China, Korea, and Taiwan (Wahl & Poon, 2012). These few markets present potential opportunities to increase the export volume of BC wood product.

In addition, South Korea has established the free trade agreements (FTA) with the EU and the US. According to US-Korea FTA, the tariffs on the US lumber imports will be removed (Office of the United Sates Trade Representative, 2013) and US will have a competitive advantage over Canada. Currently, Korea and Canada do not have a FTA on trade of lumber, which is a drawback for the Canadian wood product industry. The FTA between US and South Korea will allow the South Korean lumber consumers to buy the US lumber at more competitive price than Canadian lumber with tariffs. Establishing lumber FTA between Canada and Korea should be considered as the first step towards diversifying the market in South Korea. As a result of the enacting FTA, Canada can make itself more of a competitor in the South Korean lumber market. In a few years, if there is no change to the FTA with South Korea and to the soft wood lumber agreement with the US, the biggest customer will turn into a competitor.

4. Korean Lumber Market

a. Korean Economy and Lumber Market

As previously examined, the economy of South Korea is strong as the world economy is recovering from the recession. The GDP growth is much higher than the average of advanced economies and expected to grow more in the future. The demand for wood products in South Korea is smaller than other dominant markets such as US or China; however, the South Korean market "continues to grow in both volume and sophistication in the product it imports" (Counil of Forest Industries, 2013). There is a clear sign of increase in the market size which allows the BC wood industry to increase the export volume to the South Korean forest market. The quality of wood demanded by this market is also changing; South Korea started to buy more of higher quality lumber, which is more profitable for the exporters including Canada. For comparison, the Chinese market demand is largely on the low grade lumber; the volume of import is much larger than the South Korean market, but the profit per volume sold is lower.

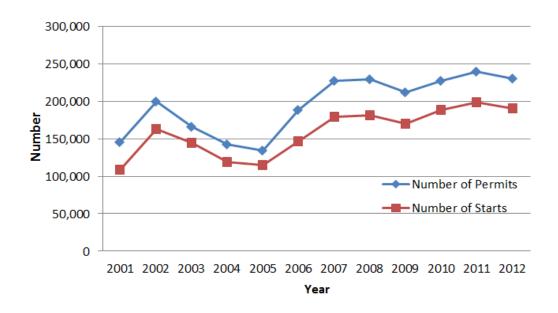


Figure 5: Number of Building Construction Permits and Starts in South Korea

(The Ministry of Land, Transport and Maritime Affairs, 2013)

To observe an aspect of wood product market in south Korea, the change in numbers of wood building starts over last few years sould be studied. According to FPInnovation, "BC softwood lumber is primarily destined for the growing wood frame construction market" (Forestry Innovation Investment, 2012). In addition, the South Korean wood industry heavily relies on imports which account for over 80 percent of its consumption (Lee & Oh, 2012). Therefore, by observing the wood building starts trend in South Korea, a partial trend of the wood product market can be analyized. The Figure 3 illustrates the total number of construction starts for building and the number of permits issued by the government between 2001 and 2012. The construction of building starts has been slowing down since 2011. Also, the gap between the number of starts and the number of issued permits has been about 50,000 since 2006. This trend suggests that there are less demand for new buildings, as well as the investment for starting new constructions. The drop in 2009 reflects the effect of the global financial crisis; the recession depressed the investment and construction of new buildings.

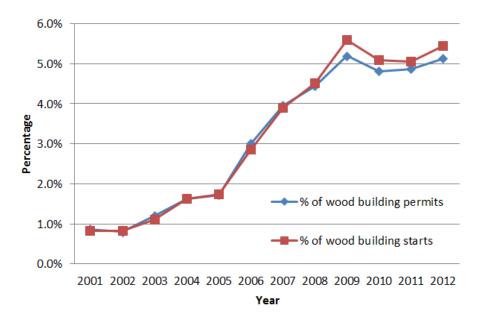


Figure 6: Percentages of Wood Building Construction Permits and Starts in South Korean

(The Ministry of Land, Transport and Maritime Affairs, 2013)

On the other hand, the wood building construction starts shows a very different trend over the same period of time. Figure 4 represents the percentages of the wood building permits and starts between 2001 and 2012. The both percentages have been rapidly increasing since 2002. Again, the drop of the wood housing market in 2009 reflects the effect of the global financial crisis. However, between 2011 and 2012, the wood building starts showed fast recovery from the recession, while the number of permits and number of starts for the overall building construction decreased. The overall growth of the demand for wood product in South Korea was generated by the "strong housing and real estate market, including the growing use of lumber in structural applications and in outdoor applications" (Wahl, Poon, & Toosi, 2012). Hence, the growing wood housing market in South Korea is an vaild opportunity for the BC lumber industry to target and expand. In addition, the difference between the percentages of the wood building permits and starts is much smaller than the difference between numbers of the overall construction permits and starts. This narrower gap between two graphs, permits and

starts, suggests that the wood building construction is more attractive for investments than other types of building constructions such as concert and still. Again, the wood construction market in Korea is getting larger and the BC wood industry can focus on exporting specific types of wood products: dimensional lumber and engineered wood products.

b. Lumber Demand

South Korea is a small country with limited amount of natural resources and the demand of wood cannot be met by the supply of domestic industry. According to Forestry Innovation Investment (FII), in South Korean, "over 90 percent of wood products consumed are imported" and "the small size of the country limits the domestic wood supply, even when Korea's forests mature" (Forestry Innovation Investment, 2012). South Korean market heavily depends on the import supply and the BC wood industry is one of the largest exporters to this market. Because of this high dependency, the price of forest product in South Korea changes according to the supply condition of global competitors. The main products exported to South Korea are "structural products, exterior envelope products, and value-added products" (Forestry Innovation Investment, 2012).

On the other hand, according to the statistics from Korea Forest Service (KFS), South Korea imported 3,632,853m3 of wood product for the domestic forest product industry from global suppliers in 2011. The import volume represented 51.7% of entire supply of 7,030,062 m3 (Korea Forest Service, 2012)¹. The demand of the South Korean forest industry cannot be supplied with its domestic lumber. Furthermore, South Korea can only grow and harvest

¹ This report was translated by author.

limited amount of wood due to the size of land and government regulations to protect the forest; therefore, South Korea must rely on imported wood products.

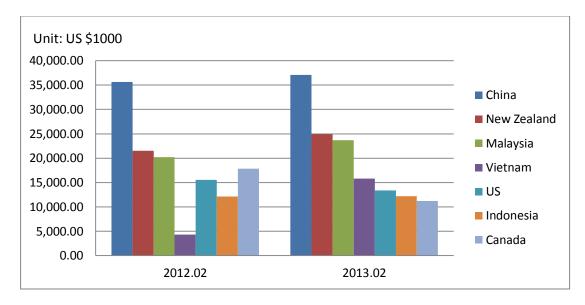


Figure 7: South Korea Wood Products Imports

(Statistics of Forest Product's Trade, 2013)

The Figure 7, illustrates the imports of wood products in South Korea. In 2013, the value of imports from China, New Zealand, Malaysia, and US increased, while Vietnam, Indonesian, and Canada decreased. The total demand in the South Korean market increased, but Canada exported less. In other words, the South Korean market is growing so Canada should try to export more wood product to this growing market. In addition, Lee Seohyun and Oh Youngsook (2012), states that "although US wood and Canadian wood are both considered high quality logs in Korea, price competitiveness of Canadian logs attracted the Korean consumers". The Canadian wood industry has a price advantage over the US, but fails to achieve larger market share in South Korea.

	Consumption	Domestic Production	Total Exports	Total Imports	Canada Exports	BC Exports	BC Share in Korea Imports	BC Share in Korea Consumption
	m ³	m ³	m ³	m ³	m ³	m ³	%	%
Softwood Lumber	4,288,301	2,508,408	8,728	1,788,621	322,384	295,655	16.5%	6.9%
Plywood	1,715,688	422,188	6,500	1,300,000	3,978	3,975	0.3%	0.2%
OSB	56,675	0	0	56,675	40,260	33,756	59.6%	59.6%
MDF & Fibreboard	2,082,083	2,021,736	55,615	115,962	0	0	0.0%	0.0%
Particleboard	1,791,596	1,077,264	1,454	715,786	193	0	0.0%	0.0%
Total	9,934,343	6,029,597	72,297	3,977,044	366,815	333,386	8.4%	3.4%

Note: 2011 domestic production volumes are FPInnovations estimates

Table 3: Korea Wood Product Summary 2011

(Wahl, Poon, & Toosi, 2012)

In detail, referring to Table 3, South Korea imports mainly 3 types of wood products from the Canadian forest industry (mostly from BC): softwood lumber, plywood, and Oriented strand board (OSB). BC share in Korea import and consumption is very high for OSB. The volume of OSB import is only about 10% of volume import of softwood lumber, but BC dominates the South Korean OSB market. The BC share of softwood lumber import in South Korea is relatively smaller, about 16%. However, the plywood import share was very low and other products were not imported from Canada.

c. Forest Industry in South Korea

KFS (2012) stated that the total consumption of the wood product industry in South Korea was decreased by 9,445m³ (0.13%) from 2010 to 2011. Also, the total sales of wood products was decreased by 92.8 billion won (4.06%), which is about 84.3 million in Canadian dollars. Additionally, the total number of employee decreased by 1,289 (15.5%). In detail, even though the total volume, sales, and unit price decreased during 2009 to 2010, the demands from wood-based panels and chip manufacturers for raw materials increased; production volume of chip also increased. As stated in the global market overview, the average of GDP growth for advanced economy decreased during the same period of time and it is reflected on the wood product demand in South Korea.

Interesting trend of demand for wood product is that as the economy changed, the market demand has shifted to wood-based panels and chips. This data shows that by strategically focusing on supplying more wood-based panels and chips, the BC wood industry can gain more market shares in South Korea faster. Currently, South Korea is only importing OSB in larger volume from Canada (Wahl, Poon, & Toosi, 2012). The BC forest industry has an opportunity to diversify the exporting products such as particle boards.

Furthermore, according to the report from KFS (2012), the import volume of soft wood lumber was increased in 2010 but decreased in 2011. The analysis on this trend was that the logging of Korean forest increased because supply of lumber from New Zealand went to China and India. As a result, the rate of utilization of wood from the domestic supply over import supply was increased by 7.9% from 2009 to 2011. KFS (2012) suggests that "the consumption of South Korean wood increased because the majority of foreign suppliers limited their export volume going into South Korean market and South Korea had to consume the domestic supply". This situation is a valid opportunity for BC wood industry to penetrate into the South Korean wood product manufacturers in order to increase the market shares.

The Korean manufacturers are experiencing shortage of supply simply because the global competitors are mainly focusing on the larger markets, China and India. However, it is important to recall that BC wood industry should not allocate their product to dominant markets, in order to diversify and reduce the risk of reliance on them. Also, establishing reliability of supplying adequate volume of lumber to South Korean market can help make

the market into a cash cow, since other global suppliers are constantly changing their primary target market and do not provide steady supply to South Korea as it demands relatively smaller volume.

Moreover, KFS report (2012) presents the surveys conducted from the wood industry manufacturers stating that "South Korean manufacturers those who only uses domestic lumbers had complained that the supply of lumber must be increased, because other wood product producers started to consume domestic wood instead of import wood". In other words, the limited supply of import wood is causing South Korean manufacturers to consume more domestic wood which should had been usually used by specific wood product producer. The competition of getting enough supply for manufacturers could cause the increase in price and provide an lower barriers to entry (or expand) for the BC wood suppliers.

d. Opportunities in Korean Wood Industries

To gain the competitive advantages in the South Korean market, it is important to understand the market demands and what is needed to increase the demands in Korean forestry product industry. The survey conducted by KFS (2012) illustrates some considerable facts. The survey from the various wood product manufacturers revealed that 71.3% of the firms said they would not invest in their production line, even if they have extra budget in-hand or able to get extra credits from the government. 17% of the firms stated that they would invest and grow the size of their businesses by utilizing domestic wood supply, while 11.7% stated that they would invest and grow their firms and utilize import wood. This result indicates that the majority of the wood products manufactures are not planning expand their operation even when they have budget. When this trend is

compared to the previously examined market growth expectation, the BC forest industry can gain substantial share in the South Korean wood product market by focusing on the 11.7% of potential buyer with more aggressive and direct marketing. Thus, the BC wood industry will gain more advantages by establishing larger and stronger supply chain and market base to compete with other countries. Also, FTA between Canada and Korea must be started to gain a price competitiveness in South Korean market since the US lumber imports has no tariff; Chile also has FTA with South Korea (Lee & Oh, 2012).

Additionally, the survey also stated that 38.9% of the firms answered that the firms need credit from the government, KFS. It suggests that the Korean forest industry needs more investment to stabilize its operations, since the majority of firms are not planning to expand. The limited volume of wood product supply is increasing the price of raw material; therefore, the firms need more budget to buy supplies. As previously mentioned, the BC wood industry should focus on supplying the demanded wood products in adequate volume to South Korea to successfully achieve the market competitiveness before other countries establish their supply chains.

Another perspective on this trend in the South Korean wood product industry is that the industry is suffering from a financial insufficiency and the BC wood industry can gain substantial market shares through acquisition of these firms. As a result, BC wood industry will be able to directly leverage the core competencies into these acquired firms in South Korea and sell the products with more efficient supply chain and cheaper labours to process the wood products, returning higher profit to the BC wood industry.

Moreover, among the various types of wood product companies in South Korea, wood preservation companies showed a significant difference in the answer to the question about wiliness to invest and expand their operation. 80% of the wood preservation firms wanted to invest and expand their operation, and 20% showed willingness to buy import wood for their raw material. BC industry has ability to supply quality wood to South Korean wood preservation producers and may take this opportunity for diversifying their market base within the South Korean market. In fact, The quality of pressure treating is often considered to be poor (Forestry Innovation Investment, 2012). The BC wood industry can work with the South Korean forest industry to improve the quality of pressure treatment and build an long-term business relationship.

15.6%, of answers were that they want government to help the industry to increase the volume of supply. This result is consistent with other statistics presented above, confirming that the South Korean wood product industry is experiencing a shortage of wood supply. By establishing supply chain in South Korea, it can vastly benefit the BC forest industry to gain more market shares. Furthermore, by contracting with South Korean forest industry to supply steady amount of wood products will allow the BC wood industry to gain a strong business relationship, which is a competitive advantage over other competing countries, 7.6%, of the answers was that Korean forest industry wants KFS to provide more wood product processing technologies. Some of the firms in South Korea showed their weakness in the technology and they demand technical supports from the government to increase their efficiency and profitability. The BC wood industry is considered as one of the most technologically advanced in the world. Again, by providing education or training to

the South Korean industry, the BC wood industry will gain better reputations and a positive business relationship, which can lead more demand for wood supply from BC.

e. Future of South Korean Market

With high expected growth in demand for wood products, there are numbers of possibilities for the BC wood industry to increase the market shares in the South Korean market.

As stated previously, the wood building market in South Korea is growing very fast.

Therefore, the demand for building materials such as structural lumber, panels based product and engineered wood products will continue to increase in near future.

FPInnovation suggests that "the growth in wood-frame duplexes and quadruplexes is likely to promote prefabrication of wall panels, floors and roof trusses" (Wahl, Poon, & Toosi, Business Analysis, 2012) and these products can be exported from BC wood industry. Also, the BC wood industry can supply high quality raw materials, logs, to the wood industry in South Korea.

In addition, the South Korean marketing is demanding more of Do-it-Yourself (DYI) furniture products (Lee & Oh, 2012). This market is growing fast through home-shopping and internet channels. The wood product from BC forest industry is considered to be high quality, which can be used for DYI projects. By exporting sufficient amount of high quality lumber to South Korean DYI market, the BC wood industry can gain higher profit and diversify the export products.

Furthermore, as South Korea became one of the advanced economies, the public started to concern about environmental and health issues. FII stated that "environmental concerns continue to influence Korean consumers as the government works to address carbon footprint and 'sick house' syndrome form non-wood construction methods which dominate city development" (Forestry Innovation Investment, 2012). This trend will also help the demand for wood products to increase. The constructional wood products are the main products of the BC wood industry; hence, BC has a good chance to increase the market share by increasing export volume to South Korea. Additionally, Canada has been working with the forest industry to establish and develop global markets by supporting many organizations such as Canada Wood. Canada Wood has a branch in South Korea and it has been working to increase the awareness of Canadian wood product (Canada Wood, 2012).

Another future possibility for the BC wood industry to gain a core competency is with the exportation of biomass or bio-fuel to South Korea. As the price of energy and environmental concerns increases, finding and processing alternative green energy sources have become a key factor for economical stability and growth of industry in most of the countries. South Korea has very high energy prices; it has been mostly relying on imported resources. These high prices will allow the bio-fuel manufacturing to be more cost competitive. Canada, especially BC, has abundant natural resources of bio-fuel and also has ability to process these resources into bio-fuel. In the near future, it will make more economical sense to produce and export bio-fuel than exporting solid wood product to the countries with high energy price such as South Korea.

In addition, the charcoal manufacturing in South Korea has been one of niche wood industries. There are demands for charcoal in many different areas of industries in South

Korea. It is used for agricultural purposes, cooking, air-filtering, cosmetics, and much more. What the BC industry should focus on is the by-product of this charcoal manufacturing process. The most of manufacturing facilities in South Korea still use the traditional method of cooking logs into charcoal and it produces a by-product, pyro-ligneous liquor. Pyro-ligneous liquor is used for many purposes in difference industries such as medicine and agriculture; however, there is more opportunity for this by-product to be fully utilized. The process is essentially the same as making pyrolysis oil which is a bio-fuel and this bio-fuel is an alternative resource that South Korea needs. Investment and development of a process to incorporate the bio-fuel production in the charcoal manufacturing will allow the BC wood industry to fully utilize the raw materials and return maximum profits within South Korea.

5. Conclusion

The Canadian wood product industry suffered from the recession and the crash of US housing market. Thus, the industry started the global market diversification in order to recover the loss from the depression and to reduce the risk of being dependant on a single dominant market, the US. The diversification has been partial success, because the majority of BC wood products still exported to a few prime markets: China and the US. In order to further reduce the risk, the Canadian wood product industry must increase their export to other smaller markets with high a potential for market growth.

South Korea is one of the advanced economies, however the economic growth is higher than other advanced economies. The demand for wood product in South Korea is also growing very fast and the growth is expected to continue in near future. There are many opportunities for increasing the volume of BC wood products export in this market. The wood housing

construction starts is rapidly increasing, demanding more and more constructional lumber products. The wood product industry in South Korea is suffering from the shortage of wood supply and Canada can easily satisfy this needs with abundant natural resources and with advanced wood processing technologies. The South Korean industry is also lacking financial and technological support from the government and it is an opportunity for the Canadian wood industry to increase the market shares by acquisition of firms or building business relationships through providing trainings and educations. Additionally, there are many other potential wood product markets in South Korea including DIY markets and Bio-fuel industry.

Canada needs to diversify Asian market base. By establishing a larger market share in South Korea through the allocation of internal and external resources, the Korean market is expected to return a higher margin to BC wood industry thus reducing the risk of being heavily reliant on a few dominant countries.

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