**C I N T R A F O R**

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**An Assessment of the South Korean Market for Non- Structural Wood Products**

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**Executive Summary**

During 1997 South Korea (Korea) imported almost $300 million in primary and secondary wood products from the US, making it the third largest export market for US wood producers. While almost 41% of the value of wood product exports was derived from unprocessed logs, this number is down 85% since 1983. The standard of living for most South Koreans has improved phenomenally since the end of the Korean War, and expenditures on housing and secondary processed wood products imported from the US have increased. The value of wood frame homes and secondary wood products from the US increased 203% from $14.5 million in 1990 to $43.8 million in 1997. As a result, exports of secondary processed products to Korea, as a share of total solid wood exports, increased from 3.9% in 1990 to 14.6% in 1997.

While access to the Korean market continues to improve and demand for wood products appears to increase, US exporters still face many challenges. While some barriers are specific to wood products (i.e., restrictive and inadequate building codes), others are more generic (i.e., complicated distribution system, cultural differences, a complex business permitting system). The challenge confronting US exporters is to develop a better understanding of the Korean residential construction industry; viable end-markets for US wood producers; the extent of repair and remodel activity in residential and commercial structures;

Korean business practices; the competitive position of US wood products in Korea; consumer preferences; and marketing strategies that may provide US wooden building materials with a competitive advantage in this market.

This report is based on information gathered during May 1998 through interviews of Korean industry analysts, importers and distributors, architects, construction companies, editors of trade publications, and manufacturers. US manufacturers were also interviewed in order to gather information about specific obstacles that US companies face and strategies they may employ. The result is a compilation of supply and demand trends, import statistics, primary competitors, competitive factors, information about the distribution system for wood materials within Korea, and analysis of risks involved with exporting to Korea. Finally, recommendations for companies either currently selling products to Korea or for those interested in entering the market are provided.

## The Korean Housing Market: Viable Markets and Barriers

The most promising sector for solid wood interior products appears to be the single-family and low-rise multi-family residential construction sector. Single-family and low-rise multi-family homes comprise approximately 20% of the housing units built in Korea in 1997. While the majority of consumers live in high-rise concrete apartments, more single-family homeowners are purchasing higher-priced, solid wood products. Among single family homeowners product appearance and quality are more important than price. Wood frame homes are becoming increasingly popular among upper income consumers. The number of homes built was rapidly increasing until the Korean economy took a downturn in late 1997. The number of western-style wooden housing starts increased from 97 units in 1994, to approximately 800 units in 1996, and an estimated 1,100 homes in 1997. Many importer/wholesalers and industry analysts in Korea expected the number of wood frame homes in 1998 to have reached 1,500 if Korea had not entered a recession.

US manufacturers supply approximately 60% of the 2x4 wood frame construction sector. According to interviews of wood frame construction companies, consumers generally use interior wood products from the same country that produced their home. Therefore, while no statistics exist, it is estimated that US manufacturers maintain approximately 60% of the interior wood products market within the 2x4 wood frame home sector as well. US interior wood product manufacturers are significantly less competitive in the high-rise apartment sector, where solid wood and composite products manufactured by lower-cost domestic and Southeast Asian producers are popular. The Korean mortgage system requires consumers to pay approximately 80% of the home price up front, and pay the remaining loan in 5-20 years. Therefore, many consumers cannot afford to purchase expensive finishes when they initially buy their apartment.

The system of awarding contracts to supply materials to construction projects in Korea can make it very difficult for small, particularly foreign, companies to succeed. About 30 large construction firms build approximately 70% of apartments. Small companies hired by condominium associations build the remaining apartments (CERIK 1998c). Large construction companies purchase not only products, but also product installation from the same company. In high-rise apartments, approximately half of all construction work is subcontracted in this manner. In addition, the subcontractor or supplier provides financing to the construction company. The key to winning a contract may not be subcontractor ability or low price, but the ability to extend financing. If a company is too small to be able to provide financing, they may partner with a product manufacturer.

Problems may arise when subcontractors cannot purchase materials for upcoming jobs because they have not received payment from past contracts they financed. It is common for large construction companies to obtain financing from multiple companies, then pre-sell the apartment units and use the funds received from the financing for other construction projects or financial ventures. Prior to Korea’s economic crisis, many large corporations used financing from smaller suppliers to leverage other investments and business ventures. When these investments failed, many large firms declared bankruptcy and defaulted on debts, forcing many smaller companies who had provided financing into bankruptcy as well.

## Opportunities Created by the Korean Recession

While the Asian economic crisis sharply curtailed prior financial growth in Korea, it appears that the current economic crisis may have positive long-term impacts on future foreign investment and trade. President Kim Dae Jung and his cabinet launched one of the most aggressive economic restructuring campaigns in Asia. Many of the Korean government's reforms are supplementary to reforms required by the International Monetary Fund (IMF). In an effort to stimulate the domestic economy by attracting foreign capital, the Ministry of Finance and Economy (MOFE) instituted several economic reform policies that will relax real estate and foreign investment laws to attract foreign capital. First, the MOFE instituted a policy to increase the maximum allowable foreign ownership of domestic companies from 55% to 100%. The limit on government-run companies has been expanded from 25% to 30%. Second, new legislation called the "Law on Land Acquisition by Foreigners,” adopted in May 1998, allows foreign companies to purchase and develop land in Korea. Residential land development, which was strictly confined to government and public land development, is now open to both domestic and foreign private sector development and all land ownership restrictions imposed on foreigners have been removed. Fourth, administrative procedures for foreign investment in real estate are being streamlined. To facilitate land transactions of government-held debt properties, a series of asset-backed securities was issued starting in July 1998, after approval from industry experts and foreign investment banks. Fifth, the Korea Trade Investment Promotion Agency (KOTRA) was established as a one-stop office for processing and facilitating real estate transactions for foreign investors (Construction and Economy Research Institute of Korea (CERIK) 1998a). Finally, hostile mergers and acquisitions by foreign corporations of domestic firms are now allowed (Korea Trade and Investment 1998).

While the Korean economy has not been restored to pre-recession conditions, economic reform measures are causing the economy to recover at a faster rate than projected. Economic recovery is in part a result of US $58.35 billion in relief funds from the IMF, the World Bank, and the Asian Development Bank. In an effort to restructure the banking system, the MOFE also announced that unstable banks will be merged with relatively healthy banks or will be obliged to transfer their assets and liabilities to viable banks. Financial

institutions and large corporations were also required to establish cost accounting systems as a means of making their business operations more transparent (Korea Trade and Investment 1998a).

The combination of foreign financial aid and domestic restructuring in the financial sectors has resulted in tangible changes in Korea's economy. Since first quarter 1998, the Korean government converted US

$21.8 billion of outstanding foreign short-term debt to medium-term debt (AF&PA 1998b). By May 1999, the Korean stock market reached the 842 points, or 1.4 million won, the highest point in almost three years. The purchasing power of the won has also rebounded. The won-US dollar exchange rate increased from low of 1,960 won per US dollar in December 1997, to 1,184 won per US dollar in June 1999, Korea's strongest exchange rate since November 1997 (US Federal Reserve Board 1999). Market interest rates also dropped from a peak of 40% to 10-12% in July 1998. Projections for further economic recovery are also promising. The Organization for Economic Cooperation and Development (OECD) raised its growth forecast for the Korean economy from a 0.5% to 4.5%, while other official and private researchers also agreed on a 4% range of growth for Korea in 1999 (Korea Times 1999). J.P. Morgan, a US-based investment firm, forecasts 4% growth for the Korean economy for 1999, and 4.5% growth for 2000 (Korean Trade and Investment 1999).

Foreign investment has also surged. According to Korean Ministry of Commerce, Industry, and Energy analysts, foreign investment is expected to reach US $15 billion by the end of 1999 after reaching a record US $8 million in 1998 (Korea Trade and Investment 1999).

The consumer market is also starting to improve. Consumer prices increased 8.6% during first quarter 1998 compared to first quarter 1997. However, by March 1998 consumer price increases decelerated slightly due to the decline in domestic consumer demand and a gradual improvement in the stability of the won (Bank of Korea 1999). Despite a 0.05% decrease in the monthly average income per household, average urban household consumption rose 8.9% during the first three months of 1999 compared to 1998, according to the National Statistical Office. This was the first time since the onset of the economic crisis in late 1997 that urban household consumption recorded positive growth (MOFE 1999a). Imports have also increased. By the end of 1998, total imports declined almost 36% and imports of wood products declined almost 60%. During the first quarter 1999, however, imports of wood products increased from 30% to 200% (depending upon product) from year-end 1998 levels. Forecasts for housing starts predict that 460,000-500,000 will be constructed during 1999, an 80% increase from 1997. Industry analysts expect the demand for wood products from the US to follow the upward trend in the housing sector (AF&PA 1999).

Despite improvement in consumer prices and spending, the unemployment rate continues to increase. Unemployment reached 1.88 million or 8.6% by first quarter 1999, the highest since July 1982 when Korea started to record employment statistics (MOFE 1999). Analysts state that the increase is the result of the aftermath of the economic slump combined with the impacts of business restructuring (Digital Chosun 1999). Government officials expect that the unemployment rate will begin to contract following the overall strengthening of the economy starting during the second quarter 1999 (MOFE 1999a).

## Results

Korea's economy is undergoing a dramatic transition that promises to restructure the financial system, construction sector, and business environment comprehensively. Banks and chaebol, or large Korean conglomerates, are being required to make their accounting systems more transparent. Chaebol are also being forced to raise capital by divesting some of their business holdings. The government has also lifted limits on foreign investment and business partnerships. The result will likely be an open business market where consumers are given more products to choose from, and where international products will be more competitive with Korean-made products. This is an opportune time to begin educating consumers and advertising the benefits that consumers can get by using wood products. When housing was in short supply, construction companies were able to use low to moderate quality building materials and still sell units. Now that there is an oversupply of housing, consumers realize they have a choice and they expect higher quality alternatives.

An open market is likely to have significant implications for product marketing. Korean consumers are very fashion conscious and are influenced by popular trends in advertising. Consumers tend to purchase products they see on television shows, in print advertising, or endorsed by celebrities. Journalists from

major daily newspapers are also very influential in guiding consumer preferences. Therefore, newspapers can be very effective in terms of educating Korean consumers about products. After the Korean market is open, product literature, articles, and advertising should focus on the benefits that can be derived from using US products in general or a particular company's product. Advertising that highlights innovation is directly related to product success. Since individuals did not have a wide range of high-quality affordable products prior to the market restructuring, special features and benefits derived from the product should be highlighted. Since US suppliers cannot compete with many domestic and Southeast Asian producers on the basis of price, product marketing should focus on quality, durability, and design attributes.

In general, US companies can increase sales if they market their products in Korea more aggressively. The market for solid wood interior products is far larger than the US market share. For example, according to Korean respondents, US manufacturers have not aggressively marketed kitchen cabinets. In 1997, US companies supplied only 0.02% of the $118,000 imported kitchen cabinet market. On the other hand, US manufacturers have actively marketed wood frame homes through advertising and trade shows. As such, they maintain 60% of the imported wood frame housing market and an estimated 60% of the interior products used in wood frame homes. US companies can take advantage of the recent economic downturn to educate Korean consumers and builders about the benefits of using US wood products. If US companies establish brand recognition in Korea now when the economy fully recovers Korean consumers may be primed to purchase US goods.

Both Korean and US respondents agree that Europeans, and Italian manufacturers in particular, are more aggressive in their approach to the Korean market, which has translated directly into greater market share. Many trade magazine editors derive the content of the magazines from product literature and promotional articles from manufacturers. US manufacturers do not appear to be capitalizing on trade magazines as a means of advertising. The importance of architects in selling products also appears to be overlooked by US manufacturers. Architects most frequently specify materials. As high-income apartments become more prevalent, architects may be the best route to enter the apartment sector. They rely upon trade magazines, product literature, and trade shows to learn about products, yet based on interview response, US firms do not appear to be reaching this segment. According to architects interviewed, they find most information on US products by attending trade shows in the US.

Foreign companies must also invest time and resources to learn about Korean consumer preferences and product needs. For example, Korean consumers do not like do-it-yourself projects. Instead, retailers provide full service with the goods they sell, often assembling break-down furniture as part of after-sales service.

While the majority of consumers live in high-rise concrete apartments, this may not be the most viable sector for US solid wood products. It can be both complicated to understand the distribution system and to establish a contract with large companies. It can also be financially risky to try to sell materials to these firms. More viable markets include 2x4 wood frame homes, wood townhomes, non-wood single-family and low-rise multi-family homes, and the remodeling sector.

While North American interior wood products dominate the single family 2x4 wood frame home market, a limited number of individuals are capable of affording single family homes and the larger lot size that a single family home requires. The desire to own a wood frame home, however, is widespread, particularly among the younger population. According to a survey conducted by the KyungHuan Daily Newspaper and LG Advertising, many young people indicate that they prefer wooden homes in a suburban setting even if it means a long commute to their jobs (AF&PA 1999). Therefore, the market for American-made interior wood products may increase if US policy-makers and builders are able to increase the number of affordable townhomes. The current building code in Korea places height and construction restrictions on wood frame housing, which requires builders to modify their building plans to include more fire protection measures.

However, a new building code that more closely resembles US codes is currently being reviewed by the Ministry of Construction and Transportation (MOCT; AF&PA 1999a). The Korean government has already made land available in outlying areas around Seoul to encourage the development of "Satellite Cities.” Builders might look to these areas for sites for townhome developments. The benefits of making wood frame housing affordable are two-fold. By building and marketing townhomes as an affordable

alternative for wood frame homes, builders may not only reach a larger segment of the population, but since Korean consumers are heavily influenced by fashion trends and word of mouth advertising, townhomes may catch on as a popular new trend.

Another aspect to consider is product presentation. Many US companies that sell products to Korea commonly sell materials to US exporters and consolidators who supply the wood frame home market. One US company found that exporters were not packaging their products with complementary goods, therefore, only components were being supplied to the Korean market, which added one more obstacle to winning Korean customers. If a consumer wants to use US made materials they may go through the extra work required to locate, purchase, and make them fit with Korean appliances. However, most consumers select their flooring, kitchen cabinets, moulding, appliances, and other home products from retail outlets that carry all of these goods in one place.

US companies may stimulate local sales by using multiple product showrooms. Product showrooms offer a way to reach consumers, contractors and builders. Since architects specify materials used, and contractors make recommendations to customers, it is important to focus on reaching these individuals. Showrooms and trade shows allow these important customers to see products first hand. Showrooms may also help companies develop brand recognition. If consumers see products at showrooms they may be more likely to specify US products to their contractor when upgrading their homes. It may be useful for US firms to partner with Korean firms to open a showroom featuring products from the US and Korea that work together. For example, if a US kitchen cabinet manufacturer partnered with a Korean appliance and fixture supplier, customers could pair a variety of cabinet styles with appliances. A drawback of showrooms is capital investment. A stair manufacturer estimated a showroom would require approximately $80,000 in inventory for its product alone. The opportunity to realize far larger returns is great however. During 1996, the stair manufacturer sold $350,000-$400,000 without a showroom. Since product showrooms help manufacturers reach more consumers, the potential to increase sales further could be great.

Further research is also needed to understand how North American building components such as doors and windows can be used in traditional post and beam construction. This research would require a greater understanding of the structural aspects of post and beam construction and the distribution system and selection process for materials within this sector. This type of endeavor would also require more interaction between US wood industry promotional associations and Korean architects in order to encourage architects to incorporate US products into homes of traditional design.

There is a definite need to educate consumers and builders about US products and product attributes. As income has increased, the public knows that it wants wood homes and interiors. However, consumers base their decisions about quality primarily on appearance and are unaware of species differences. US firms should market their products to trade magazines, architects, builders, and consumers based on cost competitiveness, product innovations and benefits derived from using a particular brand or species.

US products are not generally cost competitive with Southeast Asian products on a volume basis, yet less wood can be used to deliver equivalent durability. Therefore, suppliers and manufacturers need to teach builders how to use US products efficiently. For example, instead of using a 1 9/16" thick door frame (40 mm), US suppliers and agents can teach Korean builders that 1 1/4" door jambs are structurally sound and cost competitive.

The reluctance to extend credit also appears to hinder use of US products in Korea. Korean importers reported that it is easy to source a wide variety of wood products, but they are constrained by the fact that invoices must be paid in full upon delivery. Several Korean respondents stated that suppliers in other countries extended 90-180 day payment invoices, which has helped introduce their products to the Korean market. However, there can be significant risks involved with extending credit to firms that do not have an established credit history with the supplier. US suppliers reported both positive and negative experiences with extending financing to Korean firms. Some stated that it had "proved over the years to be a credit risk,” and that some Korean companies tried to re-negotiate the price of goods after they were received.

Other companies reported that they had not had problems receiving payment. Most US firms were willing to extend credit to firms with which they had a long working relationship. In light of the Asian economic

crisis and its impact on the construction industry, the risk of extending credit in hope of expanding sales may be excessive.

The decision to select a particular country as a supplier seems to depend heavily upon the agent the Korean company interacts with. Some Korean builders base their opinions about finished products from the US on past experiences with lower grades of lumber that have been common in Korea. Thus, opinions about the quality of US products vary greatly from company to company. While most importers reported that producers in the US and Canada provide the highest quality temperate hardwood and softwood products, others cited other countries such as Switzerland, Germany, and Russia. These varying opinions may be a case of a supplier or agent failing to provide materials that are appropriate for the intended final use. It is important in an emerging market such as Korea where reputation is highly dependent upon word of mouth advertising, that agents and sales people take the time to understand what their customers' product needs are before supplying the product. Attentive after sales service is also vital. It is vital to understand if and why a customer is not satisfied with the product. Without an active customer satisfaction evaluation, customers are more likely to switch suppliers than voluntarily explain product problems.