

BUILDING UP AND PERFECTING THE SUPPLY CHAIN FOR ENTERPRISES PRODUCING WOODEN PRODUCTS FOR EXPORT

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1. Problem

Export of Vietnamese timber and wooden product has increased year by year. In the period 2004-2008, on average, export turnover increased by 25.7% annually. However, in 2009, this figure fell to 8.2% due to the impact of the global economic crisis. A deeper analysis of the export of this line of product throughout the years would point out that the cause of the unsustainable growth comes from the fact that a supply chain, in its true form, has not yet been set up. This paper analyses the set up of and participation in the supply chain of Vietnamese wooden product export enterprises.

2. Theoretical basis for supply chain management

The term “supply chain” appeared in the late 1980s and became popular in the 1990s. Before that, terms such as “logistics” and “operation management” were used for referring to activities relating to supply chain.

According to Lambert, Stock and Ellram, supply chain is as the alignment of firms that brings products or service to market.

Chopra Sunil and Peter Meindl say that supply chain consists of all stages involved, directly or indirectly, on fulfilling a customer request. The supply chain not only includes the manufacturer and suppliers, but also transporters, warehouses, retailers, and customers themselves.

As for Ganesham Ran and Terry P.Harrison,

the supply chain is a network of facilities and distribution options that perform the functions of procurement of materials, transformation of these materials into intermediate and finished products, and the distribution of these finished products to customers.

From these opinions, the authors suggest the following general definition of the supply chain: It is a system consisting of companies and necessary business operations to design, produce, distribute, and consume commodities or service. The objective of supply chain is “minimum expenses, maximum effectiveness”.

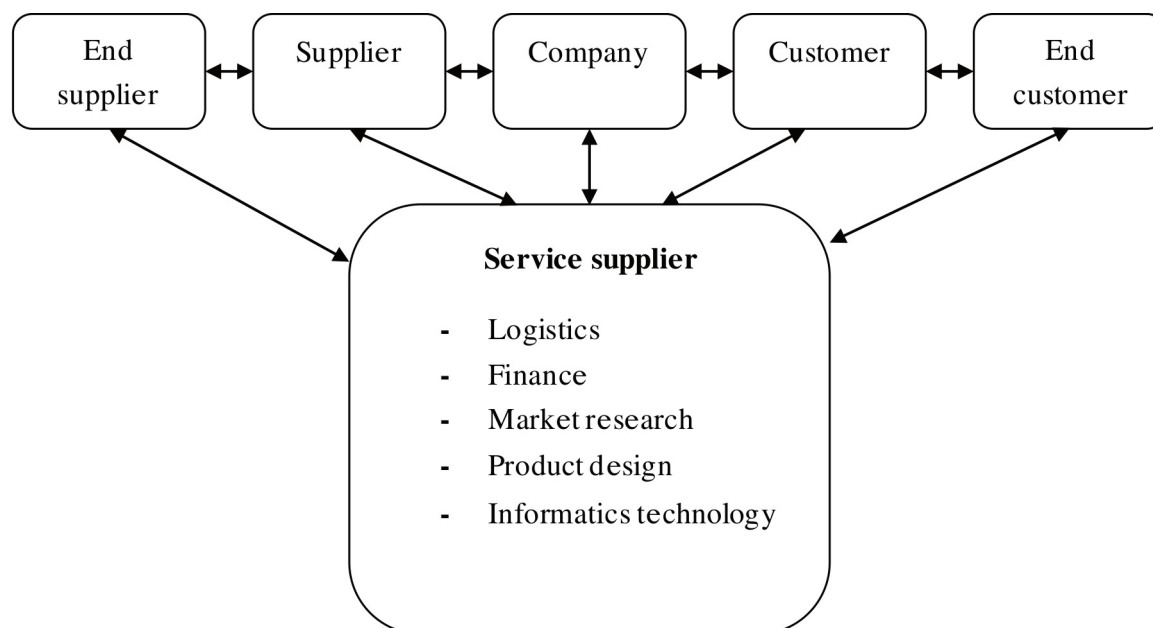
Up to now, supply chain and logistics have been believed as the same so they have been used alternately. Logistics, in fact, is only an element in the supply chain.

Members of a supply chain are shown as follows (See Figure 1):

Supply chain of wooden products for export has come into being in countries such as Indonesia, China, India, and Canada, etc. In general, each country would set up its own particular supply chain of wooden products. From the woods, lumber is brought to saw mills. Sawn timber and preliminary wooden products then are carried to factories to be manufactured by machinery and other associate industries (cloth, glue, paint, plastic...). In addition, production of wooden products for export is cooperated and supported by other service businesses.

FOREIGN TRADE CONTROL VIEWED FROM COMPANIES

Figure 1: Members of a supply chain



Source: Nguyễn Công Bình, MA (2008), *Quản lý chuỗi cung ứng* (Supply chain management), p. 30, Thống Kê Publishing House.

3. General view of Vietnamese wooden products for export

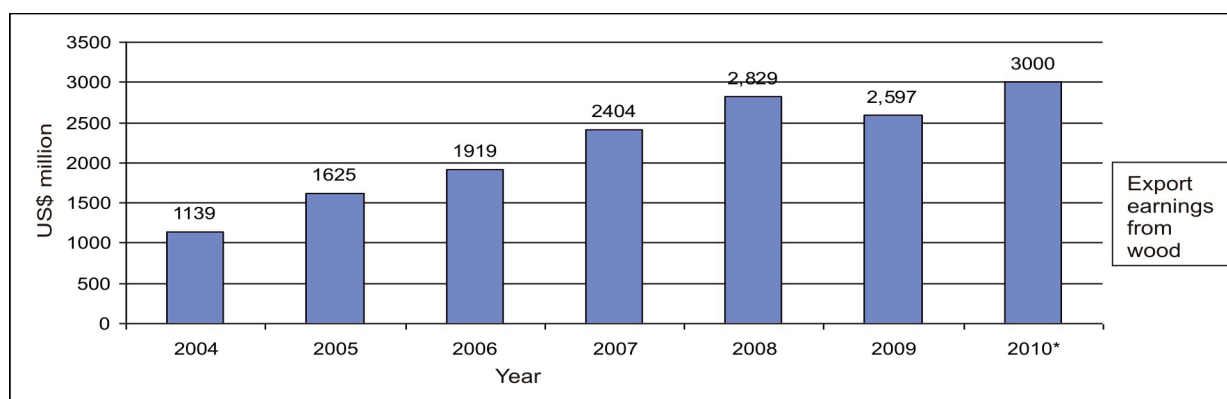
Reports of the Vietnamese Association of Timber and Forestry (Vifores) show that, up to late 2009, there were about 1,800 small wood-manufacturing facilities with a capacity of 15-200m³/year/facility and 1,200 enterprises with a capacity of 2 million m³ of wood/year/enterprise. Of the above-mentioned producers, 870 ones took

part in exportation. Export earnings from wooden products increased rapidly over the years and is shown in the following figure:

The Vietnamese wooden products processing industry, in recent years, gained a growth rate of 25.7% annually in the period 2004-2008. In 2009, this figure fell to 8.2%. One of the reasons for this fall is the global financial crisis. If we analyze carefully the trend of development of the wood

Figure 2: Export earnings from wood and wooden products 2004-2010

(US\$ million)



Source: General Customs Office *: Estimate

FOREIGN TRADE CONTROL VIEWED FROM COMPANIES

processing business we could conclude that the growth rate not only decreased in 2009 but it already started to fall in 2008. The unsustainable growth of the industry of processing wooden products for export is not only due to the global financial crisis but one of the major reasons is that the supply chain, in its true form, is not yet set up. In other words, the cooperation between enterprises producing wooden products for export and enterprises supplying materials and services - even between enterprises producing wooden products for export themselves - is very limited

Wood is the main and most important material in wood processing and it usually accounts for 60-70% of the production cost. According to the Vi-fiores, most of the materials for producing wooden products for export come from foreign countries. In order to gain an export turnover of about US\$2.597 billion in 2009, the wood business had to import US\$1.21 billion of wood materials. Some accessories such as paint, oil, glue, hardware, cloth, leather, and PU, etc. depend totally on the monopolistic suppliers from Taiwan, China, the US, Japan, and Germany. The dependence on foreign materials and accessories makes wood processing enterprises lose their autonomy in production.

Currently, enterprises producing wooden products are meeting with new laws from the US (Lacey), effective on April 1, 2010 and from the EU (FLEGT), effective on January 2012. These laws require exporters to present clearly the roadmap of timber from the exploitation phase to the phase of finished product so that the concerning authority could trace down the origin of materials. Besides, Vietnamese enterprises producing

4. The set up of and participation in supply chains in the Vietnamese industry producing wooden products for export

Up to now, there have not yet been adequate and official statistics figures from associations, governmental agencies and organizations about the formation and development of the supply chain of Vietnamese wooden product for export. Therefore, in order to analyze the set up of and participation in the supply chains of Vietnamese wooden product for export, authors of the research have depended on the secondary data collected via surveys of enterprises producing and exporting wooden products.

The total of collected samples is 233 samples. Geographically speaking, enterprises taking part in the survey are shown as follows:

Table 1: Surveyed enterprises by locality

Area	North Vietnam	Central Vietnam and Western Highlands	South Vietnam	Total
Enterprise	6	21	206	233
%	2.50%	9.00%	88.50%	100%

Source: Author's calculations from the results of survey

In terms of form of enterprises, of the 233 surveyed enterprises there are 101 local ones, 39 joint-venture ones, and 93 foreign-invested enterprises.

Based on the collected data from 233 enterprises, the authors divided these enterprises into three groups according to their level of setting up of and participation in the supply chain.

Table 2: Enterprises by the level of setting up of and participation in the supply chain

Level of participation in the supply chain	Relatively complete	Nearly complete	Not yet complete	Total
Enterprise	39	140	54	233
%	16.70%	60%	23.30%	100%

Source: Author's calculations from the results of surveys

wooden products for export could also meet with lawsuits based on safeguard measures (anti-dumping, countervailing duties, etc.) brought about by American domestic producers.

Analyzing the building up of and participation in the supply chain of the three aforesaid groups of enterprises shows that the supply chain of enterprises producing wooden product for export has been formed and developed in Vietnam. For each

FOREIGN TRADE CONTROL VIEWED FROM COMPANIES

of these three groups of enterprises, the authors analyses and describes their concepts of doing business; their cooperation with other members in the supply chain such as suppliers of materials and accessories, companies in the same industry, logistics companies, and trading companies; and their own operations.

a. Enterprises with relatively complete supply chain:

- Concept of doing business: In the authors' survey, 39 enterprises of this group - besides the objective of making a profit - have paid much attention to the development of the supply chain of enterprises (100%) and supply chain of customers (77%). However, only 30% of the enterprises paid attention to the supply chain of the whole industry.

- Cooperation with suppliers of raw materials: Only four enterprises of this group participate in the afforestation in order to ensure raw materials for themselves and supply materials to other enterprises. As for the cooperation with accessory supplying companies, 49% of the enterprises get materials and accessories from foreign suppliers in Vietnam or import them, 42% get part of raw materials from domestic suppliers, and only 9% of the enterprises get the materials completely from domestic enterprises.

- Cooperation with logistics companies: In the author's survey, only one enterprise, Trường Thành Timber Group, carries out almost all logistics activities inside the enterprise. All other enterprises get logistics services from hired logistics

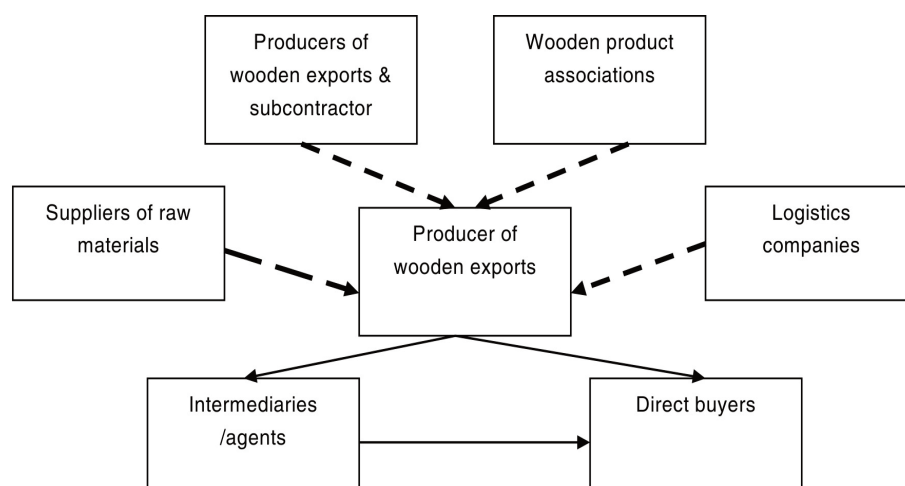
companies. For some lots of export wooden products to big economic groups, a fourth supplier such as Thomasville, IKEA, Pierl Imports ... take care of all logistics services.

- Cooperation with the members in the same industry: Results of the survey show that these enterprises have a close relationship with each other in sharing the source of materials and orders. However, there is a difference between foreign-invested enterprises (77%) and domestic ones (23%) in their investment cooperation.

- Cooperation with trading companies, intermediaries, and direct customers: The survey shows that all those 39 enterprises have set up their cooperation with intermediaries, and with agents of large-scale importers of wooden product in the world. However, the cooperation is somehow depends on the scale of each enterprise. Only 77% of enterprises are the main suppliers of these groups. The rest (23%) supply some product lots.

- Cooperation with relating associations: According to the survey, only 35% of the enterprises have a close relationship with timber associations (receiving trade information, participating in seminars on technical issues, and taking part in trade fairs organized by the associations). These enterprises are mainly local ones. Other 25% participate off and on and up to 45% do not join associations at all.

Analyses of the said data allow us to generalize the relatively perfect supply chain of producers of wooden products for export in the past decade in the following Figure.



FOREIGN TRADE CONTROL VIEWED FROM COMPANIES

b. Enterprises with supply chain nearly complete

- Concept of doing business: Results of the survey of 140 enterprises show that all these enterprises make profit their top target (100%). Of these enterprises, 85% have built up their own supply chain. The customer-oriented supply chains accounts for 48%. Only 7% are interested in the development of the supply chain of the whole industry.

- Cooperation with suppliers of raw materials: Of the 140 enterprises in the survey, only one enterprise, the Đức Long Gia Lai enterprise, has engaged in afforestation.

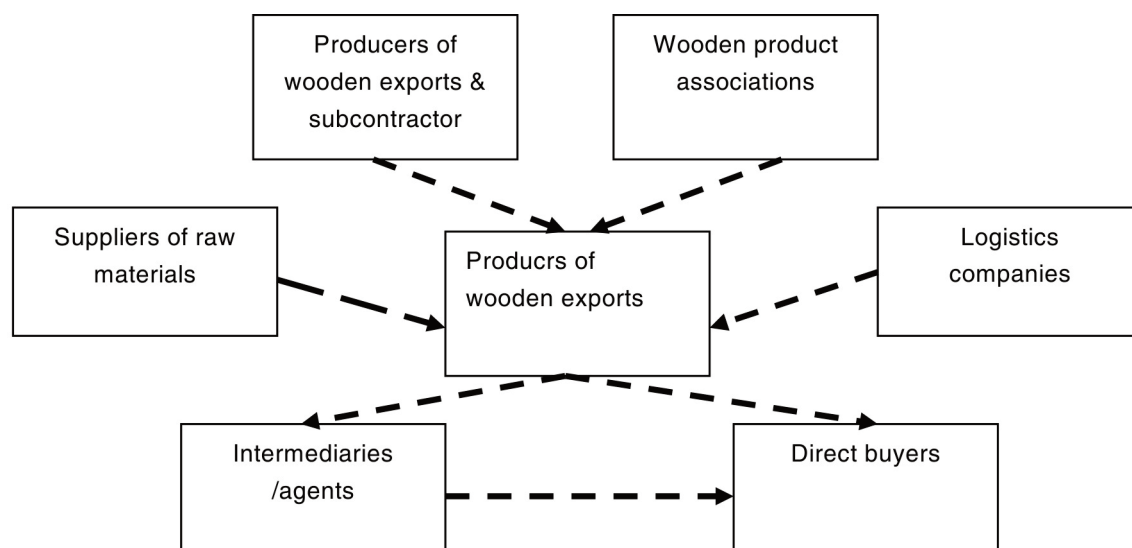
- Cooperation with logistics companies: The survey shows that 56.55% of enterprises carry out simple logistics activities within the enterprise and 43.45% get logistics service from hired logistics companies. Up to 91.7% of enterprises gets complicated logistics service from hired logistics

members of the same industry but only require them to supply products made exactly after the sample. Enterprises of this group, instead of cooperating to form strong supply chains to fill orders of small and medium sizes and later large orders in the future, tend to cur their profit and offer low prices to attract customers, and thus causing unnecessary price wars.

- Cooperation with trading companies, intermediaries, and direct customers: The survey shows that 100% of the enterprises take trading companies and intermediary agents as the link between enterprises and foreign customers.

- Cooperation with relating associations: Only 36% of enterprises have relationship with relating associations and organizations; 45%, vague relationship, and 19%, no relationship at all.

The following figure describes the nearly-complete supply chain of the second group of surveyed companies.



companies and only 8.3% carry out logistics activities inside the enterprise.

- Cooperation with the members in the same industry: There is a very fierce competition between the enterprises which are now in the process of setting up their supply chains. Fearing other enterprises would take away their own customers, these enterprises are taking great precaution. They do not share information about customers and technical standards with other

c. Enterprises with no supply chain:

Enterprises with no supply chain account for 23% (54 enterprises) of the total 233 surveyed enterprises. The authors also analyze the set up of and participation in the supply chain of these enterprises via the same criteria as with the other groups. The results show that this group has weak strategies and does not have cooperation with relating enterprises in the supply chain.

5. Solution to the building and perfection of the supply chain

a. Solutions to the building of the supply chain:

- Enterprises should change their views and business strategy. This is the prerequisite for the setting up of the supply chain of enterprises. Enterprises should take part in the supply chain of the industry or else they would not develop at all. Enterprises should change their thinking about the market. They should sell what the customers need, not what they have at hand. They should always perfect themselves to be able to meet customers' requirements. On this basis, they could gradually re-evaluate every stage of their supply chain.

- Enterprises should build up sources of materials and accessories for their own supply chain. They should replace unstable source of materials and accessories and improve their supply capacity. For the time being, enterprises could keep on importing materials but in order to ensure the source of raw materials they should focus on afforestation. However, this task requires large capital, good management and well-trained workforce. Small enterprises need not heed this solution. Instead, small enterprises should cooperate with other enterprises to purchase timber in large quantity from the very source thereby securing a competitive price.

- Enterprises need to determine what their key products are and if these products could take foothold in the world market. They should determine whether these products are interior furniture, or fine art wooden ones, or outdoor wooden commodities. Currently, the world market demand for interior furniture is on the increase, therefore, enterprises should pay attention to producing, purchasing, and stockpiling plywood or wood for indoor furniture to avoid a price hike in materials when orders come.

- Enterprises should start looking for extra sources of materials because, in reality, there is a movement to promote export of Vietnamese wooden furniture and products made of wood and some other materials such as metal and rattan.

Apparently, it is very easy for enterprises to combine wood with rattan and bamboo to make a product simply because these materials could be found easily and their price is lower than that of wood. This combination is a strong advantage of Vietnamese fine arts and handicrafts.

- Enterprises should use services provided by logistics companies in order to accumulate the added value given by these companies to their supply chain.

- Vietnamese enterprises should clearly clarify themselves as enterprises supplying processing products in the customers' supply chain. From then on they could build up their strategy to infiltrate, develop, and consolidate their position in the customers' supply chain.

- Enterprises should keep on developing and maintaining their traditional markets (both intermediary market and end-user market). In doing so, the prestige and quality of Vietnamese wooden products could get quick access to the customers.

- Enterprises should strongly develop some target markets in countries where the economy is stable, spending power and demand are constantly increasing, trading service and institutions are perfected, and distribution channels are widespread and dynamic. These markets include the EU, the USA, Japan, and Russia.

- It is necessary to build up a marketing workforce well trained in foreign languages technical expertise to possibly infiltrate into new markets. Enterprises should also build up a system of intermediary agents or good relationship with intermediary companies in order to get more chance to participate in the supply chains in bigger markets.

b. Perfecting the supply chain:

- Enterprises with their own supply chains need to cooperate with other supply chains via investment cooperation, and experience and order sharing. They should also perfect their relationship with other members in the supply chain, making ordinary partners into strategic ones, and creating a close and uninterrupted relationship.

- Enterprises that have taken part in the supply chain should expand the capacity to do teamwork and admit new members in order to get

bigger business opportunities.

- It is necessary for enterprises to improve their corporate value. They should spend more on R&D in order to keep up with the market demand and new developments of the product. They should also cooperate with experts or even with European ones to help design and make their products more attractive to such major markets as the U.S and Europe. For the time being, they should exploit the market for outdoor furniture because this is one of Vietnamese strengths. In the long run, enterprises should direct their production to indoor furniture and at the same time increase the high-quality ones in the structure of interior wooden items. In addition to purely wooden products, it is necessary to make furniture from other materials or items with combined materials. The diversification of products helps them not only enter into the market but also avoid anti-dumping lawsuits.

c. Participation into the regional and global supply chains:

- Enterprises should define their second position (processing and supplying wooden product enterprises) in the regional and global supply chain of wooden products in the following chain: Afforesting and material supplying enterprise – Wood product processing and supplying enterprise - International export & import – Retailer - Consumer. On this basis, enterprises could classify the global supply chains in which they could take part.

- It is necessary for enterprises to gradually build up their brand names via the assurance of stable quality from the first order to the last one. Enterprises should also build up a system of product standards suitable to characteristics of the enterprise as well as to the requirements of the customers. Moreover, it is also necessary to examine and observe properly regulations relating to this industry in other countries.

d. Some proposals to set up and perfect the supply chain for Vietnamese wooden products in the coming years:

- The government should take measures to support and solve the first and most important part in the supply chain, that is, the source of materials.

- The government and relating associations should examine all activities of enterprises in this industry in order to set up strategies to develop the supply chain in a reasonable and effective way.

- Vietnamese Association of Timber and Forestry and local timber associations should focus on their orientation role and management ability in the building up of the supply chain of this industry in their first stage of development■

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