

## Participation of Vietnamese enterprises in the global footwear supply chain



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### ABSTRACT

This study examines the factors influencing the involvement of Vietnamese enterprises in the global footwear supply chain. It uses the Porter Diamond Model to evaluate the competitive advantages of Vietnamese footwear enterprises based on four key attributes: factor conditions, demand conditions, related and supporting industries, and firm strategy, structure, and rivalry. The research combines various methods, including a review of previous studies, analysis of secondary data, and in-depth interviews with twelve industry experts. The findings offer insights and managerial implications for enhancing supply chain collaboration among Vietnamese footwear companies. It suggests that Vietnamese businesses and policymakers should actively engage in the global supply chain to gain higher competitive advantages and advance to more value-added activities. The study discusses practical and theoretical implications.

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### 1. Introduction

Footwear making is one of the most globalized industries. It is a model of interdependencies among people, communities, and nations linked through global networks (McMichael, 2017; Stacey, 2019). As a developing country with some favorable conditions, Vietnam is a popular destination for many global footwear brands to outsource the manufacturing part of their supply chain. Thus, footwear is a key export industry in the country, ranking third after electronics and apparel in the year 2022, contributing about 6.4% of the country's total export value. Footwear made in Vietnam has a presence in nearly 100 countries in the world and creates jobs for nearly 1.5 million workers (MOIT, 2023).

Despite rapid growth in recent years, Vietnam's footwear manufacturing and exporting industry is still weak in its competitive position and receives a small share of value in the global supply chain for various reasons. For the upstream part of the supply chain, Vietnamese footwear businesses are still

heavily dependent on imported raw materials, resulting in higher prices and supply disruptions in crises such as the COVID-19 pandemic. For the downstream stage, footwear companies are strongly affected by fluctuations in the international market, leading to a lack of orders in the first months of 2023. In the global footwear supply chain, Vietnamese manufacturers are just involved in the manufacturing stage, which has the least added value, and they are struggling with relatively low-profit margins compared to other members of the chain.

In the era of deepening international economic integration, Vietnamese footwear enterprises have to face many challenges and great competition from the domestic context and strong opponents of other countries, who have greater advantages in finance, technology, production experience, and marketing professionalism. Therefore, adding value and enhancing the active participation of each company and the whole Vietnamese footwear industry in the global supply chain is essential. This should be implemented regularly and continuously updated according to the requirements of new contexts in the industry.

Thus, this article aims to find out and explore the factors that affect the participation of Vietnamese footwear enterprises in the global supply chain. Through the literature review and the in-depth interviews with 12 experts in the footwear industry, both secondary and primary data were collected and

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analyzed to describe the position and role of Vietnamese enterprises in the global footwear supply chain to deepen the understanding of Vietnamese companies' participation for further improvement.

**2. Global footwear supply chain**

Footwear refers to human items worn on the feet, which typically serve the purpose of protection against the bad effects of the external environment (avoid being injured, scratched, slippery, unflavored temperature, or soiling the feet when in contact with the ground), to soften the feet while performing various activities, and to bring a certain aesthetic beauty (Menz and Bonanno, 2021).

Footwear is an essential item in human life, appearing since ancient times with the original design of just leather bags to protect the feet, found in many countries with cold weather (DeMello, 2009). Traditionally, footwear has been made from leather, wood, or canvas but is increasingly being made from rubber, plastics, and other petrochemical-derived materials. The footwear design is extremely diverse and rich with time, culture, and purpose. Modern footwear varies widely in terms of use, style, and cost (DeMello, 2009; López et al., 2022).

Before the 19th century, footwear was handmade, and a single pair was produced. In 1845, the first shoe-making machine was put into use. It is a rolling mill used to replace tools such as hammers and stones to increase the durability of shoes. A year later, the sewing machine was invented, sparking the mass production of footwear and serving the varied needs of the mass market (DeMello, 2009). Today,

the footwear industry is a highly globalized field and employs millions of people worldwide. By the end of 2022, Vietnam will have about 2,200 footwear manufacturing enterprises with nearly 1.5 million employees engaged in this industry (MOIT, 2023).

The global footwear industry is highly diversified, with a wide variety of materials used in its production, as well as the distinction between athletic and non-athletic footwear with the boundless variations of designs associated with the use purposes. The footwear industry is also very competitive, with many brands and many manufacturers. Key brands in the global footwear market include Nike, Adidas, New Balance, Puma, Reebok, Skechers, Timberland, Vans, Under Armor, Asics, Fila, and others. These famous brands are owned by leading companies in the global footwear supply chain.

The footwear supply chain is complex due to the wide range of product types and the adoption of an outsourcing strategy in developing countries. The outsourcing strategy of the brands and the complex features of the entire highly decentralized and globalized supply chain are the recipe for low costs and low prices for footwear products sold in international markets.

Therefore, the global footwear supply chain includes many participants, such as material suppliers, component suppliers, manufacturing enterprises, focal enterprises (the chain leaders), and commercial firms (wholesalers, retailers), all of whom combine to deliver the right product to end consumers all over the world. The overall model and overview of the global footwear supply chain are illustrated in Fig. 1.

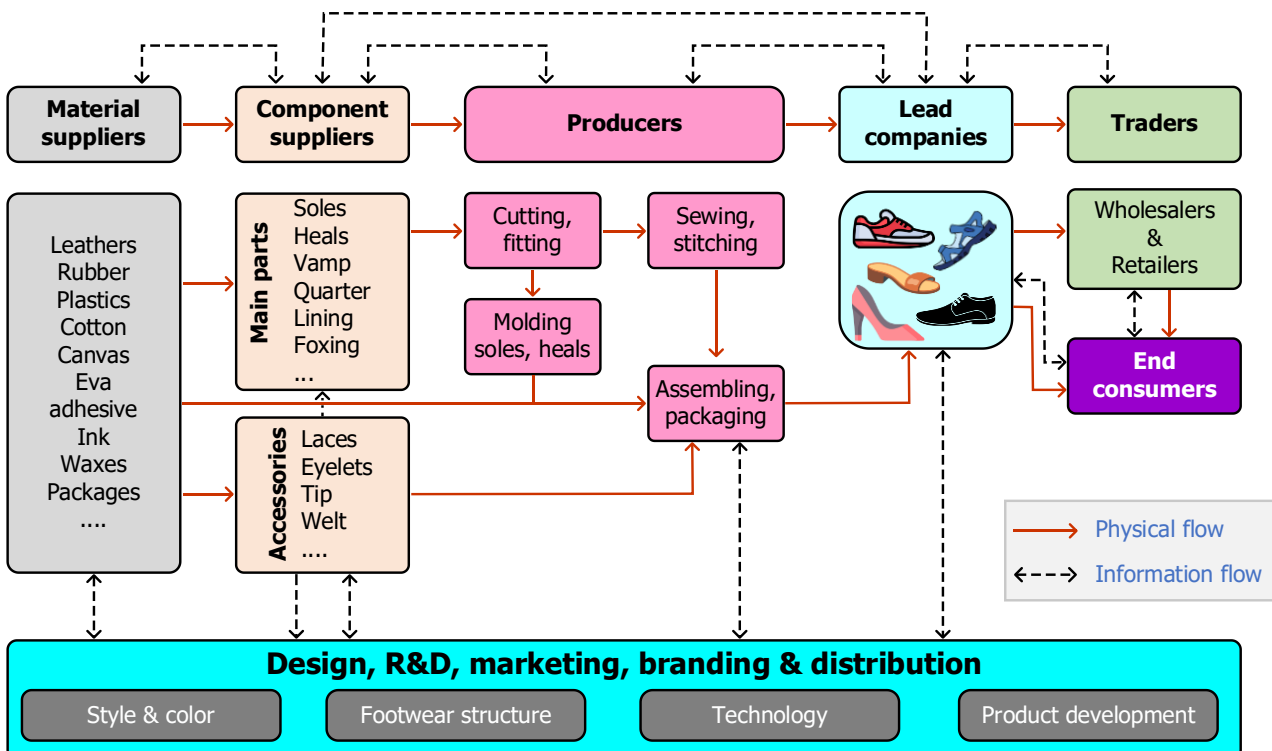


Fig. 1: Overall global footwear supply chain (Gereffi, 1994; Stacey, 2019)

Here, the focal companies focus on product design, R&D, new product development, marketing, branding, and distribution. The greatest added value in the footwear supply chain is the design stages, new product development, and marketing activities. For many years, businesses with well-known brands such as Nike and Adidas have often focused on high-value-added activities without worrying about component manufacturing or finished product assembly (DeMello, 2009; Kim et al., 2019).

This is also known as a buyer-driven global chain. Since advertising and marketing activities, combined with fashion and consumption, are always the core factors governing production, they shape networks and the entire supply chain. The lead companies, acting as the organizational buyers, have overwhelming bargaining power, with the total revenue of just three footwear giants (Nike, Adidas, and Puma) alone reaching nearly \$47 billion, accounting for more than 12% of the global market value (\$382 billion) in the year 2022 (Pan et al., 2023).

The key to the success of powerful footwear brands is their ability to organize and manage their partners through their global hubs and networks. Their professionalism and control over the chain are presented in the most important areas: design, R&D, distribution, marketing, and branding. The core competencies of the leading companies are their outstanding abilities in the promotion and creation of markets, which means building a compelling world of symbols, ideas, and desired exploits of individuals towards the consumption of footwear in general and sneakers in particular (Korzeniewicz, 1994; Stacey, 2019).

Nowadays, most popular footwear brands choose to outsource their production activities to their partners located in developing countries. Specifically, countries like China, India, Brazil, Italy, Vietnam, Indonesia, Mexico, Thailand, Turkey, and Spain are the destinations for the production plants of these leading footwear corporations. In the past, South Korea and Taiwan were the countries that once dominated the global footwear manufacturing market before the 1990s. Today, companies from these countries have relocated their production plants to other countries in Asia. To create the final product, some large multinational companies, such as Pouyue, Dona Standard (originated in Taiwan), or Tae Kwang, Hwaseung, and Chang Shin (from South Korea), provide manufacturing and processing services for leading companies such as Nike and Adidas. These production factories compete fiercely to win large-scale orders to compensate for their rather thin profit margins.

The footwear industry continues to be strongly concentrated in Asia, as 87% of total world footwear production is produced here. China continues to be the largest country in footwear exports, with a volume of 7.4 billion pairs, accounting for 61.1% of the market share (Simões et al., 2024). However, China's footwear export market share has decreased by 12% from 73.1% in 2011. This decline comes

from the rise of Vietnam, Indonesia, and some other markets. For the first time in 2021, Vietnam accounted for over 10% of the global footwear export market with about 1.2 billion pairs and ranked second in the world in footwear exports.

The global footwear supply chain is characterized as a "buyer monopoly" with its suppliers, in which the brands have full bargaining power to set the purchase price. Due to this monopoly position among brands, footwear suppliers and assemblers receive the smallest share of the chain, forcing them to keep labor costs to a minimum. Leading brands enjoy the largest share of the profits, with an average of 9% in the footwear industry. In comparison, manufacturers and assemblers engaged in the last and least value-added stages of the global value chain struggle with a profit margin of only 2% to 3%. All footwear manufacturers in Asia have said that purchasing prices from brands have not increased in the past five years; some even faced pressure from brands to reduce prices (Stacey, 2019; Simões et al., 2024).

The global size of the footwear market is forecast to continuously increase from 2023 to 2028, adding 0.5 billion pairs per year (+3.58%). The volume is estimated to reach 14.5 billion units by the year 2028. In terms of value, the global footwear market reached 382 billion USD in 2022 and is expected to reach a market size that will grow to 440 billion USD in 2026, growing at an average rate of 2.3% per year in the period 2020–2026.

The athletic footwear segment currently accounts for 37.6% of the global footwear market share. Sports shoes continue to be a driver of growth as growing interest and participation of all ages in different sports and lifestyle changes are driving the use of sneakers, even for non-sports-oriented people.

### 3. The participation of Vietnamese enterprises in the global footwear supply chain

Footwear is Vietnam's main export product and reached 23.87 billion USD of total footwear export revenue in 2022 (MOIT, 2023), up 34.3% in comparison to 2021 and an increase of nearly 162.4% compared to the year 2017 (Fig. 2).

The year 2022 is considered a successful time for Vietnam's footwear exports. The industry's export growth rate stands near the highest among export items, reaching about 100 countries around the world. The United States is still the largest footwear import destination for Vietnam, reaching more than 9.6 billion USD (accounting for 40.2%), China is the second largest market with more than 1.7 billion USD (7.1%), and Belgium is the third largest market with more than 1.6 billion USD (6.8%).

Footwear exports to important markets all grew at double-digit rates (except China) due to favorable international trade agreements. The EVFTA and UKVFTA have contributed to promoting footwear exports in the EU and UK markets. Meanwhile, the CPTTP Agreement has boosted the export growth of

some markets in North American countries, such as Canada and Mexico. Remarkably, the Indian market has had positive signals for the footwear industry, with an export growth of 96.8% for footwear. However, the majority of exporting companies in the

industry are foreign-invested companies with factories operating in Vietnam. Table 1 shows that 9 out of 10 enterprises operating in Vietnam with the largest export value in 2022 are companies with foreign investment, mainly from Taiwan and Korea.

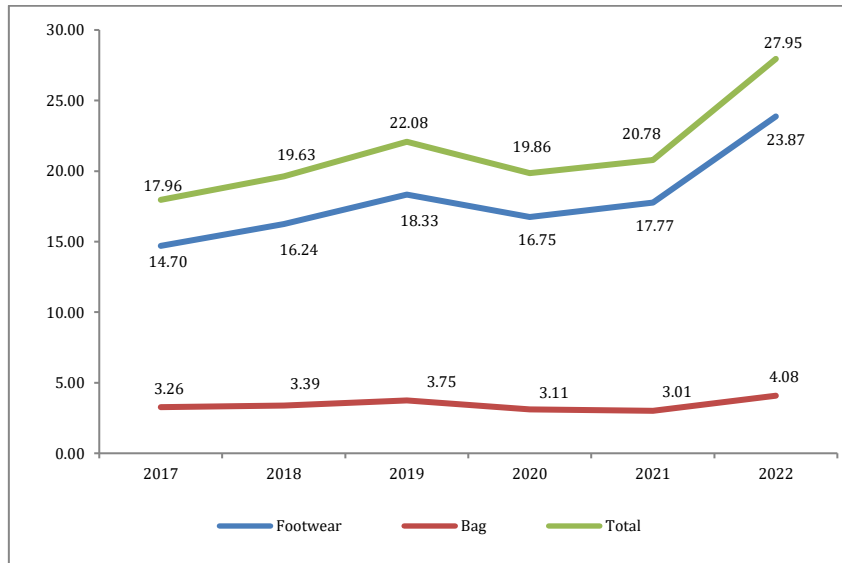


Fig. 2: Footwear and bag export value 2017 – 2022 (in billion USD)

Table 1: Top ten footwear export companies in Vietnam in 2022

No.	Company's name	Export value (million USD)	Country of origin	Year started operations in Vietnam	Number of employees
1	Pouyuen Vietnam Co Ltd.	1213.60	Taiwan	1998	79918
2	Tae Kwang Vina Industrial	1118.10	Korea	1995	40000
3	Chang Shin Vietnam	914.4	Korea	1994	36100
4	Dona Standard Vietnam	548.9	Taiwan	2006	20349
5	Gold Star Co. Ltd	526.7	Vietnam	1995	14500
6	Hwaseung Vina	510.8	Korea	2007	15500
7	Ching Luh Vietnam	439.9	Taiwan	2008	20000
8	Annora Vietnam	397.2	Taiwan	2010	15000
9	Pou Chen Vietnam	390.1	Taiwan	2008	16173
10	Roll Sport Vietnam	372.9	Taiwan	2010	20000

Only one Vietnamese enterprise, The Golden Star Co., Ltd., entered the top 10 list and ranked 5th with an export value of 526.7 million USD in 2022. Another Vietnamese company, Thai Binh Investment JSC, ranked 20th in the export list with an export value of 255.1 million USD in 2022. Vietnamese footwear brands that have a strong position in the domestic market, such as Biti's, Vina Shoes, Dong Hai, Juno, Bitas, RieNevan, and Ananas, are more focused on the domestic customers than the international markets (Nguyen and Nguyen, 2021).

By the end of 2022, the whole country will have about 2,200 footwear manufacturing enterprises in Vietnam, mainly small and medium-sized, operating in the southern region of the country (MOIT, 2023). Table 2 lists ten provinces and cities where footwear factories are currently concentrated, accounting for nearly 80% of the industry's export turnover. Among these provinces, Dong Nai holds the position as the largest footwear manufacturing and exporting location in Vietnam, followed by Ho Chi Minh City and Binh Duong Province.

Table 2: Footwear exports by cities and provinces in 2022

No.	Cities or provinces	Value (million USD)
1	Dong Nai	5127.1
2	Ho Chi Minh city	2730.7
3	Binh Duong	2284.3
4	Thanh Hoa	2173.8
5	Hai Phong	1679.4
6	Long An	1340.7
7	Hai Duong	1037.5
8	Tien Giang	902.3
9	Ninh Binh	881.8
10	Binh Phuoc	793.4
	Other provinces	4924.6
	Total footwear export value	23874.60

The supply chain of the footwear industry in these provinces is quite complete, especially strong in the production of materials such as shoe soles, insoles, and accessories, with most FDI enterprises actively creating linkages in the supply chain, from raw materials to production and distribution. It is the supply chain map in the south that has created conditions for the provinces surrounding it (such as Long An, Tien Giang, and Binh Phuoc) to have the opportunity to attract more projects in the industry. Footwear factories in the North have not had the same level of concentration as in the South. Some factories and new projects are scattered in provinces such as Thanh Hoa, Hai Phong, Hai Duong, and Ninh Binh. Big brands like Nike and Adidas have decided to locate their main production facilities in Vietnam. Nike has more than 100 suppliers in Vietnam, with 96 factories situated in the southern region. Adidas has also chosen Vietnam as its main production area, as it highlighted that about 40% of its total footwear production came from Vietnam in 2019.

Vietnam's footwear industry is growing rapidly thanks to low labor costs, a skilled workforce, and favorable trade agreements. Despite rapid growth, Vietnam's footwear manufacturing and export industry relies heavily on imported components and raw materials, with a proportion of about 55% imported value (Nguyen and Nguyen, 2021; MOIT, 2023). As the majority of materials and equipment are imported and with the position of subcontractors for big brands, Vietnamese footwear enterprises are still participating in the lowest stage of value-added in the supply chain.

#### **4. Determinants of Vietnamese enterprises' participation in the global footwear supply chain**

Determinants of the global supply chain's participation include many factors that vary over time and by product. This paper applies Porter's diamond model (Porter, 2011) to identify the opportunities for the Vietnamese footwear industry to achieve higher competitive advantages and move to higher value-added activities within the chain.

The Porter Diamond Model (Porter, 2011) analyzes a nation's advantage against four broad attributes that each country establishes and operates for its industries: factor conditions, demand conditions, related and supporting industries, firm strategy, structure, and rivalry. For the purpose of this article, let's look at the Vietnamese footwear industry and how the Porter Diamond Model is applied to this area.

##### **4.1. Factor conditions for Vietnamese footwear enterprises**

Human resources: Vietnam has a population of nearly 100 million people, with an average age of 33.7 years (Handong et al., 2021). The country is currently experiencing a "golden population" period, as more than 50% of its people are part of the labor force. Young workers in Vietnam tend to have

strengths like good health, energy, the ability to quickly learn new technologies, and high mobility. As a result, Vietnam's workforce offers competitive advantages in terms of size and skill, along with lower labor costs compared to China, the world leader in footwear production. These factors create favorable conditions for growing Vietnam's footwear manufacturing industry.

Therefore, the low labor cost becomes a determining factor in the profitability of footwear factories. The experts of the industry also confirmed this important determinant for Vietnam's enterprises' participation in the global footwear supply chain with 4 points (out of 5) for the level of impact (Table 3). Therefore, low labor costs become a determining factor in the profitability of factories. An estimated 1.5 million workers are currently employed in this industry, and 70% of the workforce is female. However, labor productivity in Vietnam is relatively lower than that of China and Brazil. The average productivity of workers in Vietnamese private footwear factories is currently only 60–70% of the productivity of FDI enterprises operating in Vietnam. Nine out of 12 interviewees emphasized that labor productivity has the most negative impact on the competitiveness of Vietnamese footwear enterprises. That is a big disadvantage, which should be improved in the coming years. The experts pointed out that laborers' lack of working industrial style and low sense of discipline are the reasons for low labor productivity.

Infrastructure: Vietnam is the 67<sup>th</sup> most competitive country in the world, out of 140 countries ranked in the 2019 Global Competitiveness Report published by the World Economic Forum. In terms of infrastructure, Vietnam ranked 77<sup>th</sup>, ten places lower than the overall competitiveness index (Tran et al., 2022). Currently, the facilities that create Vietnam's advantages are reflected in the development of a system of industrial parks and economic zones, with favored infrastructure and customs clearance for export. According to the Ministry of Planning and Investment, the country currently has more than 330 industrial parks and 17 economic zones. These industrial parks and economic zones have contributed significantly to the annual import-export turnover, creating more jobs, contributing to the modernization of domestic production technology, reducing administrative procedures and operating and management costs, and promoting strong linkages with foreign partners.

However, the technology level in the industry remains limited, and the country lacks support centers and consultants to help businesses develop new products and adopt new technologies. Establishing a consulting and technology transfer center is crucial for Vietnam's footwear industry, particularly for small and medium-sized enterprises. This is why experts have rated this factor as 3 out of 5 (Table 3). Geographical location: Vietnam, with over 3,200 km of coastline, 4,500 km of land borders, and its strategic position along the sea, serves as an international hub for the transshipment of goods on

the Asia-Pacific trade route. This offers favorable conditions for expanding trade with countries in the region and globally. These advantages are particularly beneficial for footwear manufacturing and trading businesses in Vietnam, making the transportation and export of goods more convenient.

Although the country has a favorable geographical location, it is an objective factor common to all businesses operating in the territory of Vietnam. Therefore, the impact of this factor on the level of participation of businesses in the global supply chain is only assessed by experts at level 2 out of 5 (Table 3).

#### 4.2. Demand conditions

The domestic market for footwear products in Vietnam is approximately 150 million pairs per year, with local companies holding nearly 40% of the market share. The remaining footwear is imported from China and other countries. This indicates that the market has significant potential for domestic businesses to increase their efforts to improve competitiveness, reduce reliance on imported footwear, and expand their market share.

However, since the domestic market has not been a key concern for footwear export processing-intensive firms recently, company representatives are currently evaluating this factor only at level 2 out of 5 for the impact of Vietnamese businesses' participation in the global supply chain (Table 3).

The international market plays a huge role in Vietnam's footwear industry. It was highlighted with the highest points of level impact by all 12 interviewees for the local enterprises to participate deeply in the global footwear supply chain. Since 1998, Vietnam's footwear industry has joined the product groups with an export turnover of 1 billion USD or more and has rapidly grown at a high rate. Footwear export turnover reached over 2 billion USD in 2003, over 5 billion USD in 2010, more than 10 billion USD in 2014, nearly 18 billion USD in 2021, and 23.87 billion USD in 2022 (MOIT, 2023). Vietnam's footwear industry strives to achieve an export turnover of about \$27–28 billion by 2025 and will reach about \$37–38 billion by 2030.

The US and EU are the two main export markets of Vietnamese footwear, with a total structure accounting for nearly 70% of Vietnam's total footwear export turnover in 2023. Therefore, Vietnam's footwear export activities are directly affected by the purchasing power of these two markets. The above data shows that demand conditions are one of the advantages, creating a premise to help improve the competitiveness of the Vietnamese footwear industry when both domestic and international demand are forecast to have future growth trends.

#### 4.3. Related and supporting industries

The merchandise cost and the properties of materials required for footwear making are the main

concerns of the footwear business as they determine the final price as well as the lifespan of shoes. Thus, the experts in Vietnam's footwear industry highlighted the material supply as a very important factor in influencing the enterprises to take part in the global supply chain with a level of 4/5 (Table 3).

The footwear industry in our country is facing significant challenges due to the low availability of domestically sourced raw materials. The localization rate in the industry is only 40%, and this mainly includes secondary materials such as shoe soles, sewing threads, fabrics, and low-quality leather.

The entire industry has 129 enterprises investing in the production of raw materials and supporting accessories, but only about 20 local enterprises are capable of supplying high-quality raw materials, making it difficult for manufacturers to be proactive in ordering and sourcing raw materials. Locally produced leather is usually cowhide of low quality, in small pieces with many scars, and is mainly used for production in the domestic market. Leather products produced by FDI tanneries have higher quality but only meet a small amount of export production.

Domestically produced synthetic leather usually has a hard texture, poor heat resistance, and slow-to-change designs. As many raw materials for synthetic leather production still have to be imported (PU, PVC, plasticizers, etc.), their prices are high and uncompetitive with the imported leather (Zhang et al., 2021).

Thus, real leather and synthetic leather, the most important raw materials for footwear production, are still largely imported. In 2022, leather imports reached USD 1,736.22 million, up 4.51% compared to 2021. High-grade fabrics for the production of sneakers and other sports shoes must also be imported. Machinery and equipment to serve production in the industry are now still coming from international suppliers.

The international supplies for footwear materials mainly come from China (64%), Taiwan (24%), South Korea (4.2%), and Hong Kong. This dependence creates a high risk of supply disruption when there are major fluctuations (such as the COVID-19 pandemic or the US-China trade war) and, at the same time, pushes up the product prices of Vietnamese enterprises, reducing the competitiveness of this commodity in the world market (MOIT, 2023).

As a large part of the raw materials are produced in China, the large Vietnamese enterprises with representative offices in the supply regions are more likely to acquire the materials at an affordable cost. For small businesses, access to new raw materials will be slower, and the costs will be higher due to small purchasing orders. That is the judgment and assessment of the two experts from the Leather and Shoes Research Institute.

The production and supply of raw materials for the footwear industry are too limited in quantity and of low quality, which has slowed the development of the industry. This shows that the supply conditions

and supporting industries for footwear production in Vietnam are still weak, insufficient, and have not developed enough to match the potential of the country's footwear sector.

#### 4.4. Firm strategy, structure, and rivalry

Vietnam's footwear industry is divided into two segments: domestic producers, who show little interest in exporting, and large enterprises heavily focused on manufacturing for export. As a result, the strategies, structures, and competition in these two segments are quite different. This paper focuses on companies oriented toward exports.

**Current competitors:** The leading footwear-producing countries, such as China, Italy, India, and Brazil, are direct competitors of Vietnam's footwear industry. Among them, China is considered the largest and strongest competitor, according to all 12 interviewees. Experts noted that Chinese companies are far ahead of Vietnamese firms in all stages of shoe production, including manufacturing, design, and packaging. Chinese companies also have strong raw material sources and a greater ability to access international customers. Additionally, they excel at producing shoes at a wide range of prices, allowing them to meet the needs of various customer segments.

In the domestic market, export-focused footwear companies only produce shoes for Vietnamese consumers when there are not enough export orders to keep their factories running at full capacity. In these situations, export-oriented companies face tough competition from local producers, who specialize in the domestic market and have a deeper understanding of local preferences. Well-known domestic brands such as Biti's, Juno, Hong Thanh, Dong Thinh, and Vina Giay are strong competitors, focusing on innovative designs and targeting younger customers with effective marketing campaigns (Esteves et al., 2022).

**Potential competitors:** Since the ASEAN Economic Community (AEC) was established in December 2015 and began operating in 2018, countries like Indonesia, Cambodia, and Myanmar have emerged as strong potential competitors for Vietnam's export footwear industry. For instance, Myanmar has recently promoted the textile, garment, and footwear industries, relying on a young, low-cost labor force to build these sectors into major industries. This positions Myanmar as a formidable future competitor for Vietnamese footwear companies.

**Current strategy:** The strategy of Vietnamese footwear companies is primarily focused on serving as subcontractors for international brands and manufacturing shoes according to the designs and specifications provided by these brands. In Vietnam, the capacity to design original models that meet international market demands is still limited, and the level of technology in footwear production remains average compared to the region. Technologies needed to produce high-end products, such as specialized sports shoes, medical footwear, and high-

fashion shoes, are generally beyond the reach of Vietnamese companies. Manual labor is still heavily used in various stages of production, such as spreading raw materials, applying glue, chiseling, grinding, trimming, and transporting materials and semi-finished products.

**Organizational challenges:** Another weakness in the Vietnamese footwear industry is the lack of senior staff and management skills, which negatively affects the industry's ability to compete. This is a significant issue that needs to be addressed to ensure long-term competitiveness.

Table 3 summarizes experts' average assessments of the factors influencing the competitiveness of Vietnamese footwear companies in the global supply chain, using a 5-point scale where 1 represents the lowest impact and 5 represents the highest.

Those are the analyses highlighting four groups of factors, showing favorable conditions as well as challenges for production and business activities that have strong impacts on the participation of Vietnamese footwear enterprises in the global supply chain.

**Table 3:** Determinants of Vietnam's enterprises' participation in the global footwear supply chain

Determinants		Level of impact
Factor conditions	Human resources	4
	Infrastructure	3
	Geography	2
Demand conditions	International market	5
	Domestic market	2
Related and supporting industries	Material supply	4
	Equipment supply	3
	Current competitors	4
Industry rivalry	Potential competitors	3

1: least impact; 5: most impact

#### 5. Recommendations for Vietnamese enterprises and policy implications

As a relatively recent participant in the global supply chain compared to China, Vietnamese businesses and policymakers must accelerate their integration and participation in the global supply chain to advance to higher value-added activities. The recommendations for Vietnamese enterprises and relevant policy implications are summarized in four key areas:

##### 1. Factor conditions

- Improve the quality of human resources, including both managers and workers.
- Focus on training programs that enhance the effective use of human resources.
- Strengthen management skills at the firm level, including professional knowledge, management capabilities, and legal understanding of international markets.
- The government should establish support and consulting centers to assist businesses in developing new products and applying new technologies.

## 2. Demand conditions

- In international markets, enterprises should improve their international marketing capabilities, implement comprehensive market research, diversify their product offerings, and develop competitive pricing strategies.
- In the domestic market, Vietnam's population of 100 million provides significant potential for growth. The development of this market will depend on the strategies and priorities of individual businesses.

## 3. Related and supporting industries

- Vietnam needs to implement coordinated policies and strategies to attract investment in supporting industries, which will enhance the capacity for footwear production and export.
- Since the footwear industry is influenced by rapidly changing fashion trends, it is essential to develop a supporting industry that aligns with these trends.
- The government should introduce policies that encourage and support domestic production of raw materials, providing businesses with competitive and sustainable supply chains.
- Enterprises need to be proactive in securing raw materials with consistent quality and standards.

## 4. Firm strategy, structure, and rivalry

- Businesses should increase their focus on research and development activities, as well as invest in footwear design.
- Enterprises should transition from the current CMT (cut-make-trim) production model to FOB (free on board) production, ODM (original design manufacturing), and OBM (original brand manufacturing) to increase product value and improve operational efficiency.
- Companies should foster creativity in areas such as new model design, material sourcing, process innovation, and technical improvement in footwear production.

## 6. Conclusions

Observing the expansion of global supply chains, Vietnam aims to increase the involvement of its domestic enterprises and facilitate their shift to higher value-added activities within these chains. Up until now, Vietnam's participation in the global supply chain has largely been through labor-intensive roles, and domestic firms remain in a weaker position compared to foreign direct investment (FDI) enterprises.

Nevertheless, there are numerous opportunities for Vietnamese businesses to engage more deeply in the global footwear supply chain. Enhancing the contribution of Vietnamese enterprises to this supply chain is an urgent priority for individual businesses and the footwear industry as a whole. Analyzing the factors that affect the level of connection between Vietnamese firms and global supply chain members will help businesses better understand the current situation and guide future efforts.

Further research may clarify and quantify the specific impact of each factor on the participation of Vietnamese enterprises in the global footwear supply chain. With the efforts of state management agencies and the determination of enterprises, it is hoped that the Vietnamese footwear industry will gradually gain a stronger presence in the market and integrate more fully into the global supply chain.

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## Compliance with ethical standards

### Ethical considerations

Informed consent was obtained from all interview participants, who were assured of the confidentiality of their responses. All data was collected in compliance with ethical standards.

### Conflict of interest

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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