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Master's Thesis of International Studies

Does Vietnam have the potential to replace China's share of manufacturing?

베트남이 중국의 제조업 시장 점유율을 차지할 수 있는가?

August 2023

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Abstract

With over a third of global output, the Chinese economy has

flourished as a manufacturing powerhouse. The remarkable growth of

Vietnam has brought the country into the international spotlight,

particularly for manufacturers seeking a new outsourcing destination. In

fact, many experts believe that Vietnam's current manufacturing

industry status closely resembles that of China from a decade ago or

even earlier. Given the current emphasis on developing Vietnam's

manufacturing industry, this paper will employ SWOT analysis to

examine its potential, especially the Mobile phone production sector.

Keyword: China, Vietnam, Manufacturing industry

Student Number: 2020-29207

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Chapter 1. Introduction

1.1. Study Background

Asian countries play a pivotal role on the international stage, particularly in the realm of the economy. Asia boasts some of the world's largest and fastest-growing economies, serving as major drivers of global economic growth. Many Asian nations are renowned for their robust manufacturing sectors and export-oriented economies, positioning them as vital nodes within global supply chains. These countries engage in the production and exportation of diverse goods, encompassing electronics, automobiles, textiles, and various other products. It is important to acknowledge that while Asian countries collectively wield significant economic influence, there exist notable variations among them in terms of economic development, political systems, and policy frameworks. Each country possesses unique strengths, faces distinct challenges, and contributes in its own way to the international economy.

China has undeniably achieved remarkable progress and emerged as a prominent global player across multiple domains. Its rapid economic growth, sizable population, and expanding influence in global affairs have contributed to its prominence. However, it is worth considering

Vietnam, which shares a similar communist political system with China, making it an interesting point of comparison. Both countries feature one-party rule, with their respective ruling communist parties exerting significant influence in governance. Consequently, it is meaningful to examine whether Vietnam has the potential to surpass China in the realm of the manufacturing industry.

China's industrialization history has been characterized by significant growth and transformation, particularly in the manufacturing industry. After the founding of the People's Republic of China in 1949, the government initiated a series of policies designed to promote industrialization and modernization.

In the 1950s, the government focused on developing heavy industry, such as steel and machinery production. This led to the establishment of large-scale state-owned enterprises and the construction of infrastructure such as roads, railways, and ports.

In the 1960s and 1970s, China experienced significant political and social upheaval, but the government continued to invest in industrial development. During this period, the country focused on developing basic industries and infrastructure, including energy, transportation, and telecommunications.

In the 1980s, the government introduced a set of economic reforms that aimed to transition the country from a centrally planned economy to a market-oriented economy. These reforms encouraged foreign investment, privatization of state-owned enterprises, and the development of the private sector.

Since the implementation of these reforms, China has experienced rapid industrialization, particularly in the manufacturing sector. The country has become a major player in the global economy, positioning itself as a leading producer and exporter of goods.

On the other side, after World War II, Vietnam, the neighbor of China, declared independence from France in 1945, but this was followed by a period of conflict between French colonial forces and the Vietnamese nationalist movement led by Ho Chi Minh.

In 1954, the Geneva Accords divided Vietnam into two parts: the communist-led north, which was assisted by China, and the prowestern south. In the 1960s, the Vietnam War erupted between the north and south, leading to significant destruction and loss of life.

After the war ended in 1975, Vietnam was unified under a socialist government and followed the path of economic development that China had chosen in the 1950s, which was to close itself off from the world.

As a result, the economy almost collapsed.

Facing alarming economic difficulties, in 1986, the government learned from china's experience and initiated a set of economic reforms known as Doi Moi, which aimed to transition the country from a centrally planned economy to a market-oriented economy. (Ha Thi Hong Van, 2010) These reforms were designed to encourage foreign investment, modernize industries, and promote exports.

Since the implementation of Doi Moi, Vietnam has experienced rapid industrialization and economic growth, which can be summarized as exploration in the 1980s, rapid takeoff in the 1990s, and steady development after 2000. The government has focused on developing the manufacturing sector, particularly in areas such as textiles, electronics, and food processing.

The manufacturing industry plays a crucial role in the economic development of countries around the world. Both China and Vietnam are located in East Asia and have experienced significant economic growth in recent years, largely due to their manufacturing industries. However, due to the significant difference in population, China's economy is much larger than that of Vietnam. In 2020, China's Gross Domestic Product (GDP) was approximately \$16.2 trillion, while Vietnam's GDP was approximately \$341 billion. China, in particular, has

emerged as a global leader in manufacturing, with its "Made in China 2025" initiative aimed at upgrading the country's manufacturing industry through the use of advanced technologies. Vietnam, on the other hand, has been actively pursuing a policy of industrialization and modernization, with a particular focus on the development of its manufacturing industry.

In the world's history, there were 4th industry transfer happened. From England to Europe and America, then moved to four Asian tigers, and now it's in mainland china. Therefore, is the 5th industry transfer happening and will Vietnam become the destination?

It is important to compare the manufacturing industries of China and Vietnam to gain a better understanding of their respective strengths and weaknesses. This study aims to provide such a comparison by examining the accounting policies, labor resource, infrastructure and overall policy framework. By doing so, the study aims to contribute to the understanding of the factors that contribute to the success of manufacturing industries and to inform future policy decisions in both countries.

1.2. Literature Review

China's rapid economic development has led to an increase in its global influence. Similarly, Vietnam, a small newly industrialized economy, has also gained economic strength and influence in the Asia-Pacific region. (Ma, Teng, Yuli Liu, and Yuejing Ge, 2017)

Manufacturing industries in China and Vietnam have undergone significant transformations in the past few decades, resulting in a significant impact on their respective economies. China is expected to face some competition with Vietnam, which is considered by many scholars to be an important competitor to China.

China has been a leading global manufacturing hub for the past few decades, with a diverse range of industries and a massive labor force. The country's manufacturing industry has been a significant contributor to its rapid economic growth, and it has become a global leader in many manufacturing sectors. Over the past two decades, the Chinese approach has thrived on the proximity of suppliers, resulting in faster, more cost–effective, and efficient production. (Niharika Mandhana, 2019) However, China's manufacturing industry has been facing challenges such as rising labor costs, increasing competition from other countries, and the need to move up the value chain.

In recent years, China has been focusing on developing high-tech industries such as artificial intelligence, robotics, and renewable energy, to stay ahead in the global race for innovation. Additionally, the country's "Made in China 2025" plan aims to transform China into a leading high-tech manufacturing hub, emphasizing the development of advanced materials, biotechnology, and next-generation information technology.

The modern era of economic reforms, also known as Doi Moi, was first introduced in Vietnam in 1986, eight years after China's reforms were launched in 1978. (Khuong, Vu Minh, 2015) Vietnam, highly appraised for sharing multiple similar characteristics with China, has emerged as an attractive manufacturing destination in recent years, with a significant rise in FDI, especially in the textile, footwear, and electronics industries. For example, Early movers such as Nike began produced shoes in Vietnam from the mid–1990s. In addition, South Korean giant Samsung has invested billions and moved some of its factories to Vietnam. (Niharika Mandhana, 2019) The country has a young, skilled labor force, favorable business environment, and a strategic location, making it an attractive destination for foreign companies looking to set up manufacturing operations.

The Vietnamese manufacturing industry has faced challenges such as inadequate infrastructure, limited access to financing, and skills

shortages. For instance, Khuong and Vu Minh (2015) found the disparity in growth between the two nations has been significant, not just in terms of GDP, but also concerning labor productivity and total factor productivity. These two factors are crucial for ensuring sustainable long-term economic performance. To overcome these challenges, Vietnam has been investing in infrastructure development and human capital to create a more conducive business environment for manufacturing.

Both China and Vietnam have successfully developed their manufacturing industries, attracting significant FDI and contributing to economic growth. However, there are significant differences between the two countries, with China having a more established and diverse manufacturing sector and Vietnam emerging as a new player in the industry. Despite similarities in their approach to industrialization, China and Vietnam have taken different paths in developing their manufacturing industries, with China focusing more on heavy industry and Vietnam on light manufacturing. According to Doan and T.M.K. (2021), Apple and many other countries had already or were considering relocating manufacturing facilities out of China to Vietnam. For roughly a decade, the rising wages in China have played a role in the trend of reshoring, as noted in the 2020 Trade and Development Report published by UNCTAD. However, some analysts hold the view that companies are unlikely to depart from China without significant effort. According to Kennemer and James (2020), the supply chains in China remain robust and convenient. In addition, the country's advanced and high-quality manufacturing industry, along with an apparently inexhaustible pool of skilled laborers, are also compelling factors that cannot be easily overlooked, as noted by Mandhana (2019). Nguyen (2020) also pointed out that Vietnam may not be an ideal location for businesses, as they continue to face challenges with infrastructure and materials, even after operating plants in the country for several years.

China has been moving up the value chain, focusing on high-tech industries, and investing in innovation to maintain its global manufacturing leadership. In contrast, Vietnam has been focusing on labor-intensive industries such as textiles, footwear, and electronics assembly.

1.3. Outline

There is a need to examine whether Vietnam can be the potential successor of China. Hence, I decided to work on this research, and the following research questions will be dealt with in this thesis:

a) What kind of advantages and disadvantages Vietnam in manufacturing industry?

- b) How big is the institution and resource difference between China and Vietnam?
- c) How prospective it is for Vietnam to replace China's share of manufacturing?
- d) Will Vietnam's mobile phone production industry replace China's?

 The goal of this study is to provide a deeper and more comprehensive view on Vietnam's chances facing investment relocating trend in China. More specifically, this research aimed to evaluate the probability for Vietnam and suggest improvements.

This thesis is structured in four sections. Chapter 1 gives an overall introduction of the thesis. Chapter 2 discusses the competitiveness comparison between China and Vietnam, which applies SWOT analysis into both macro and micro level. Chapter 3 presents the conclusions and limitation.

1.4. Methodology

SWOT is a strategic planning tool that stands for Strengths, Weaknesses, Opportunities, and Threats. The SWOT analysis involves identifying the internal and external factors that can impact the success or failure of an organization or project. Strengths and weaknesses are internal factors, while opportunities and threats are external factors.

The goal of a SWOT analysis is to identify Vietnam's strengths and weaknesses, as well as the opportunities and threats in the external environment. By identifying these factors, Vietnam can develop strategies to leverage its strengths, address its weaknesses, capitalize on opportunities, and mitigate threats.

Chapter 2. Competitiveness Comparison between China and Vietnam

2.1. Macro Level SWOT analysis

2.1.1 Strength

2.1.1.1 Geographic Location

Vietnam's strategic location in Southeast Asia has played a significant role in the development of its manufacturing industry. Situated along important shipping routes and close to major markets such as China, Japan, and South Korea, Vietnam has easy access to raw materials, components, and markets for its manufactured goods.

Furthermore, Vietnam's long coastline and deep-water ports have made it an attractive location for foreign investors looking to establish manufacturing facilities. This has led to the development of export-oriented industries such as textiles, electronics, and footwear, which have become major contributors to the country's economic growth.

Vietnam's location has also allowed it to take advantage of the increasing trend towards regionalization of supply chains, as companies seek to diversify their production bases and reduce their dependence on China. As a result, many multinational corporations have set up manufacturing operations in Vietnam, leading to a boom in exports and job creation.

Overall, Vietnam's strategic location has contributed significantly to the development of its manufacturing industry, making it a major player in the global economy.

2.1.1.2 Natural Resources

Vietnam is also rich in natural resources, which have contributed to its growing manufacturing industry.

In detail, Vietnam has significant coal, oil and gas reserves, which are used to power manufacturing activities, such as the production of

plastics, chemicals, and fertilizers. Vietnam has the third-largest coal reserves in Southeast Asia, with an estimated 4.8 billion tonnes of coal reserves. The majority of the coal is found in the northern regions of the country and is mainly used for power generation and cement production. Vietnam is also endowed with a wide range of mineral resources, including bauxite, iron ore, tin, gold, aluminum, steel, and electronics, are used in the production of various industrial products. For example, Vietnam has an estimated 2.2 billion tonnes of iron ore reserves, mostly located in the provinces of Lao Cai and Thanh Hoa. Besides, Vietnam has great potential for renewable energy, such as hydropower, wind, and solar power. The development of renewable energy sources has helped to reduce reliance on fossil fuels and promote sustainable manufacturing practices.

The availability of these natural resources has helped to attract foreign investment and support the growth of Vietnam's manufacturing industry. However, it is important to note that the extraction and use of natural resources can have negative environmental impacts if not managed properly.

2.1.1.3 Labor Cost

The labor costs in the manufacturing industry stand for a significant

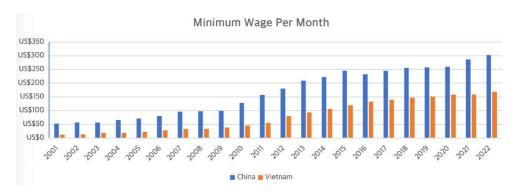
portion of the total production cost, therefore, manufacturers must manage their labor costs effectively. Since labor cost is an important part of cost management, the comparison of China and Vietnam's minimum wage is obviously quite necessary. It is widely known that Vietnam's labor costs are generally lower than those in China, which has made Vietnam a more attractive destination for labor–intensive industries, such as textiles, garments, and footwear. But the Vietnamese government blindly raised the level of workers' wages, which resulted in a rapid increase of 20% in the past few years.



Data source: the world bank

In general, the minimum wage in Vietnam is lower than in China. As the table above suggests, the minimum wage per month of the two countries have gradually risen up and the gap between the two

countries also grows larger.



Data source: the world bank

As of 2022, the minimum wage in Vietnam is around US\$170 per month, while in China, it just exceeds US\$300 per month. However, wages can vary depending on the industry and location. On average, Vietnam's labor costs are half as much as China's labor costs at US\$2.99 (VND 68.000) per hour compared to US\$6.50 (VND 148.000) per hour respectively.

In detail, minimum wage determination in Vietnam follows a four-tiered system that is adjusted and administered via regional zones. Zone 1 has the highest minimum wage, while Zone 4 has the lowest. Zone 1, which covers the urban areas of Hanoi and Ho Chi Minh City, is around US\$ 170. Zone 2, which covers the rural areas of Hanoi and Ho Chi Minh City, and the urban regions of Can Tho City, Da Nang City and Hai Phong City is around US\$ 150. Zone 3, which consists of the provincial cities and the districts of Bac Ninh Province, Bac Giang Province, Hai

Duong Province, and Vinh Phuc Province is around US\$ 140. Zone 4, which consists of the remaining localities, including the least developed parts of Vietnam is just US\$ 120. On average, Vietnam is still seen as a wage-competitive market in the region, especially when compared to neighboring countries. Vietnam has safely priced itself in the labor market while at the same time ensuring annual wage hikes. As a result, it has come to be one among the preferred alternative destinations for China-based companies looking to geographically diversify their operations because of rising input costs. With a large territory, the development level of each region is different, so the minimum wage is also different in China. For instance, Shenzhen has the highest minimum wage per month, which is almost US\$ 340, while the minimum wage per month in Yunnan is only US\$ 240.

2.1.1.4 Foreign Direct Investment

Both China and Vietnam have been successful in attracting foreign direct investment to their manufacturing industries, but the situation in each country is different.

China has been one of the largest recipients of FDI in the world for many years. The country's manufacturing industry has been a significant driver of FDI, with foreign companies investing in China to take advantage of its large market, skilled labor force, and favorable government policies. However, in recent years, China's manufacturing sector has faced challenges such as rising labor costs, increasing competition from other countries, and shutdown during COVID 19, which have led to some companies relocating their production to other countries.

Vietnam, on the other hand, has emerged as a significant player in the manufacturing industry in recent years, and has also been successful in attracting FDI. The country's low labor costs, favorable business environment, and strategic location have made it an attractive destination for foreign companies looking to set up manufacturing operations. In addition, the Vietnamese government has implemented policies to attract FDI, such as tax incentives, streamlined administrative procedures, and investment promotion programs.

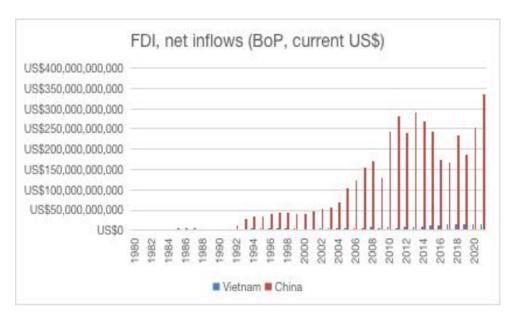
In terms of the types of industries that attract FDI in each country, China's manufacturing industry is more diverse and includes sectors such as electronics, automotive, and machinery, among others. Vietnam's manufacturing industry, on the other hand, has been focused on labor-intensive industries such as textiles, footwear, and electronics assembly.

In recent years, Vietnam has emerged as a notable destination for

foreign direct investment (FDI). Despite the impact of the COVID-19 pandemic on global investment flows, the country received a considerable \$28.5 billion in FDI in 2020. Among the industries attracting investment, the manufacturing sector has been the primary recipient, particularly in electronics, textiles and garments, footwear, and machinery. Vietnam's favorable location, competitive labor costs, and improving infrastructure have made it an appealing option for foreign investors. Many multinational companies, notably from Japan, South Korea, and Taiwan, have established a presence in Vietnam to leverage the country's growing domestic market and its low-cost manufacturing base for export to other countries. Moreover, Vietnam's signing of various trade agreements, such as the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) and the EU-Vietnam Free Trade Agreement (EVFTA), has further bolstered its attractiveness to foreign investors.

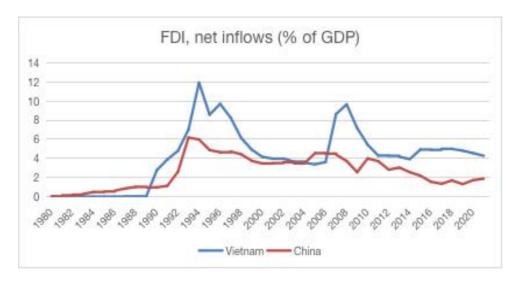
According to data from the Ministry of Planning and Investment of Vietnam, the country began attracting foreign investment in 1986 when it initiated the Doi Moi reforms to liberalize its economy. Between 1988 and 2020, Vietnam accumulated a total of \$413 billion in registered FDI, with the majority of investors coming from Asia, including Japan, South Korea, Singapore, and Taiwan. Despite receiving considerable foreign investment from these countries, Vietnam still faces a considerable challenge in achieving a level of net inflow of FDI comparable to that of

China.



Data source: the world bank

On the positive side, after 1990, Vietnam's FDI as a % of GDP is high, which indicates that foreign investment is a significant contributor to Vietnam's economy.



Data source: the world bank

In a word, both China and Vietnam's manufacturing industries have

benefited from FDI, but the situation in each country is different, with

China having a more established manufacturing sector and Vietnam

emerging as a new player in the industry. The considerable foreign

investment received in the past several years indicates Vietnam's

strength in development of manufacturing industry. It has provided

Vietnam's manufacturing sector with access to capital that it needs to

expand its operations, invest in new technologies, and increase

productivity. FDI has been a major source of investment for Vietnam's

manufacturing industry, which has helped to fuel its growth.

2.1.1.5 Policies

Vietnam has been proactively pursuing a policy of industrialization and

modernization, with a special emphasis on the progress of its

manufacturing industry. The nation has put into effect various policies

and measures to allure investments, stimulate innovation, and advance

the competitiveness of its manufacturing sector.

The creation of industrial zones has been a significant policy initiative

in this regard, as they provide designated areas of land for

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manufacturing activities. These zones offer a variety of incentives to draw in investors, such as tax exemptions, simplified customs procedures, and access to infrastructure and services. Vietnam presently has more than 300 industrial zones located throughout the country.

Furthermore, the Vietnamese government has adopted the Industry 4.0 Strategy to incentivize the advancement of high-tech industries and foster innovation. For instance, the nation has established various technology parks and incubators to back the progression of high-tech startups and businesses. The objective is to modernize the industry and enhance its efficiency, competitiveness, and sustainability.

Vietnam has also prioritized enhancing the quality of its workforce through the implementation of a national productivity strategy that emphasizes vocational training and education, with the goal of enhancing productivity in the manufacturing industry. The government has introduced policies to improve the quality of vocational training and increase the number of skilled workers in the country, which is essential for the development of a modern and competitive manufacturing industry.

Furthermore, the Supporting Industry Development Strategy is geared towards the growth of supporting industries such as raw materials,

components, and logistics, which play a critical role in the advancement of the manufacturing industry. The objective is to decrease Vietnam's dependence on imported inputs and raise the competitiveness of its manufacturing industry.

Overall, Vietnam's government has acknowledged the significance of the manufacturing industry as a catalyst for economic growth, and has executed several policies to promote its growth. Their strategy centers on luring investments, stimulating innovation, and enhancing the competitiveness of the sector. These measures have led to noteworthy outcomes, as Vietnam has become a crucial manufacturing center in the region, garnering substantial foreign investments and escalating its exports of manufactured products.

In 2015, the Chinese government launched "Made in 2025," a national strategy designed to modernize the country's manufacturing industry and establish a dominant position in advanced manufacturing worldwide. The strategy centers on harnessing cutting-edge technologies such as artificial intelligence, robotics, and the Internet of Things to revolutionize China's conventional manufacturing practices into a modern, high-tech industry.

The strategy of Made in 2025 comprises ten principal sectors, such as information technology, biopharmaceuticals, and aerospace, among

others, with the purpose of achieving various objectives by 2025. These targets encompass raising the domestic content in high-end equipment manufacturing to 40%, upgrading significant industries to international advanced levels, and gaining core competitiveness in the global manufacturing industry.

The Chinese government is heavily investing in research and development, promoting innovation, and implementing various policies and initiatives to accomplish these objectives. To illustrate, the government has set up special funds dedicated to research and development in advanced manufacturing technologies and initiated pilot demonstration projects in critical industries.

Criticism has arisen against the Made in 2025 strategy from certain Western nations who perceive it as a threat to their respective manufacturing industries. They assert that the strategy unjustly favors Chinese companies and may result in job losses in other countries. Moreover, critics have expressed apprehensions about the absence of intellectual property protection in China, which could facilitate Chinese companies in pilfering technology from foreign competitors.

Notwithstanding these criticisms, the Chinese government remains unwavering in its commitment to the Made in 2025 strategy, viewing it as an indispensable component of its agenda to revolutionize China's

economy and attain technological supremacy in the worldwide market.

All in all, both China and Vietnam have implemented policies aimed at promoting and developing their respective manufacturing industries, but their approaches differ. In the case of China, the Made in 2025 strategy is a comprehensive plan that outlines the country's approach to upgrading its manufacturing industry and becoming a dominant force in advanced manufacturing globally. While China has been focusing on innovation and high-tech industries, Vietnam has been attracting FDI in labor-intensive industries, investing in new technologies to transform its manufacturing sector and striving to increase its competitiveness in the manufacturing industry by enhancing its workforce skills. With each country facing its unique challenges and opportunities, the future of their respective manufacturing industries remains promising.

2.1.2 Weakness

UNIDO has developed the competitive industrial performance (CIP) index over the past few years to help assess national industrial performance in the global economy. The aim of this index is to capture the ability of countries to produce and export manufactures competitively in a single, intuitively appealing measure.

As the table below indicated, in the past 30 years, China always has a higher CIP score than Vietnam. But notably, Vietnam has climbed 64 positions, from 98th to 34nd in the global ranking, by far the biggest leap among ASEAN countries in the period 1990–2020. The gap between the top five countries in the region (Singapore, Malaysia, Thailand, Indonesia and the Philippines) has now narrowed significantly, which confirms Vietnam's tremendous achievements. Although Vietnam has made great progress, the gap between China and Vietnam is still huge.



Competitive Industrial Performance Index Score

	1990	1995	2000	2005	2015	2020
China	35	28	23	16	3	2
Vietnam	98	95	81	71	47	34

Competitive Industrial Performance Index Rank

The same with global competitiveness rank. Vietnam has improved its global competitiveness, but is nowhere near as competitive as China.

	2019	2018
China	28	28
Vietnam	67	77

Global Competitiveness Rank

This chapter of this article describes Vietnam's weakness in replacing China's share of manufacturing.

2.1.2.1 Accounting policies

A company's financial report can help investors decide whether it is a good investment, and whether there are any risks or uncertainties. However, without accounting standards, businesses could easily pretend to be financially successful. It would also be much harder to compare the performance of different companies. Thus, there are generally two sets of guidelines most companies follow when preparing their financial statements – one American and one international. Having these accounting standards in place enables investors to make informed decisions about where to invest their money by knowing businesses are accurately reporting their finances. Government agencies, small businesses, and companies are encouraged to prepare

financial statements in a transparent and accountable manner. By doing so, any holdings, transactions, and balances will be less subject to error and manipulation.

The International Accounting Standards Board (IASB) issues International Financial Reporting Standards, which are adopted by most countries. IFRS Standards are applied in over 160 countries in the world, including the European Union, Australia, South Korea, Singapore, Russia, Brazil, India, Malaysia, Pakistan, and so on. Consistent with this trend, China mandated IFRS adoption for all publicly traded firms beginning in 2007. Obviously, the primary goal of China's IFRS adoption is to commensurate with international practice and attract more foreign investment. With more than 10 years great efforts, China has integrated into the world trade despite different political system. However Vietnam has its own special accounting standards, which were based on International Accounting Standards (IAS) with many modifications to reflect Vietnamese legal and economic environments. VAS stands for Vietnamese Accounting Standards, which was issued by the Ministry of Finance of Vietnam and designed for application by companies operating in Vietnam, including both domestic and foreign-invested enterprises.

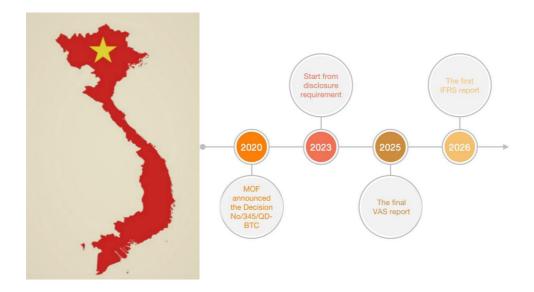
		Strength of auditing and accounting standards	Transparency
China	19	78	75

Vietnam 79 128 101

Source: World Economic Forum's report

According to the World Economic Forum's 2019 report, Vietnam lack transparency and strength of auditing and accounting standards, which was detrimental to operation of companies. It's well-known that investors are worrying about the transparency and unreliable financial statement report, however Vietnam does even worse.

Beginning from 2019, Vietnam introduced International Financial Reporting Standards (IFRS) for consolidated financial statements of listed companies and unlisted public companies with a certain level of capital. The government published the roadmap in 2019 as below. The convergence of IFRS and VAS is anticipated after 2025. This move is in line with international best practices. The adoption of IFRS is part of Vietnam's efforts aiming to harmonize its accounting and financial reporting practices with international standards and to enhance transparency and comparability of financial statements.



It's worth noting that the IFRS is not yet widely used in Vietnam. Many smaller companies and private enterprises in Vietnam continue to use Vietnamese Accounting Standards (VAS) as their financial reporting framework. However, the adoption of IFRS for listed companies and larger public companies is expected to increase transparency and comparability of financial statements in Vietnam, which could lead to wider adoption of IFRS over time. In order to enhance its accounting and financial reporting standards and attract more foreign investment, Vietnam has also been promoting the adoption of IFRS through training programs and other initiatives.

Sadly, there is no official data available on the exact number of companies in Vietnam that have transferred into IFRS since its adoption in January 2019. However, because it is mandatory for listed

companies and unlisted public companies with a certain level of capital to adopt IFRS, the number of listed companies can give us some inspiration roughly. According to the State Securities Commission of Vietnam, there were about 1,139 listed companies on the two stock exchanges in Vietnam, by December 2021. It's a fair guess that these companies have adopted IFRS for their consolidated financial statements. Besides, some large private companies in Vietnam have also adopted IFRS voluntarily to enhance their financial reporting performance. However, undoubtedly, the majority of small or private enterprises in Vietnam haven't made a transformation and continue to use Vietnamese Accounting Standards (VAS) for their financial reporting.

The coexistence of VAS and IFRS accounting systems in Vietnam can create some challenges and drawbacks. First of all, the use of two different accounting frameworks can be confusing and complex for investors, analysts, and other stakeholders who need to compare financial statements of different companies. It can also create difficulties for auditors and regulators who need to ensure the compliance with both frameworks. Secondly, companies that are required to use both VAS and IFRS may incur additional costs for training, software, and consulting service, which can be particularly burdensome for small and medium-sized enterprises (SMEs) with limited resources. Companies have to undergo a costly technical

conversion of their internal control and accounting system. Thirdly, there may be inconsistencies in the financial statements prepared under VAS and IFRS, which could lead to difficulties in comparing financial performance and making informed investment decisions. Also, the continued use of VAS by many smaller companies in Vietnam could limit the comparability of financial statements across the market. This could create challenges for investors seeking to allocate capital and evaluate investment opportunities. Overall, the coexistence of VAS and IFRS accounting systems in Vietnam can make a mess, but it's important and urgent for the government of Vietnam to promote deeper integration of Vietnamese financial market into global financial market. By doing so, an open, transparent and reliable market will facilitate the investment and trade of the manufacturing industry.

The major difference between IFRS and VAS

	IFRS		VAS
Presentation of financial statement	More disclosure		Less disclosure
Impairment review of business combinations	Compulsory impairment review	annual	

Events after the balance	Provide guidance				
sheet date					
PPE evaluation	Impairment write down of				
	PPE is allowed				
Cash flow	Restrictive	Flexible			
Fair value	Financial assets, financial	Historical value			
	liabilities are evaluated at				
	fair value.				
Cost method	FIFO, weighted average	LIFO, average			
	method				
Accounting period	Calender year	A 12-month period			
		beginning the first day of			
		each quarter			

The first part is presentation of financial statement. VAS requires less disclosure than IFRS. IFRS lists all the disclosure in detail and requires high-level analysis, including the key assumptions and estimating uncertainty of managements, an analysis of changes in equity, etc. The financial report is prepared by the company under the supervision of the management. The way that the management view, treat and operate the company is crucial. IFRS demands the management

explaining what kind of and why uncertainty exist. It will give investor a further understanding of the company's value.

The second major difference is about the way companies handle the impairment review of business combinations, or to say goodwill. Under VAS, goodwill is not subject to compulsory annual impairment review. Goodwill is an intangible asset that represents the value of a company's brand, reputation, and customer relationships. When a company acquires another company, it pays an added premium for the target company's goodwill, which is then recorded on the acquiring company's balance sheet. However, goodwill is subject to impairment, meaning that its value may decline over time due to changes in market conditions, competitive landscape, or other factors. If the value of goodwill declines, it may not be recoverable, which means that the acquiring company may need to write off the goodwill as a loss on its income statement. To ensure that companies are accurately reflecting their value on their balance sheets, it is important to subject goodwill to compulsory annual impairment review. This review involves assessing the value of the goodwill and comparing it to the company's market capitalization and other key financial metrics. By requiring annual impairment reviews of goodwill, companies can ensure that they are accurately reflecting the value of their intangible assets and are not overstating their financial performance. This can improve transparency for investors and help to prevent financial misstatements or fraud. That's why foreign countries worry about Vietnam's companies using VAS, because they may trigger many financial issues. Additionally, regular impairment reviews can help companies to identify potential risks or opportunities in their business operations, which can inform strategic decision—making and help to drive long—term growth and profitability. So it's highly recommended that companies be subject to compulsory annual impairment review.

The handling of the events incurred after the balance sheet date is the third difference. The balance sheet is a snapshot of a company's financial position at a specific point in time. However, some events, like the issuance of new equity or debt, changes in management, or significant litigation, etc., that are happened after the balance sheet date can give a significant impact on a company's financial position and future prospects. As a result, IFRS requires company to update certain important events that occur after the balance sheet date in their financial statements, for the goal of accuracy, timeliness and transparency. Reporting events after the balance sheet date ensures that the financial statements are accurate and up-to-date, reflecting the most current financial position of the company, and provides investors and other stakeholders with timely information that may impact their decision-making. In summary, reporting events after the balance sheet date is essential for ensuring the accuracy and completeness of financial statements, as well as providing stakeholders with timely and relevant information that can impact their decision—making. When certain events happen, the company has to report and decide whether to modify the financial statement. For VAS, when Vietnam companies published their financial statement, then they can wash their hands of the matter and neglect their responsibility followed.

Property, plant, and equipment (PPE) are long-term tangible assets used in the production of goods or services. PPE includes assets such as buildings, machinery, and vehicles. The measurement of PPE's value is also an crucial issue. Like all assets, the value of PPE can decrease over time due to factors such as wear and tear, obsolescence, or changes in market conditions. When the value of PPE declines below its carrying value, the asset is considered impaired. In such cases, a company must recognize an impairment loss by writing down the carrying value of the PPE on its balance sheet to its estimated fair value. If a company fails to recognize an impairment loss when it occurs, the company's financial statements may overstate the value of its assets, leading to potential misrepresentation of the company's financial performance. This requirement in IFRS can also prompt a company to dispose of underperforming assets and redirect resources towards more profitable investments. All in all, writing down the impairment of PPE is important for accurate financial reporting, compliance with accounting standards, and to improve decisionmaking and ensure efficient use of resources.

The fifth major difference refers to cash flow. IFRS is more restrictive in the way cash flow must be treated than VAS. Under IFRS, interest paid and dividends received must be classified as operating cash flows. Dividends must be classified as financing cash flows. By contrast, VAS allows companies more flexibility in how they treat dividends, interest, and overdrafts.

The sixth difference I am gonna to discuss is historical value. Historical value refers to the original cost of an asset or liability when it was acquired or incurred, whereas fair value is the estimated value of an asset or liability based on its current market conditions. There are some reasons why fair value (IFRS) should be used instead of historical value (VAS). Fair value considers current market conditions, such as supply and demand, interest rates, and other factors that may affect an asset's value. It provides a consistent basis for comparing the value of different assets or liabilities. This is particularly important when companies have assets or liabilities that are similar in nature but were acquired at different times or under different circumstances. However historical value may not accurately reflect the current value of an asset or liability. Fair value also provides a better indication of the potential risks and rewards associated with an asset or liability. This information can help companies make better-informed decisions about risk management and investment strategies.

Seventhly The LIFO method adopted by VAS is not encouraged. LIFO stands for Last-In, First-Out, which is a method of valuing inventory. Under LIFO, the most recent inventory items purchased or produced are assumed to be sold first, and the older inventory items are assumed to be retained in inventory. While LIFO can provide certain benefits, such as reducing the tax burden, there are also some drawbacks to using this method. LIFO can result in an inaccurate valuation of inventory since the older inventory items are not valued at current prices. This can make it difficult to determine the true cost of goods sold and the value of ending inventory. LIFO also requires extensive record-keeping and inventory tracking, which can increase administrative complexity and costs. This is because companies must keep track of the date and cost of every inventory item, as well as any adjustments made to inventory levels. Most importantly, in some cases, the physical flow of inventory may not match the LIFO assumption, especially in industries where products have a short shelf life or are subject to spoilage. In such cases, LIFO may not provide an accurate representation of the actual flow of goods. LIFO is most effective in reducing taxes in periods of rising prices or inflation, but it can result in distorted financial statements when used in deflationary or stable price environments.

Last but not least, VAS has different accounting period with other

international companies. IFRS recommends calender year, from January to December, while VAS allows any 12-month period beginning the first day of each quarter, for example, from April 1 to March 31 of the following year or July 1 to June 30 of the following year. It's not convenient for foreign companies to make a huge investment because companies need to make consolidated financial statement.

In conclusion, current Vietnam Accounting Standards does not conform with international practice. Fortunately, the government of Vietnam realized and started to implement IFRS, as China did several years ago. Transforming into IFRS can enhance the transparency and accuracy of Vietnam companies' financial statement and attract more foreign investment. However, important conversion issues should be addressed immediately and Vietnam's government should shoulder the responsibility of oversight role of the process to ensure that the quality expected of the process is in fact achieved.

2.1.2.2 Labor

Labor is an often discussed issue when we compare the competitiveness of China and Vietnam in the global market. Labor plays a crucial role in the manufacturing industry, as it is the primary resource that produces goods and services. The manufacturing industry involves the production of goods by transforming raw

materials into finished products through a series of processes. These processes require the use of machinery, tools, and equipment, but they also require labor to operate them.

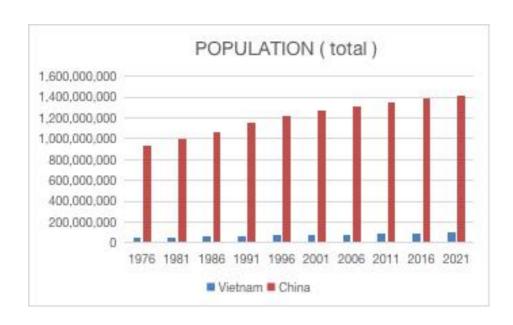
Both China and Vietnam are famous for abundant labor resources. China is the most populous country in the world, with a population that makes up approximately 18.47% of the global population. Vietnam, on the other hand, is the 15th most populous country in the world, with a population that makes up approximately 1.25% of the global population. As of 2022, the population of China is significantly larger than that of Vietnam. According to national development and reform commission of China, published by Jan 2023, China reported 1.41175 billion population by 2022, 850,000 fewer than in 2021. And according to the World Bank, the estimated population of Vietnam is just over 98 million people. This means that the population of China is approximately 14 times larger than that of Vietnam.

It is worth noting that both China and Vietnam have experienced significant changes in their population demographics over the past few decades. China's one-child policy, which was in place from 1979 to 2015, led to a decline in the country's population growth rate. Even though China's one-child policy has been abolished, affected by various factors such as changes in fertility concepts and delays in marriage and childbearing, the birth rate of China will continue to

decline in 2022. Vietnam, on the other hand, has seen a gradual increase in its population growth rate since it foundation.

	1976	1981	1986	1991	1996	2001	2006	2011	2016	2021
Vietnam	48,163,573	54,280,394	61,221,107	68,358,820	74,946,448	79,817,777	83,951,800	88,349,117	93,126,529	97,468,029
China	930,685,000	993,885,000	1,066,790,000	1,150,780,000	1,217,550,000	1,271,850,000	1,311,020,000	1,345,035,000	1,387,790,000	1,412,360,000

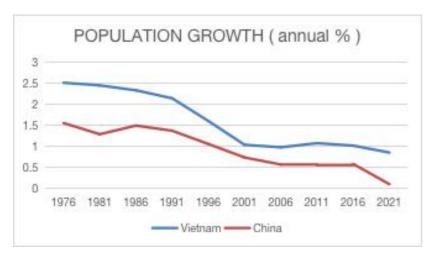
Population of Vietnam and China



Population Growth Rate of Vietnam and China

	1976	1981	1986	1991	1996	2001	2006	2011	2016	2021
Vietnam	2.510	2.447	2.330	2.138	1.597	1.028	0.969	1.067	1.009	0.844
China	1.547	1.281	1.487	1.364	1.048	0.726	0.558	0.546	0.573	0.089

Data Source: the World Bank

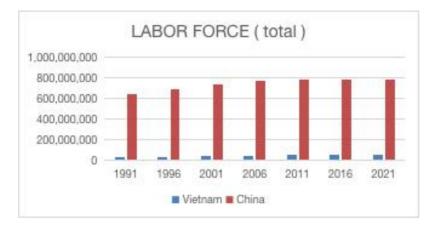


Data Source: the World Bank

As shown in the table, with modernization, the population growth rate of Vietnam and China continues to fall. In recent years, the population growth rate of the two countries were even below 1%.

	1991	1996	2001	2006	2011	2016	2021
Vietnam	32,756,000	36,896,000	40,502,000	45,207,000	51,233,000	54,678,000	55,035,000
China	647,241,000	691,090,000	739,360,000	774,287,000	778,323,000	780,524,000	780,371,000

The labor force of Vietnam and China



Data Source: the World Bank

China's labor force has grown rapidly in recent years due to its large population and the country's economic development. Vietnam's labor force has also grown, but at a slower rate than China's. As of 2021, China's labor force was estimated to be around 780 million, while Vietnam's labor force was around 55 million. The same with total population, in the aspect of labor force, China is also approximately 14 times larger than that of Vietnam. In terms of the size of the labor force as a percentage of the total population, in both China and Vietnam, the labor force makes up approximately 55% of the total population.

	Ease of finding skilled employees
China	41
Vietnam	96

Data Source: World Economic Forum

In addition, according to World Economic Forum's 2019 Global Competitiveness Report, China ranked 41 in the world in the aspect of ease of finding skilled employees, while Vietnam lagged far behind.

It is worth noting that both China and Vietnam face challenges related to their labor force, including labor shortages, skill gaps, and issues related to labor rights and working conditions. Although it's not as serious as western countries, China has an aging population, which may lead to a shortage of labor in the future. The situation in Vietnam,

on the other hand, is not very optimistic, but compared with China, it has a younger population, which could provide a significant advantage in the long term. Besides, in recent years, Vietnam has made significant progress in developing its workforce, with a focus on improving education and skills training. However, China still has a more highly skilled labor force, particularly in the areas of technology and engineering. Last not the least, both countries have labor laws in place to protect workers' rights. However, there have been reports of labor rights violations in both countries, such as forced labor and inadequate safety standards.

In summary, labor is a critical factor when we compare the competitiveness of each country in the global manufacturing industry market. Regarding the size of the labor force, Vietnam has almost 14 times less the number of workers compared to China. While China has a larger labor force and a more highly skilled workforce, Vietnam has a lower minimum wage and a younger population. Vietnam is more attractive for labor-intensive industries such as textiles, garments, and footwear. While China, on the other hand, has a larger pool of skilled and semi-skilled workers, especially in areas such as engineering and high-tech industries. Considering these facts, it's hard to affirm that Vietnam has any advantage in labor resource, compared with China. With 14 times population gap, Vietnam may not be competent to replace China or finish all the orders that belonged to China.

2.1.2.3 Infrastructure

Infrastructure is vital for the manufacturing industry as it provides the necessary physical, organizational, and technological support to facilitate the efficient and effective production of goods. Infrastructure such as roads, railways, airports, and ports play a critical role in the transportation of raw materials, finished products, and equipment. Efficient transportation infrastructure reduces lead times, lowers transportation costs, and improves the overall supply chain efficiency. As important manufacturing hubs in Asia, China and Vietnam have different levels of development and infrastructure their manufacturing industries. Without doubt, the scale of China's manufacturing industry, now is much larger than Vietnam's, because China has been the world's largest manufacturing economy for several years. Thus, from the perspective of infrastructure, China has a welldeveloped manufacturing infrastructure, with thousands of factories and manufacturing clusters. However, Vietnam's manufacturing industry is still developing and unfortunately is more concentrated in certain regions, especially in Ho Chi Minh City and Hanoi.

	Transport Infrastructure	Utility Infrastructure
China	24	65
Vietnam	66	87

Data Source: World Economic Forum

Road Ra	ailroad Airport	Shipping E	Electricity
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	connectivity	density	connectivity	connectivity	access
China	10	61	2	1	2
Vietnam	104	58	22	19	84

Data Source: World Economic Forum

The table above shows China has much greater infrastructure than Vietnam in terms of road, airport, shipping and electricity, published by World Economic Forum.

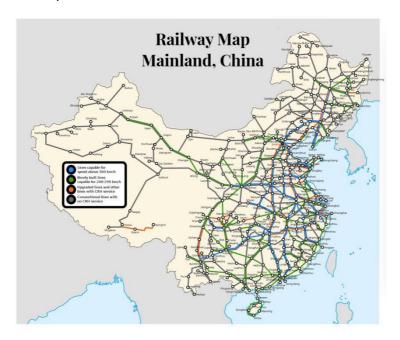
China's comprehensive transportation system, including railways, ports, highways, and airports, makes it easier for manufacturers to move goods and raw materials around the country.

	Airports	Major Ports	Minor ports	expressways	railways
China	Over 200	34	Over 2000	169,100km	155,000 km
Vietnam	33	10	Over 320	2237 km	3,159 km

Data Source: Wikipedia

China's first railway, the Songhu Line, was built in 1874 in Shanghai, symbolizing the beginning of modern transportation in China. Began in 1980s with the introduction of economic reforms named 'Open Door Policy', the Government of China realized that they needed an efficient system to move not only people but also goods across the country in order to keep the economy moving forward. This led to significant investment in infrastructure, particularly in transport and energy. In the

last few decades, the world has witnessed a massive upgrade of China's transport infrastructure, which also boosts related industries such as construction equipment, engineering, container security, and electronic. China has one of the world's most extensive transportation systems, with a total length of railways exceeding 150,000 km. Prior to 1950, there were only 21,800 km of railway lines, which concentrated in inland cities along major rivers or the more economically developed coastal areas. China is too big to implement projects, so it chose to neglect remote and rural areas in the first place. After decades of effort, China's railway system now has been dramatically improved and includes the world's largest high–speed rail network, with a total length of over 38,000 km, which connects major cities and regions across the country.



Updated 2022.12.30, Made by Howchou, wikipedia

Along with railway construction, from the late 1980s, China also began the construction of a modern highway network, which is still expanding today. China's expressway system has grown rapidly in recent years, with the total length of expressways in the country exceeding 160,000 km. All of those helped China to stimulate the economic growth.

China has numerous international ports, with some of the major ones being Shanghai Port, Shenzhen Port and Ningbo-Zhoushan Port. Shanghai Port, located on the eastern coast of China, is the world's largest and busiest container port, which handles over 40% of China's foreign trade.

China has over 200 commercial airports, with Beijing Daxing International Airport being one of the world's busiest airports, serving over 100 million passengers annually.

Not only traditional infrastructure like roads, railway, ports and airports, but also new infrastructure like energy and digital infrastructure construction all have undergone tremendously rapid development, which provided a massive employment boost in China over the next decade. China is a leader in digital infrastructure, which has a large and growing number of internet users, with over 1 billion Internet users. Enormous demand enabled China to become a global leader in areas such as e-commerce and mobile payments. Furthermore, in the area of

energy, China is the world's largest producer and consumer of electricity, with a total installed capacity of over 1.7 TW. China has made significant investments in renewable energy, including wind and solar, and is a leader in the production of electric vehicles.

Despite those achievement, recently, China has also been investing in new infrastructure projects. Most noteworthy is the Belt and Road Initiative, a testament to China's continued commitment to infrastructure development as a key driver of economic growth and development. It aims to build a large and convenient network of infrastructure across Asia and Europe.

Vietnam's infrastructure is has been developing rapidly in terms of both quantity and quality in recent years, with improvements being made in areas such as roads, bridges, and ports. However, compared with China, it's still a little bit lagging in every areas.

In detail, Vietnam's railway, owned and operated by Vietnam Railways, has a total of approximately 3,159 km, which connects major cities and regions throughout the country. The overall condition of railway infrastructure in Vietnam is quite poor and most of the network remains in need of rehabilitation and upgrading.



Picture Source: Wikipedia

		Rail lir	nes (total ro	ıte-km)		
	1996	2001	2006	2011	2016	2021
China	56678	59079	63411.7	72487	91675	109767
Vietnam	2646	2347	3147	2347	2581	3159

Data Source: the World Bank

Secondly, Vietnam has 222,179 km of roadways in total, including over 2,200 km of expressways. The country has set out plans for developing the network since 2000s. It planned to build more than 5,000 km of

expressways by 2030 and almost double that by 2050, a road network development plan envisages. It should be noted that Vietnam has taken 17 years to build 1,163 km of expressways, far short of the original goal to have 5,870 km built by 2020. Vietnam has only finished building 1,163 km of expressways by 2010 and another 1,074 km by 2020. The Ministry of Transport estimates the speed of expressway construction in Vietnam at 74 km per year on average, just 1.5% that of China. The Vietnam government attributed the slow progress to its limited financial resources, saying the state budget can only meet investment for partly upgrading the national highway system. In addition to the slow pace progress and difficulties in attracting investment, Vietnam's expressway network is not evenly distributed among regions. This has made the transportation of goods more difficult, increased logistics costs and exerted greater pressure on some route, resulting in chronic congestion. Meanwhile, many of the country's roads are still in need of repair and modernization. Many major roads are dangerous and slow to drive on due to outdated design. Many roads in Vietnam are narrow and poorly maintained. There are concerns about road safety, with Vietnam having one of the highest rates of traffic accidents in the world. Traffic congestion is a significant problem in Vietnam, with negative impacts on productivity. The roads in Vietnam, in particular, are often congested and in poor condition, especially in rural areas. Due to congestion and lack of safety, the average speed on the national roads is only 50 km per hour. This can lead to delays in the transportation of

goods and people, which can have an impact on the country's economy.

Thirdly, Vietnam has over 20 commercial airports, with the major airports located in Hanoi, Ho Chi Minh City, and Da Nang. The busiest airport is Tan Son Nhat International Airport in Ho Chi Minh City, serving over 40 million passengers annually. Compared to other Southeast Asian countries, Vietnam stands out with international airports facilitating transportation.

Fourthly, Vietnam is a coastal state, thus it has a number of seaports, including the deep water port of Cai Mep in southern Vietnam, which is the largest port in Vietnam and capable of handling large container ships. Other major ports include Hai Phong Port, which is a major gateway for trade with China and Da Nang Port which is used for trade with Southeast Asian countries.

Fifthly, the manufacturing industry is a heavy consumer of energy, and reliable and affordable energy supply is essential for the smooth functioning of the industry. Adequate power generation, transmission, and distribution infrastructure are therefore crucial for manufacturing plants to operate at maximum capacity and efficiency. Despite huge investment, traffic jams and electricity blackouts constantly bothered Vietnam's development. The country's electricity supply is heavily reliant on fossil fuels, and there are concerns about the sustainability

of this approach. Developing renewable energy sources, such as solar and wind power, could help to address this issue and reduce the country's dependence on imported fuels.

Last but not least, in today's digital age, manufacturing companies require high-speed internet connectivity, reliable telecommunications infrastructure, and data centers to store and process vast amounts of data. These infrastructure components are essential for efficient communication, data exchange, and supply chain management. The country has been investing heavily in expanding its broadband network, improving internet speeds, and promoting the adoption of new technologies. Despite these advancements, and there are significant disparities in access between urban and rural areas. Additionally, cybersecurity remains a concern, with Vietnam experiencing a high rate of cyberattacks in recent years.

Overall, infrastructure is vital for the manufacturing industry to thrive and remain competitive. It enables manufacturing companies to operate efficiently, reduce costs, and produce high-quality goods that meet customer demands. It's meaningless to compare the absolute figures because the size of the two countries is different. Vietnam has made significant progress in developing its infrastructure in recent years and has become an increasingly important hub for logistics and trade in Southeast Asia, but the country still faces some challenges

that need to be addressed. At present though, Vietnam's transport infrastructure is still weaker than China and there are a number of areas that need immediate attention. Infrastructure in Vietnam is still needed to fill the gaps and to accommodate the growing demand in many locations. It's needed to be further improved to facilitate the smooth flow of goods and people under a competitive environment and modernize infrastructure and management. Investing in transportation networks and developing renewable energy sources are all essential for Vietnam's continued growth and development.

2.1.3 Opportunities

The ongoing trade tensions between the US and China have made it more difficult and expensive for companies to do business in China. Tariffs on Chinese exports to the US have led some companies to shift their production to Vietnam to avoid these extra costs. Companies seek alternative production locations, with many choosing to move their operations from China to Vietnam. This has led to a significant increase in investment in Vietnam's manufacturing sector, particularly in areas such as electronics, textiles, and footwear. However, the trade tensions have also had negative effects on Vietnam's economy. The trade tensions have created uncertainty in the global market, leading to a slowdown in overall economic growth. Overall, while the trade

tensions between the US and China have created both opportunities and challenges for Vietnam's manufacturing industry, the Vietnamese government should grab the opportunities and work hard to diversify the country's trading partners and reduce its dependence on the US and China, which may help to mitigate some of the risks associated with the ongoing trade conflict.

In addition, Vietnam has been signing a number of free trade agreements with other countries and regions, such as the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) and the EU-Vietnam Free Trade Agreement (EVFTA). These agreements have helped Vietnam to expand its export markets and attract more foreign investment, thereby boosting the manufacturing industry.

Overall, these external opportunities provide Vietnam's manufacturing industry with a favorable environment for growth and expansion in the global market.

2.1.4 Threats

Relying solely on low wages as a competitive advantage is not a sustainable long-term strategy for Vietnam's manufacturing industry.

While Vietnam currently has lower labor costs compared to China, wages have been steadily increasing in recent years as the country's economy continues to grow and workers demand higher pay. Vietnam faces stiff competition from other low-cost manufacturing countries such as Bangladesh, Indonesia, and Cambodia, which could lead to price wars and reduced profit margins.

To remain competitive, Vietnam's manufacturing industry needs to focus on improving productivity, developing more advanced skills among its workforce, investing in technology and innovation, and creating a favorable business environment. This will require significant investment in education and training programs, as well as continued efforts to improve infrastructure and logistics, reduce bureaucratic hurdles, and enhance the country's legal and regulatory framework.

Additionally, Vietnam needs to diversify its manufacturing industry beyond low-cost labor-intensive industries such as textiles, footwear, and electronics, and move up the value chain towards higher-end industries such as automotive, aerospace, and biotechnology. This will require significant investments in research and development, as well as closer collaboration between businesses, academia, and the government.

Another problem is its dependence on imported raw materials and

components. Vietnam's manufacturing industry is heavily dependent on imported raw materials and components. Any disruptions in the global supply chain due to factors such as geopolitical tensions or natural disasters could severely impact the industry's production capabilities.

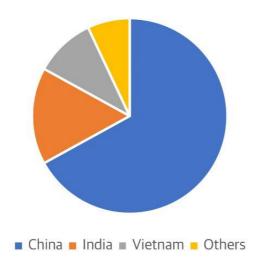
Finally, as concern for environmental protection grows, stricter regulations on emissions and waste disposal could increase production costs for Vietnamese manufacturers and limit their competitiveness.

2.2 Micro Application to Mobile Phone Industry

China has been the world's largest producer of mobile phones for several years. It has a well-established manufacturing infrastructure and is home to numerous large-scale electronics factories. Many major global smartphone brands, as well as domestic companies, have manufacturing operations in China. Vietnam, on the other hand, has been emerging as a popular manufacturing destination for mobile phones. The country has attracted significant investments from multinational corporations seeking to diversify their production bases and mitigate risks associated with relying heavily on China. Vietnamese manufacturing facilities primarily cater to international smartphone brands, and the country has experienced steady growth in mobile phone production.

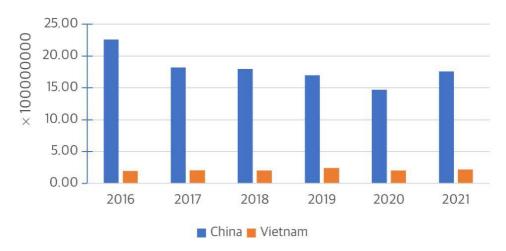
So far, China alone accounts for 67% of the world mobile phone production, which means two third of mobile phones were made in China. The second producer is India, accounting for 16%, and Vietnam ranks third in the world with 10% share.

The Share of Mobile Phone Production in the World



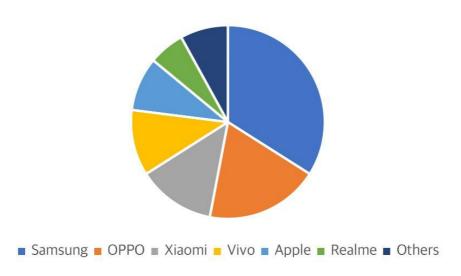
In detail, the annual production volume of mobile phones in China is between 1.7 billion and 2.2 billion. On the other hand, Vietnam's annual production volume of mobile phones is around 200 million.

Production Volume of Mobile Phones



Inside Vietnam, Samsung invested 20 billion dollars in Vietnam, as a result, Samsung occupies 34% of Vietnamese mobile phone market. Oppo, Xiaomi, Vivo and Realme, which are Chinese brand, together account for 49%.

Vietnam Mobile Phone's Share (%)



Vietnam's mobile phone manufacturing industry exhibits several notable strengths. One of its key advantages is its convenient geographic location, enabling easy access and efficient distribution of products to various regions. This advantageous positioning helps reduce logistical costs and transportation time, enhancing the competitiveness of the industry.

Moreover, Vietnam offers a substantial and cost-effective labor force, which is particularly appealing for labor-intensive industries such as mobile phone manufacturing. The availability of skilled workers proficient in electronics assembly and manufacturing processes further strengthens Vietnam's attractiveness as a manufacturing destination. This skilled labor pool contributes to the industry's efficiency and productivity, supporting the production of high-quality mobile phones.

Furthermore, the Vietnamese government has implemented a range of incentives aimed at attracting investment in mobile phone production. These incentives include tax breaks, reduced import and export duties, streamlined administrative procedures, and preferential land leasing policies. Such measures create a favorable business environment and encourage both domestic and foreign investors to establish or expand their mobile phone manufacturing operations in Vietnam.

These strengths position Vietnam's mobile phone manufacturing

industry competitively on the global stage, fostering its growth and attracting international brands and manufacturers to establish a presence in the country. Continued investments in infrastructure, research and development, and the nurturing of a skilled labor force will further enhance Vietnam's position as a leading destination for mobile phone production.

Several weakness hinder the development of Vietnam's mobile phone industry. Firstly, the labor quality in Vietnam raises concerns, characterized by an abundance of low-skilled labor but a shortage of high-skilled talent. This skill gap poses obstacles to achieving higher levels of technological sophistication and innovation within the industry.

Secondly, despite significant investments in infrastructure development, Vietnam's infrastructure remains relatively weak. For instance, frequent power outages have been a recurring issue in the country. The occurrence of power disruptions, particularly during hot weather, has impacted manufacturing operations, including major players like Samsung. Strengthening the reliability and stability of the power supply is crucial for ensuring uninterrupted production.

Thirdly, incompatible and complex procedures persist in Vietnam, encompassing not only accounting-related challenges but also concerns regarding customs procedures. Foreign companies operating

in Vietnam express frustration over the lengthy and time-consuming customs clearance processes, which often exceed common international practices. Streamlining and simplifying procedures would enhance operational efficiency and facilitate smoother business operations.

Lastly, market access represents a significant weakness for Vietnam's mobile phone industry. China, with its large population of mobile phone users, enjoys robust domestic demand for devices. While Vietnam has made efforts to improve market access through trade agreements, it still faces challenges in achieving the same level of connectivity and market penetration as China. Expanding market reach and effectively tapping into international markets would be crucial for the sustained growth of Vietnam's mobile phone industry.

Addressing these weaknesses will require concerted efforts from both the government and industry stakeholders. Enhancing the quality of the labor force, investing in infrastructure, streamlining procedures, and expanding market access are key areas that require attention to foster the long-term development and competitiveness of Vietnam's mobile phone industry.

Vietnam's mobile phone industry presents several significant opportunities for growth and development. One key opportunity arose

from the trade war, which prompted many mobile phone manufacturers to relocate their production to Vietnam. This shift led to a substantial influx of investment and increased manufacturing activities within Vietnam's mobile phone industry, positioning the country as an attractive alternative manufacturing hub.

Moreover, Vietnam's Free Trade Agreements (FTAs) play a crucial role in fostering the industry's development. For instance, the European Union-Vietnam Free Trade Agreement (EVFTA) has reduced tariffs on mobile phones, creating a more favorable trade environment between Vietnam and EU member states. This reduction in trade barriers enhances export opportunities and facilitates greater integration into global supply chains.

Furthermore, the global demand for mobile phones continues to grow steadily, offering Vietnamese manufacturers ample opportunities to tap into international markets. As consumers worldwide increasingly rely on mobile devices, Vietnamese manufacturers can capitalize on this expanding market and leverage their competitive advantages, such as cost-effective production and proximity to major consumer markets.

Seizing these opportunities requires continued investment in research and development, fostering innovation and technological advancement within the industry. Additionally, maintaining strong partnerships with global brands, ensuring product quality and reliability, and addressing any remaining challenges in infrastructure and logistics will contribute to sustaining and maximizing the potential of Vietnam's mobile phone industry in the global market.

On the other hand, the mobile phone industry in Vietnam does face certain challenges and threats that should be taken into consideration. Firstly, Vietnam's mobile phone production heavily relies on the import of components such as wires, plugs, and camera parts, which are predominantly sourced from China. Consequently, when China experienced a lockdown due to the Covid–19 pandemic, Vietnam's factories also faced disruptions and ceased operations. This dependency on external suppliers poses a risk to the continuity of mobile phone production in Vietnam.

Secondly, the mobile phone manufacturing industry is characterized by intense competition, with established players dominating the market. Vietnamese manufacturers encounter fierce competition from global brands as well as emerging low-cost manufacturing hubs within the region. This competitive landscape requires Vietnamese manufacturers to continuously enhance their capabilities and differentiate themselves to secure market share.

Thirdly, Vietnam's intellectual property protection regime is still

developing and may not be as comprehensive and effective as that of China. In the past, Vietnam has encountered challenges related to intellectual property infringement, which could deter foreign investors or potentially result in legal disputes. Strengthening intellectual property rights enforcement is crucial for ensuring a conducive environment for mobile phone manufacturing in Vietnam.

Lastly, the mobile phone industry is subject to rapid technological changes. Advancements in technology occur at a swift pace, necessitating Vietnamese manufacturers to remain agile and adaptable. Keeping up with these technological advancements is crucial to stay competitive in the industry and avoid being left behind by more innovative players. It is essential for investors and industry participants to be aware of these challenges and develop appropriate strategies to mitigate risks and capitalize on the opportunities presented by Vietnam's mobile phone production sector.

Chapter 3. Conclusion

3.1 Conclusion

Vietnam's strategic location in Southeast Asia provides it with easy access to major global markets, including China, Japan, South Korea, and other ASEAN countries. Along with its rich natural resources, low wage, increasing FDI and favorable policies which shows a positive attitude towards further opening of foreign trade, Vietnam becomes an ideal location for manufacturing companies looking to serve their markets.

Certain factors also put Vietnam as a 'China Alternative' in the short run into question. These potentially worrisome factors include the incompatible accounting policies, shortage of labor, competition from other low-cost countries, unskilled nature of its workers, and lack of robust infrastructure, which can make foreign companies' operations in Vietnam less smooth than they may have hoped. Vietnam's companies have faced criticism for lack of transparency and corruption because of different accounting policies. Besides, in terms of productivity and quality, while Vietnam offers cost-effective labor, China's workforce is approximately 14 times larger. Although wage increases in China have reduced their competitiveness, Chinese workers still possess higher skill levels and productivity, which contribute to sustaining their labor demand and maintaining their

advantage in these areas. Furthermore, Vietnam's infrastructure can can impede investment and impact the efficiency of transportation and operations. Though the Vietnamese government has pushed for infrastructure improvements, China appears to have the upper hand in this area.

Nonetheless, the opportunities for Vietnam are wide-opened. The trade war is not going to end soon and so far Vietnam is the biggest beneficiary, although it could be an immediate, short-term effect as firms had to make adjustments in a hurry. The redirection from Japan and Korea is also visible since there have been governmental encouragement and incentives for firms to move to Southeast Asia. Also, Vietnam's participation in numerous free trade agreements with various countries and regions presents a promising avenue for boosting the manufacturing industry and attracting increased foreign investment.

On the contrary, the threats are as real as it gets. Global supply chains have become vulnerable to complex geopolitical challenges and crises, highlighting the need for increased resilience and assurance. While complete disruptions to international trade are unlikely, it is imperative to address these vulnerabilities and establish more robust systems. Furthermore, relying solely on low wages as a competitive advantage is not a sustainable long-term strategy for Vietnam's manufacturing industry. Vietnam faces stiff competition from other low-cost

manufacturing countries such as Bangladesh, Indonesia, and Cambodia, which could lead to price wars and reduced profit margins. As an emerging developing country, Vietnam should also pay attention on the environment issue happened in the process of manufacturing.

In detail, Vietnam's mobile phone production industry, while growing and gaining significance, cannot fully replace China's dominant position in the global market. China has long been recognized as the world's largest producer of mobile phones, boasting a well-established manufacturing infrastructure, extensive supply chains, and a vast pool of skilled labor. While Vietnam has made significant strides in attracting mobile phone manufacturing investments, it faces certain limitations in challenging China's position. These limitations include factors such as labor quality and weak infrastructure. Vietnam's industry is still developing and may not match China's level of production volume, manufacturing efficiency, and overall industry maturity.

In conclusion, it is unlikely that Vietnam will completely replace China's share of manufacturing in the near future, as China has developed a highly efficient and integrated manufacturing ecosystem over several decades. It's noted that Vietnam remains behind China when it comes to operations. China may no longer be the cheapest manufacturing destination in Asia, but China still offers solid infrastructure, strong

supply networks and skilled labor all at a reasonable price. However, Vietnam's manufacturing industry has been growing rapidly in recent years and has the potential to capture a larger share of the global market as China's labor costs and other factors increase.

3.2 Limitation

This paper only focuses solely on comparing China's manufacturing share with that of Vietnam, with the exclusion of other Asian countries from the analysis. By disregarding the manufacturing performance and potential of countries such as India, Japan, South Korea, and others, the analysis may overlook significant factors that could influence the future trajectory of the manufacturing industry in the region. Considering the diverse manufacturing capabilities, market dynamics, and economic policies of other Asian countries could provide a more comprehensive understanding of the broader context within which Vietnam's manufacturing growth occurs. Therefore, it is important to acknowledge this limitation and recognize that the conclusions drawn may not fully capture the complexity of the Asian manufacturing landscape.

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Abstract

중국 경제는 전 세계 생산량의 3분의 1 이상을 차지하는 제조업 강국으로 번창하고 있습니다. 최근 베트남의 놀라운 성장은 특히 공장을 새로운 목적지로 아웃소싱하려는 제조업체들에게 국제 지도에서 베트남을 더 잘 보이게 만들었습니다. 많은 전문가들은 오늘날 베트남의 제조업의지위가 10년 혹은 그 이상 전의 중국의 그것과 매우 유사하다고 생각합니다. 본 논문은 현재 베트남의 제조업 발전이 가장 주목받고 있다는 사실을 염두에 두고 SWOT 분석을 적용하여 베트남 제조업의 잠재력을 탐색하고자 합니다.