

# **Working Paper 2023.1.1.04** - Vol 1, No 1

# BIỂU HIỆN NHIỄM CĂN BỆNH HÀ LAN Ở VIỆT NAM VÀ BÀI HỌC KINH NGHIÊM TỪ CÁC NƯỚC ĐANG PHÁT TRIỂN KHÁC

Nguyễn Quỳnh Mai<sup>1</sup>, Vũ Thị Minh Nhung, Nguyễn Thị Thu Hà, Vũ Phương Thảo, Nguyễn Thi Bích Thoa, Nguyễn Vi Hiền, Đại Thi Tuyết Chinh

Sinh viên K59 Kinh tế đối ngoại - Viên Kinh tế và Kinh doanh quốc tế Trường Đại học Ngoại thương, Hà Nội, Việt Nam

# Bùi Quỳnh Chi

Sinh viên K60 Kinh tế đối ngoại - Viện Kinh tế và Kinh doanh quốc tế Trường Đại học Ngoại thương, Hà Nội, Việt Nam

# Nguyễn Thị Hải Yến

Giảng viên Khoa Kinh tế quốc tế Trường Đại học Ngoại thương, Hà Nội, Việt Nam

## Tóm tắt

Căn bệnh Hà Lan thường xuyên được nhắc đến trong các nghiên cứu như lời nguyên tài nguyên và là lời giải thích thường xuyên cho tình trang kinh tế kém hiệu quả ở nhiều quốc gia giàu tài nguyên. Bài viết này xem xét các tác đông kinh tế của nguồn đầu tư nước ngoài và xuất khẩu dầu mỏ dưới góc đô Căn bệnh Hà Lan, tập trung vào nền kinh tế Việt Nam. Việt Nam được đối tương chính của nghiên cứu vì quốc gia này đã thu được giá tri kiều hối khá cao và xuất khẩu một lượng lớn dầu mỏ. Nhóm tác giả không tìm thấy bằng chứng nào cho thấy Việt Nam mắc phải Căn bệnh Hà Lan. Tuy nhiên, mục đích của bài viết là điều tra các dấu hiệu của căn bênh Hà Lan ở Việt Nam và cuối cùng là đưa ra khuyến nghi để Việt Nam tránh khỏi căn bệnh Hà Lan.

**Từ khóa:** Căn bênh Hà Lan, nước đang phát triển, xuất khẩu dầu mỏ, FDI

# SIGNS OF DUTCH DISEASE INFECTION IN VIETNAM AND LESSONS FROM OTHER DEVELOPING COUNTRIES

#### **Abstract**

The Dutch disease is regularly evoked in the resource curse literature and remains a frequent explanation for the poor economic performance found in many resource-rich countries. This paper

<sup>&</sup>lt;sup>1</sup> Tác giả liên hệ, Email: mainq.ftu@gmail.com

examined the economic impacts of foreign aid and oil export from the Dutch-Disease perspective, focusing on the Vietnam economy. Vietnam was targeted in this study since the country has obtained a quite high value of remittances and exported a large amount of oil. We found no evidence that Vietnam has suffered from the Dutch Disease. However, the purpose of the paper is to investigate signs of the Dutch disease in Vietnam and ultimately, give recommendations to the country to avoid Dutch disease.

**Keyword:** Dutch disease, developing countries, oil export, FDI

#### Introduction

Economic activities, especially export activities in developing countries are highly dependent on natural resources. Although this natural resource is increasingly scarce, some developing countries still have large reserves of minerals, forests and other natural resources that have not been exploited for the production of raw products. There have been many countries as evidence for shortening the process of capital accumulation by exploiting the raw resources available in a rational way.

However, not all countries can do this, although the availability of natural resources is an important asset for economic development, but sometimes it is the cause of economic stagnation. Excessive exploitation and export of natural resources will cause unpredictable consequences. This phenomenon is known as the "Dutch Disease".

The "Dutch disease" causes countries to have to rely too much on imported goods, the economy is seriously imbalanced, it can also cause the country's economy to fall into a state of declining industrialization to the point that it is difficult to recover. As a developing country with rich natural resources, although not yet suffering from "Dutch disease", Vietnam needs to take preventive measures.

#### 1. Theoretical framework of the Dutch disease

#### 1.1 Definition of Dutch disease

The Dutch disease is a common occurrence in developing countries, where the emphasis on extracting natural resources for export often destroys or severely limits the development of the manufacturing sector. According to the Handbook of development economics the Dutch disease is defined as: "The deindustrialization of a nation's economy that occurs when the discovery of a natural resource raises the value of that nation's currency, making manufactured goods less competitive with other nations, increasing imports and decreasing exports."

Initially, the Dutch disease only referred to the exploitation of resources, but later it was expanded to refer to all the huge collection of foreign currency, including both rising prices of exports and foreign investment.

#### 1.2. Causes of the Dutch disease

The Economist used the term in 1977 to describe the disaster that befell the Dutch economy. In 1959, the Netherlands discovered large gas reserves. That caused exports to skyrocket. From 1937 to 1945, gas exports increased by 10% of total export value and by 4% of GNP. But The Economist realized that the Dutch economy looked good on the outside, but inside it was incubating. From 1970 to 1977, unemployment increased from 1.1% to 5.1%. Investments from large corporations turned upside down. The cause stems from the appreciation of the Guilder, the Dutch currency at that time.

When the gas source was fully exploited, the money source became insufficient to meet the needs of national spending, domestic demand fell, and the Dutch economy faced numerous difficulties when it must absorb a large amount of foreign currency gained from exports. Domestic goods became more expensive as the domestic currency appreciated, losing competitiveness with foreign goods and reducing exports of traditional manufacturing industries such as agriculture and electronics. Domestic production costs, the unemployment rate rose while income growth slowed. As a result, the inflation rate increased from 2% in 1970 to 10% in 1975, while the GNP rate fell from 5% to 1% and unemployment rose from 1.1% (1970) to 5.1%(1977), as well as capital investment in the country dropped. This caused the Dutch economy to stagnate, which had serious ramifications.

Therefore, the unemployment rate increased. And in a move to prevent the currency from appreciating too quickly, the Dutch government has kept interest rates low. That causes domestic investment to decline and money to flow abroad, seriously affecting future economic prospects.

#### 2. Literature review

#### 2.1. Dutch disease in Venezuela

Venezuela is a recent example of one of the worst cases of Dutch disease in the world. The country's economy went down tragically after a short growth since the oil discovery in 1922. With its oil extraction at large quantities, the country experienced a surge in GDP (during the 1950s and 1960s, Venezuela was one of the 20 wealthiest countries in the world measured in per capita income) and appreciation in the value of the national currency- the Bolivar. The unexpectedly large amount of money was spent on consumption and international support rather than long-term factors such as health, education, infrastructure, modernization, and saving for future generations (Ausman, 2019). As a result, Venezuela's economy became vulnerable and dependent on oil prices. After the oil crisis, the country's economy faced a meltdown. Production decreased by half, inflation rose at an alarming rate, and people suffered from shortages in food, medicine, and even electricity. The Bolivar, seen as a strong currency at that time, was expected to bring benefits to the country by creating larger foreign reserves and higher purchasing power for technological goods. However, a research by J Lau and Nicolas Maduro in 2022 suggested that a strong Bolivar created contrary effects, as Venezuelan exports became less competitive while imports became cheaper, leading to a current account deficit characterized by balance of payment problems.

Several reasons were analyzed for such bad outcomes of Dutch disease in Venezuela. It stems from bad politics, bad policy, and corruption. According to Elain Schwartz, 2022; when the price of oil went down, the Venezuelan economy had no shock absorbers because the president - Chavez had distorted all market activity through price controls and expropriation. Land and businesses were massively taken over and private investment had been systematically destroyed. Finding a remedy for Venezuela's situation, Jame Ausman suggested that bold reforms are needed. Instead of waiting for government subsidies, citizens must get educated to get a job by themselves, thus creating both their and the country's initial power. The government must reduce its influence and interference in the economy and place more attention on essential public goods such as health care, education, security, and infrastructure. Finally, the country must encourage private investment with transparent policies and legal protection, as well as embrace modernity instead of trying to live off non-reusable resources with a short-term vision.

#### 2.2. Dutch disease in Russia

Russia is one of the major producers of natural resources. It is estimated to hold the world's largest proven natural gas, third-largest crude oil producer at 12% of global supply in 2020, and sixth-largest proven oil reserves (according to Statistical Review of World Energy 2021). However, The Russian economy had not been utilizing its full potential and is increasingly dependent on its petroleum and natural gas exports, and there had been some symptoms of the Dutch disease. First of all, the proportion of fuel exports in Russia's export of goods climbed from around 51% in 2000 to 70% in 2012 (according to World Bank). Fuel exports also rose faster than the price of oil. In contrast, in 2000 the manufacturing industry accounted for 24% of goods exports, while the 2012 figure was just 14%. The manufacturing industry has also not yet been able to compensate for the slump in exports in 2009. Employment figures likewise showed a decline in the significance of the manufacturing industry. While 18% of all employees worked in these sectors in 2005, the current figure stands at just 15% (source: Rosstat). Mining, on the other hand, saw a rise in its share of employment from 1.8% to 2.2%.

Moreover, the price of crude oil climbed substantially between 2000 and 2008. The strong slump during the economic crisis in 2009 was also quickly recovered in the two years that followed. This development is by all means believed to have been an incentive for the extraction and export of crude oil and petroleum products in Russia. At the same time, the real effective exchange rate has seen a rising trend, and the ability to compete internationally has deteriorated accordingly. In terms of fuels, not only crude oil and natural gas, but also products from the processing of petroleum are exported.

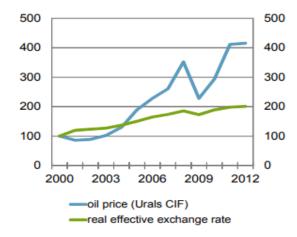


Figure 1. Oil prices and exchange rate of Russia

Source: Rosstat (2012)

The real gross value added in these economic sectors has increased significantly faster than in the manufacturing industry on the whole. The slump in 2009 was also far milder in these segments. Interestingly, the value added in the extraction of petroleum and natural gas rose at a more subdued rate despite higher production volumes and has even seen declines at times.

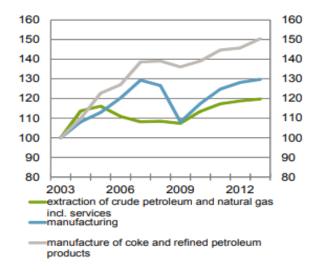


Figure 2. Real gross value added

**Source:** Rosstat (2012)

Given the one-sided focus of its exports on fuels, the Russian economy would suffer from a weak oil price or a slump in demand for petroleum and natural gas. (Katrin, 2014)

Recently, Russia has been infected with the Dutch disease and the symptoms include: cheap imports that drive Russian domestic producers out of business and the falling competitiveness of exports that leads to a ballooning currency account deficit. Sluggish economic growth and falling tax revenues cause balance of payment problems and big budget deficits. The ruble has been

artificially inflated by the almost total collapse of imports and the budget rule which has been suspended.

# Russia RUB vs USD Russia RUB vs EUR 125 100

Figure 3. Russia RUB vs USD and EUR

Russia RUB vs USD

Source: CBR

50

To conclude, in the period of 2000-2014, the Russian economy did have the symptoms of the Dutch disease but did not get infected. The symptoms have become clearer recently and the country's economy seems to have caught the disease.

Oct 2021

## 2.3. Dutch disease in Bangladesh

Remittances have been essential to Bangladesh's economic progress since the early 2000s and it is one of the largest exporters of labor in South Asia. In 2008, Bangladesh was responsible for 13.5% of all remittances to South Asia and around 2.5% of all remittances worldwide. Remittances from employees climbed from USD 24 million in 1976 to USD 1.65 billion in 2011, accounting for more than 10% of the nation's GDP. In 2021, the country was the 7<sup>th</sup> highest recipient of remittance in the world with almost \$22.1 billion in 2021 and was the third highest recipient of remittance in South Asia. (*World Bank*, 2022)

Development economists have maintained for a while that impoverished nations need to get a "big push" in order to escape a cycle of poverty that feeds on itself (*Murphy, Schleifer & Vishny*). Therefore, significant monetary inflows resulting from remittances or aid ought to overcome all kinds of barriers to economic growth and provide the necessary "big push".

Many empirical studies (Fazle Rabbi, Chowdhury, and Mohammad Zahid Hasan, 2013) however, suggest the opposite: that a sizable capital inflow may result in an appreciation in the

real exchange rate, undermining the competitiveness of the export sector. This is known as the "Dutch Disease effect," and it may be caused by a significant capital inflow.

Several researches have been conducted to find out if Bangladesh the flow of remittances are having an adverse effect on the economy of Bangladesh through Dutch Disease. Although there are conflicting views on this matter, the popularity of economists and researchers agree that there exists an adverse effect on the economy of Bangladesh through Dutch Disease due to the flow of remittances.

Also, for the situation of Dutch Disease and its symptoms in Bangladesh, we have found some recommendations for the country to reduce the adverse effects:

The first one is to keep the exchange rate nominally fixed or almost fixed through foreign exchange market intervention. So, developing countries like Bangladesh can gain some positive benefits from this type of occasional intervention in the foreign exchange market. For the last few years, policy actions of the authorities in Bangladesh have also chosen this measure.

Second, as the significant effects of some of the fundamental determinants on its real exchange rate, such as the terms of trade, are beyond the direct control of policy makers. A recent study shows that the terms of trade significantly shrink the trade competitiveness of Bangladesh. Therefore, the authorities can reduce the impact of such determinants by developing policies to encourage the diversification of tradable goods in the long run.

The last one, the government can reduce the adverse Dutch Diseases effect of remittances flow in the economy by increasing the trade competitiveness of Bangladesh.

#### 2.4. Dutch disease in China

In China, the "Dutch disease" stems from huge exports of goods that require a lot of labor plus abundant investment capital from abroad - is a factor that affects not only the exchange rate but also the process of government decision-making. Meanwhile, financial institutions are not yet complete in response to this situation. The amount of foreign currency poured in continuously while the billion exchange rates are still overvalued and relatively fixed, along with weak financial institutions that not only cost the central government the ability to contain the ongoing investment boom, but this situation also encourages rent-seeking, corruption and injustice in the countryside. Moreover, with foreign currency reserves of over one trillion USD, the Chinese government finds it difficult to cool down the economy. At present, the amount of investment accounts for 40% of GDP.

FDI poured into the Chinese market, excluding FDI poured into the trucking sector, reaching 74.8 billion USD in 2007, an increase of 13.6% compared to 2006. At the end of 2008, due to the global economic recession, FDI inflows from countries around the world tended to decline sharply, but the amount of capital flowing into China still increased by 23.6% to 92.4 billion USD. With the lingering impact of the biggest economic and financial crisis in 80 years, global foreign direct investment in 2009 continued to decline by 38.7% compared to 2008, down to \$1.040 billion, of

which China still held the second position after the US, with a total attracted FDI of \$90 billion (down only 2.6%).

In 2021, foreign direct investment into China increased rapidly to a record high, 181 billion USD, according to information released by the Ministry of Commerce of China compared to 2020, foreign direct investment in China of 144 billion USD. China is gradually positioning itself as a reliable harbinger for foreign investors. But it is also the large amount of foreign investment that has caused significant changes to China's social economy such as: high inflation, widening gap between rich and poor, unbalanced development among regions, serious environmental pollution, etc. Does China still have to deal with attracting FDI for the sustainable development of the economy?

China has implemented a policy towards clean FDI and minimized FDI projects with bad effects. Specifically, China has implemented the following policies to realize its line:

"The Chinese government promulgates reasonable policies to perfect the equal production structure among domestic industries and regions, with specific investment strategies in each period and investment guidelines for foreign investors, foreign flavors and a guide to the manufacturing industry to attract FDI."

In the early period of opening up, China established 4 special economic zones, opened 14 coastal cities, and promoted the attraction of foreign capital and technology with tax, land, and labor incentives. During this period, FDI in China mainly invests in processing, manufacturing, and labor-intensive industries. At the same time, China actively guide foreign traders to invest in this locality by taking measures such as composing "the list of dominant manufacturing industries of the Central and Western regions, calling for foreign traders to invest", increasing a properly domestic credit capital, foreign government loans and concessional loans from international monetary institutions that will mainly be used in the construction of infrastructure works, insurance works, key environmental protection, environmentally friendly projects, carbon industry; for items on the list of items in which foreign investment is encouraged, if investments are made in central and western China, after the end of the period when you are entitled to corporate income tax incentives, you will continue to receive a 15% corporate income tax reduction for the next 3 years.

In the period 1992 - 2000, the policy of building a market economic institution has been promoted, and foreign investment in China has increased rapidly. In 1993, China became one of the countries receiving the most FDI in the world (after the United States). The method of "taking advantage of foreign capital" of China in this period is to contribute capital with foreign companies, encouraging FDI enterprises to research and experiment in China. Since 1995, China's FDI has focused on industry and construction (accounting for about 70%), in which the manufacturing industry accounts for a large proportion.

After joining the World Trade Organization (WTO) at the end of 2001, China's FDI attraction policy has been adjusted in line with WTO regulations with the gradual opening to attract FDI inward services, real estate, currency, etc.

In the period of 2010 - 2020, China clearly stated its view of attracting FDI in high-tech industries, management experience, and high-quality human resources. China also made amendments to the "List of guidelines for foreign investment industries" and allowed local governments to approve investment projects from US\$100 million to US\$300 million.

At the same time, the government issued many preferential policies on credit such as: Foreign-invested enterprises in China that need capital will be able to borrow capital from banks in China with terms, interest rates and loan fees basically applied as Chinese enterprises; The foreign currency capital of these units can be used as collateral for loans at overseas Chinese bank branches; Foreign enterprises in China, if qualified, may apply for permission to issue shares on the basis of the principle of initiative and satisfaction.

The government has built a fairly strict legal system on environmental standards and legal procedures for foreign investment activities, which has partly helped this country to filter out clean FDI capital sources to ensure the safety of foreign investors and sustainable development. In recent times, due to the serious environmental damage caused by the illegal mining industry, the country has introduced policies to strengthen the supervision, control of the metallurgical industry and cut mineral exports, such as the recent global recession that has made many countries suffer due to a sharp drop in FDI inflows, but this country has been bold with an economic revival plan of 486 USD, more than twice the EU's. The decision to use 70% of its public investment program in infrastructure to modernize infrastructure and create jobs for millions of workers has made China what huge FDI suckers around the world during a really difficult period of the global economy.

#### 3. The situation of Dutch disease in Vietnam

Although not really infected with Dutch disease, in fact, Vietnam also had a period of time when it started showing signs of infection.

## 3.1. The threats of Dutch disease in Vietnam from oil export

After the Doi Moi policy, Vietnam has had very effective export promotion policies and has achieved great growth in terms of scale and growth rate, contributing a significant part to GDP as well as balancing the balance of payments. Not only did the total export volume increase, Vietnam's exports also had a significant change in the structure of export products with the strong increase of heavy industry and minerals in the structure of export items, especially crude oil. The indication of the dutch disease comes from the rapid increase in crude oil exports.

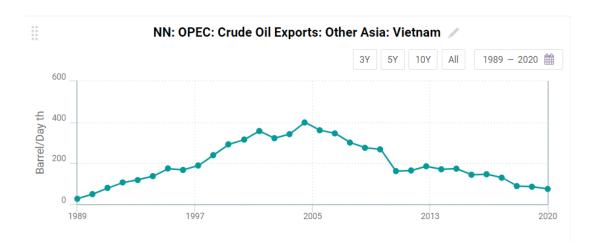


Figure 4. Crude oil exports of Vietnam

Source: CEIC (2021)

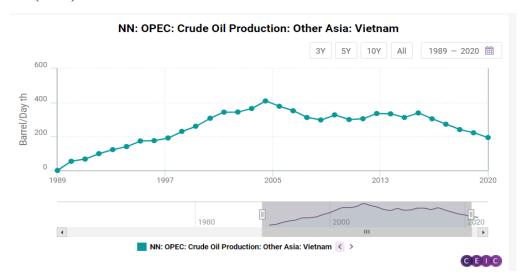


Figure 5. Crude oil production of Vietnam

Source: CEIC (2021)

In 1989, Vietnam started exporting crude oil with the amount of 1.5 million tons. Before 2009, crude oil production and exports were always approximately the same and at a very high level. However, since 2009, Vietnam's crude oil exports have decreased significantly, due to the economic crisis in 2009 and the start of operation of Dung Quat oil refinery. The volume of crude oil exported from 2010 to now has only ranged from 8-9 million tons while the production volume also ranges from 15 to 17 million tons (CEIC, 2021).

**Table 1.** Crude oil exports value of Vietnam (Million USD)

Year	Crude oil exports value (Million USD)
2004	5,666
2005	7,387
2006	8,323
2007	8,447
2008	10,450
2009	6,210
2010	4,944
2011	7,236
2012	8,212
2013	7,278
2014	7,229
2015	3,720
2016	2,361
2017	2,885
2018	2,196

**Source:** General Department of Vietnam customs

During the period 2004-2008, the value of Vietnam's crude oil exports increased rapidly. In just four years, the value of Vietnam's crude oil has nearly doubled, which has had a significant impact on the economy. During this period, crude oil exports increased sharply, making the economy dependent on oil, revenue from the oil and gas industry contributed 20-30% of the government budget, resulting in the amount of foreign currency pouring into the mining industry. Oil and gas caused the de-industrialisation that the Dutch disease mentioned.

The indication of the Dutch disease became more and more obvious when in 2009 and 2010, Vietnam's crude oil export value reached over 9 million tons, down nearly 1.3%, but the turnover only reached 3.72 billion USD, down 48.5% compared to the previous year. compared with the previous year due to the sharp drop in crude oil prices (according to Statista, 2021). Falling oil

prices lead to a sharp decrease in budget revenue, which will negatively affect government spending and GDP.

In short, since 2009, the export of crude oil has decreased, so we did not get infected with the Dutch disease but the symptoms of infection did appear. At the national level, it is light, but in some localities, it is heavy, especially those where the structure of budget revenue and expenditure is largely contributed by the oil source. For many localities that focused too much on exploiting resources, when resources ran out, many places fell short, the balance of budget revenue and expenditure were greatly affected. Some localities in the Central region had chosen to exploit titanium, instead of tourism, to make quick profits. Doing so made the mining wave increase sharply, especially raw mining.

Exploiting and exporting resources is no longer appropriate in the current context. That does not mean that the mining industry should be cut off, but it should be aimed at increasing added value, especially serving domestic industries.

# 3.2. The threats of Dutch disease in Vietnam from FDI

For developing countries like Vietnam, foreign investment flows play a very important role in promoting socio-economic development. Within 10 years since joining the WTO, our country has received more and more foreign currency capital, especially FDI. This capital has a strong impact on the balance of trade, economic structure, etc in Vietnam. Without effective policies and tactics, the rapid increase in foreign currency will likely cause negative effects, leading to the symptoms of the Dutch disease on the economy.

FDI is foreign direct investment, bringing many benefits such as supplementing capital to serve the needs of investment in social development and economic growth, restructuring labor, increasing the national budget, improving human resources, etc. On the other hand, FDI can follow consequences such as trade balance deficit, inflation, imbalance between industries and territories, environmental pollution, etc.

FDI is prioritized towards clean FDI - a source of foreign direct investment capital, ensuring the sustainable growth of the economy, which must meet the following needs: economic benefits, social benefits, and economic benefits. environmental benefits. Specifically:

- Economic benefits: Once invested, FDI capital must ensure benefits for both the investing country and the host country. For the investing country, when making an investment, it must receive economic benefits such as cheaper labor and raw materials, making a profit in the investment process. For investment-receiving countries, it must ensure high, stable and sustainable economic growth, develop production in the direction of environmental friendliness, industrialization, sustainable agricultural and rural development and industrial development.
- Social benefits: To synchronously implement measures to achieve the following objectives: Social progress and justice, hunger eradication and poverty reduction; create jobs, increase

- income, improve the quality of education, improve people's knowledge, professional qualifications, health care, etc.
- Environmental protection, treatment and remediation of pollution, restoration and improvement of environmental quality, fire prevention, prevention of deforestation and indiscriminate exploitation of natural resources.

The inflow of FDI into Vietnam is so large that the Vietnamese economy cannot absorb it and leads to many consequences that are symptoms of the Dutch Disease, that is: The weakening of the local currency, causing inflation severe development, labor displacement leads to weakening of the manufacturing industry and affects Vietnam's export industry, resource depletion and environmental damage.

#### 3.2.1. FDI - The cause of inflation

The first and most obvious manifestation is the inflation situation in our country in the period 2007-2008. The influx of foreign investment such as FDI massively poured into our country from 2007 - the first year our country joined the WTO. By the end of 2007, the whole country had over 9500 foreign investment projects granted investment licenses with registered capital of over 98 billion USD (including additional capital). Excluding the projects that have expired and are dissolved ahead of time, there are 8590 projects with a total registered capital of 83.1 billion USD, of which the implemented capital is nearly 30 billion USD (excluding the contributed capital of our country). This number also increased over 2 times in 2008 when our country received 71 billion USD in FDI capitalization.

This situation increases the total means of payment, putting pressure on inflation, even though the State Bank (SBV) has performed neutralization operations. With a regulated regime, the Central Bank (Central Bank) often intervenes in the foreign exchange market to avoid the pressure of domestic currency appreciation when capital inflows are high. As a result, foreign exchange reserves increased and total means of payment increased, putting pressure on inflation. Despite the neutralization intervention through open market operations and compulsory reserve, the total means of payment still increased sharply in Vietnam. The sudden increase in capital inflow in 2007 made the total means of payment increase by 36.9%. In other words, FDI capital poured in in large quantities and too quickly, making Vietnam's economic management system unable to react. Inflation in these two years has reached double digits, peaking in 2008, even reaching 19.8%. This period is also a turbulent period in the government's inflation control work.

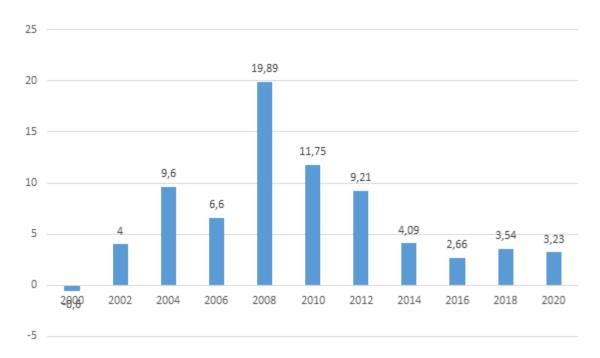


Figure 6. Inflation rate in period 2000 - 2020.

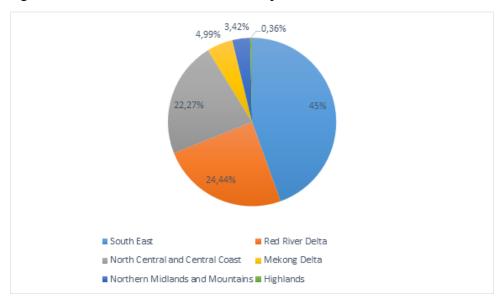
Source: According to the Bureau of Statistics

# 3.2.2. FDI and industry structure & region imbalance

The direct and indirect labor movement between regions and sectors in the economy comes from the uneven investment of FDI in the Vietnamese market.

Regarding the movement of labor between regions, domestic provinces and sectors in the economy, there is strong competition to attract FDI while the State has not had the right orientation, which will lead to uneven development between regions and evenly distribute FDI sources to industries. Areas with a large concentration of big cities such as Hanoi, Ho Chi Minh City, Hai Phong and surrounding areas often attract a large amount of foreign investment while areas such as the Central Highlands, the Midlands and the Southern region of Vietnam often attract a large amount of foreign investment. Northern mountains are not entitled to capital for development. Along with supplementing and perfecting the investment law, policies to attract FDI into regions with more difficult economic conditions, policies on industrial zones, EPZs and decentralization of investment licenses have been adopted, issued and have a great impact on the shift of FDI capital flows. Accordingly, the structure of FDI by region has changed in a more positive direction, but still slowly. This will have two effects. One is the uneven development among regions of Vietnam. This goes against the development orientation and poses a great obstacle to the government's remote development policies. Second, FDI capital invested in projects conducted in large FDI attraction regions will create a series of jobs and attract laborers to these regions. Labor in less capital-intensive areas will leave the sector and make manufacturing industries in the less capitalattractive region somewhat stagnant and undeveloped.

Below is the structure of FDI by region to 2021 according to the source of the General Statistics Office. Looking at the chart, we see a large imbalance in the amount of FDI inflows into each region. It can be said that FDI projects have been distributed to almost all provinces and cities in the country. However, areas with many advantages in terms of infrastructure, abundant and skilled labor, etc. are still the most attractive locations for foreign investment and the results of attracting foreign investment are still far ahead of the provinces with difficulties



**Figure 7**. FDI structure by region until 2021

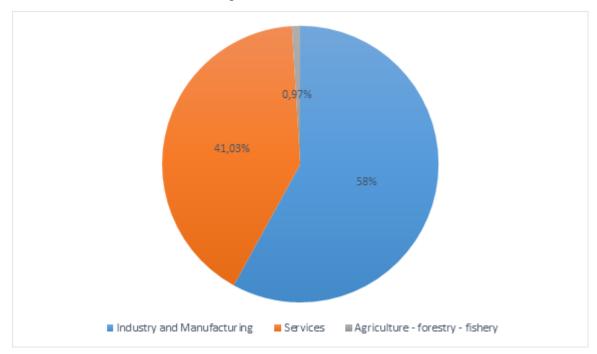
**Source:** According to the Bureau of Statistics

In terms of industry structure, the amount of FDI is also uneven across industries, weakening the manufacturing and export sectors of the Dutch disease. Firstly, FDI capital tends to concentrate more and more on a few key industry groups, associated with a roadmap to cut tariffs and open up attractive investment areas according to FTA commitments. Agriculture is an area that receives very little investment from foreign countries, while Vietnam is still an agricultural country. Although Vietnam's population is concentrated mainly in rural areas (about 67%), workers in this area account for about 46% of the total workforce and agriculture contributes about 17% of Vietnam's GDP. (General Statistics Office)... but FDI inflows into this sector account for only 1.7% of total projects and nearly 1% of total FDI into Vietnam. This leads to Vietnam's agriculture still developing relatively slowly compared to the development level of industry, services etc. FDI capital causes the industry - construction and service sectors to grow too hot without the same growth from the agricultural sector; leading to an imbalance in the structure of the economic sector, and deviant economic development. In addition, labor in the agricultural sector will also have a shift to industry and services because agriculture is not invested and developed, which will lead to stagnation, lower wages for labor in agriculture. compared to wages in industry and services.

Large FDI inflows into Vietnam also cause the amount of foreign currency in the country to increase, the domestic economy to weaken and appreciate, causing the export industry to be affected. People use domestically imported goods instead of domestically produced goods, which weakens the manufacturing sector.

Most of this capital is invested in office buildings, commercial centers, shopping and entertainment areas, rather than focusing on public works such as schools, hospitals, roads, etc. This is also an imbalance caused by FDI capital.

Moreover, FDI's contribution to economic restructuring is still not commensurate with its potential. In fact, restructuring still depends on quantity, namely: A large amount of FDI is invested in the industry, but the quality is not high, despite the production of many new products, the emergence of new industries (especially in some important industries such as telecommunications, oil and gas exploration and production, mechanical engineering, electronics, automobiles, etc., but the added value is still low due to the high intermediate costs.



**Figure 8.** The ratio of sectors of FDI investment in Vietnam in 2021.

Source: According to the Bureau of Statistics

## 3.2.3. FDI and technology transfer & natural resource depletion

The trend of Globalization and Regionalization is taking place very strongly and is considered as a very effective tool to improve the technical and technological level in developing countries. Because, in the process of cross-border investment and business cooperation, developing countries like Vietnam will have many conditions to access and take advantage of rich and diverse technologies, knowledge and skills. , modernity, advanced technology and science of your

countries, especially the world powers. However, at present, technology transfer through FDI projects has not been as expected.

The vast majority of technology transferred is only at an average level of technology. There are even cases of technology transfer, which puts Vietnam at risk of becoming a technology waste dump. The competitiveness of products in the international market is still weak because most of the technologies used in FDI projects are technologies that have been widely used in the country. One of the main reasons is the existing obstacles in the provisions of the law, the technology is limited to transfer, the regulations on binding conditions have not created a barrier; Many localities run after achievements, overcome barriers to attract FDI at all costs, and there are no regulations on an effective mechanism to manage the transfer pricing of enterprises.

Although FDI has brought many technologies to our country, it has not yet transferred technologies that meet the requirements of reality and keep up with the technological development of the world. In addition, many investors invest other than investment in areas where they are restricted in their country due to environmental pollution or adverse effects on public health. According to the General Department of Environment of Vietnam, there is currently a shift of industries causing environmental pollution from developed countries to developing countries through FDI. This "pollution export" benefits multinational corporations with a competitive advantage by reducing production costs. The reason is that the cost to overcome environmental pollution in developed countries is very high. Many projects to import outdated machinery and equipment causing environmental pollution were not detected in time. There is a tendency to shift the flow of foreign investment that consumes energy, resources, and human resources, which is not friendly to the environment, into Vietnam, but many localities do not have an environmental control mechanism.

Another remarkable thing is that FDI capital is also mainly focused on the oil and gas exploitation industry, but businesses do not invest in oil refining technology. The great short-term benefits have made foreign companies investing in oil and gas exploitation not focus on improving processing technology to save costs. This has caused the oil and gas resources in our country to rapidly deplete while the benefits for the country are not commensurate.

It can be said that the more industrial zones are concentrated, the more polluted the environment is. Some FDI enterprises have caused serious environmental problems, changed the ecosystem, affected economic development, social security in the area and caused frustration in the public opinion. People have mentioned a lot about "unclean" FDI in Vietnam related to wastewater treatment, expansion of industrial zones, shrinking forest area, life and habitat of animals. wildlife, plants have been disturbed, destroyed, adversely affecting biodiversity, water resources, fisheries, climate change and increasing pollution of river basins, etc

Thus, FDI entails outdated technologies and increasingly serious environmental pollution. These technologies not only have low productivity, a huge amount of waste into the environment, causing environmental pollution, but also quickly lose their usability and become scrap. Therefore, the government needs to have appropriate and strict management measures and policies in

receiving investment projects from abroad, avoiding the situation of "spreading the red carpet" in some localities.

The above manifestations show that Vietnam has not reached the serious level to be infected with Dutch disease but before such manifestations of risk of "Dutch disease", what should Vietnam do? Here is the fact that countries have caught and got rid of this "disease", which is a valuable lesson for the Vietnamese economy.

# 4. Recommendations to avoid Dutch disease in Vietnam

# 4.1. Recommendations to avoid Dutch disease caused by oil exporting in Vietnam

As analyzed above, one of the causes of the Dutch disease in countries, especially developing countries, is the excessive export of raw products, not paying attention to them. Dutch disease will develop once domestic resources are exhausted or there is a fluctuation in the price of resources in the world market. At that time, it was difficult to exploit resources for sale, and other domestic manufacturing industries were almost paralyzed because of technical lag when they were not invested for a long time. The economy is in crisis. From the situation of such Nigeria, lessons are drawn for Vietnam as follows:

First, as former Prime Minister Nguyen Tan Dung said at the launching ceremony and implementation of the 2007 production and business plan of PVN, "Vietnamese oil and gas cannot continue to export crude oil forever but processing and services with high added value", is a direction that we have done but still not good. The domestic gasoline and oil consumption market with a population of nearly 100,000,000 million people requires a huge supply of all types of gasoline and oil. So far, every year, the amount of crude oil exploited has been exported while the source of gasoline and oil for production and daily consumption is completely dependent on imports (every occasion the world price of gasoline and oil fluctuates, causing difficulties in the production of petroleum products). towels for import and consumption). In terms of our country's average crude oil potential, the group has planned and implemented a plan to build three refineries and petrochemicals in the north-central south regions. Binh Son Refinery and Petrochemical Complex (Dung Quat Economic Zone - Quang Ngai) with an oil refinery with a capacity of 6.5 million tons/year was put into operation at the end of February 2009. When our country's first oil refinery is put into operation, it will open the door to the complete formation of Vietnam's refining and petrochemical industry. After Dung Quat, the Vietnam National Oil and Gas Group will invest in building two petrochemical refineries in Nghi Son (Thanh Hoa) and Long Son (Ba Ria - Vung Tau). The Long Son Petrochemical Complex Project in Long Son Petroleum Industrial Park (Ba Ria - Vung Tau) is of great significance to Vietnam's chemical industry, effectively using the output products of the oil factory. According to the project of developing the petrochemical industry, with three plant complexes under construction, in turn put into operation in phase 1, along with investment to expand and increase capacity in phase 2 from 2015 to 2025, the total The capacity of the factories will reach about 50 - 55 million tons of products per year, enough to meet the demand for gasoline and oil for domestic consumption and partly for export. Along

with the petrochemical refineries, the group is also building fiber and synthetic resin factories. producing DAP fertilizer, urea fertilizer, producing ammonium - accumulator to join with Phu My and Ca Mau nitrogenous fertilizer plants to increase the fertilizer production output of the industry, meeting the increasing demand of the agricultural production, participate in stabilizing the market and actively contribute to the national food security strategy.

• Second, the State should have policies to attract capital and technology to invest in our country in order to promote the development of domestic economic sectors, especially the oil extraction and processing industry. Our country is a country with potential and resources, it's just a matter of how to maximize those resources. Through the analysis of the situation of crude oil exports in our country - one of the defining characteristics of the Dutch disease, it is not really dangerous, or in other words, divided by country, we can all see clearly and deeply understand it. However, what we need to realize is that we must act now. An effective development strategy is our only way.

Through the analysis of the current situation of crude oil exports in our country - one of the defining characteristics of the Dutch disease, it is not yet dangerous enough, or in other words, not to the extent that we can all see it clearly and deeply understand it. However, what we need to realize is that we must act now. An effective development strategy is the only way to save us.

### 4.2. Recommendations to avoid Dutch disease caused by FDI in Vietnam

Vietnam is also a market attracting huge FDI capital, and like China. However, in Vietnam, the phenomenon of Dutch disease has yet to manifest itself, so continuing to attract FDI inflow and directing it to some specific sectors that create more added value, rather than crude exporting, should be encouraged. To prevent the Dutch disease on FDI, below are some specific solutions learnt from China for Vietnam:

Firstly, Vietnam needs to learn from China in having an expensive socio-economic development master plan in the long term. The lack of a comprehensive and long-term socio-economic development plan (about 50 years) in recent times, which has been recently issued, reports and reports are one of the great causes of difficulties, hindering development in general, creating waste in the use of resources, including FDI capital. Vietnam should focus on developing supporting industries in the direction of focusing on a few key industries and products. In particular, concretize the criteria to identify industries and products that are entitled to incentives according to the power of supporting industries, raising the incentive level enough to attract investors in the field of supporting industries. In particular, special incentives should be higher for businesses investing in the chain of projects to produce products in the supporting industry compared to individual projects.

Secondly, Vietnam needs to have a strategy to attract and use FDI in each period in a synchronous and reasonable manner, closely associated with the socio-economic development goals of that period. Specific development strategies are the steps necessary to achieve the overall goal outlined in the long-term plan. Development strategies can be designed over a period of 5, 10 or 20 years suitable for each industry or region. Currently, FDI is mainly investing in import-

substituting, labor-intensive industries. The strategy to attract and use FDI capital should be in the direction of:

- Included in the overall need for capital for socio-economic development of the country.
- Establishing a priority list for using FDI capital and projects calling for foreign investors by industry and key economic regions with specific necessary volumes.
- The proposal is oriented to attract capital from international partners, including clearly defined strategic partners.
- Provide policies and solutions to prioritize and encourage the attraction and use of capital relatively stable on many aspects such as tax exemption and reduction, land rental incentives, and clearly state measures on management and foreign debt repayment.

#### Conclusion

In conclusion, the "Dutch disease" is a type of economic risk that occurs when the export of natural resources is boosted leading to a decline in the manufacturing industry - a phenomenon of deindustrialization. The massive export of oil for the purpose of earning foreign currency coupled with the mismanagement of foreign capital sources such as FDI will have serious consequences for the economy. Therefore, fully understanding the "Dutch disease" is a necessary task for countries, especially developing countries - whose economies are heavily dependent on natural resources as well as foreign aid and investment.

Vietnam, with risks from crude oil exports as well as foreign sources from FDI, suffers from threats of the Dutch disease. Research from the reality of countries that have faced and overcome this "disease", such as the experience from China and Nigeria, will help provide lessons learned to help Vietnam be fully prepared to avoid "the disease". However, the current urgent requirement of Vietnam is to manage well as well as develop a reasonable exploitation and export policy of natural resources to achieve both growth and development tasks at the same time. sustainable economy in the best way.

#### References

- Admin. (2020), "Nhận Diện 'Căn Bệnh Hà Lan' Của Những nền Kinh tế thiếu bền vững", *Redsvn.net*, Available at: http://redsvn.net/nhan-dien-can-benh-ha-lan-cua-nhung-nen-kinh-te-thieu-ben-vung/ (Accessed 22 November, 2022).
- Admin, B. (2013), "Có biểu hiện nhiễm "Căn Bệnh Hà Lan", *Tạp chí Kinh tế Sài Gòn*, Available at: https://thesaigontimes.vn/co-bieu-hien-nhiem-can-benh-ha-lan/ (Accessed 22 November, 2022).
- Ben. (2022), "Russia catches a nasty dose of the Dutch disease", *bne IntelliNews*. Available at: https://intellinews.com/russia-catches-a-nasty-dose-of-the-dutch-disease-248236/ (Accessed 18 December, 2022).
- Bp. (2021), "Statistical review of world energy", Available at: https://www.bp.com/content/dam/bp/business-sites/en/global/corporate/pdfs/energy-economics/statistical-review/bp-stats-review-2021-full-report.pdf (Accessed 18 December, 2022).
- CEIC Data. (2022), "Vietnam Crude Oil: Exports, 1980-2022", Available at: https://www.ceicdata.com/en/indicator/vietnam/crude-oil-exports (Accessed 22 November, 2022).
- Du, H.T. (2013), "Kinh tế Việt Nam Vì đâu Nên Nỗi?", *Nhịp sống kinh tế Việt Nam & Thế giới*. Available at: https://vneconomy.vn/kinh-te-viet-nam-vi-dau-nen-noi.htm (Accessed 22 November, 2022).
- Energy Global News. (2021), "Groningen gas field the rise and fall of a Giant", Available at: http://www.energyglobalnews.com/groningen-gas-field-the-rise-and-fall-of-a-giant/ (Accessed 22 November, 2022).
- Fazle, R., Chowdhury, M.B. & Mohammad, Z.H. (2013), "Macroeconomic impact of remittances and the Dutch Disease in a developing country", *ResearchOnline@ND*, Available at: https://researchonline.nd.edu.au/bus\_article/80/ (Accessed 18 December 2022).
- GSO. (2022). "General Statistics Office of Vietnam", Available at: https://www.gso.gov.vn/en/homepage/ (Accessed 18 December, 2022).
- KfW. (2022). "Russia's Dutch disease". Available at: https://www.kfw.de/%C3%9Cber-die-KfW/Service/Download-Center/index.jsp?redirect=676737 (Accessed 18 December, 2022).
- Koukias, D. & Koukias, P. (2022), "Natural reserves: A curse and a blessing, The difficulty lies not so much in developing new ideas as in escaping from old ones John Maynard Keynes", *EN*, Available at: https://econ-post.com/2022/08/13/natural-reserves-a-curse-and-a-blessing/ (Accessed: November 22, 2022).
- Migration and Development Brief. (2022), "A war in a pandemic", Available at: https://www.knomad.org/sites/default/files/2022-

- 07/migration\_and\_development\_brief\_36\_may\_2022\_0.pdf#page=15 (Accessed 18 December, 2022).
- Murphy, K.M., Shleifer, A.V. & Robert, W. (1989), "Industrialization and the Big Push", *Journal of Political Economy*, Vol. 97 No. 5, pp 1003-1026.
- Ng, L.F.Y. & Tuan, C. (1996), *Three Chinese economies: China, Hong Kong and Taiwan: Challenges and opportunities.* Hong Kong: Chinese University Press.
- Nguyen, M.N. (2022), "Vietnam: Crude oil export value 2021", *Statista*. Available at: https://www.statista.com/statistics/1266433/vietnam-crude-oil-export-value/ (Accessed 22 November, 2022).
- Schwartz, E. (2019), "How Venezuela's oil created an incurable case of Dutch disease", *Econlife*. Available at: https://econlife.com/2019/03/venezuelas-oil-creates-dutch-disease/ (Accessed 18 December, 2022).
- Venezuela: The latest victim of the Dutch disease coha (2016), Available at: https://www.coha.org/wp-content/uploads/2016/10/Venezuela-Dutch-Disease.pdf (Accessed 18 December, 2022).
- Venezuelan, A. & Ausman, J. (2019), "The devastating Venezuelan crisis, Surgical neurology international. U.S", *National Library of Medicine*, Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6744797/#:~:text=Under%20Ch%C3%A1vez%2C%20elected%20president%20in,other%20sectors%20of%20the%20economy (Accessed 18 December, 2022).
- Wikipedia Foundation. (2022), "Dutch disease". Available at: https://en.wikipedia.org/wiki/Dutch\_disease (Accessed 22 November, 2022).
- World Bank Open Data, Data. Available at: https://data.worldbank.org/ (Accessed 18 December, 2022).