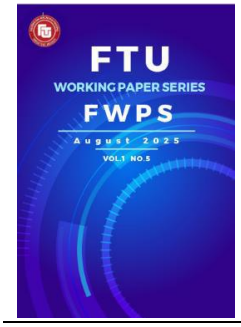

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THUẾ TIÊU THỤ ĐẶC BIỆT ĐỐI VỚI NHIÊN LIỆU TẠI VIỆT NAM: TỔNG QUAN CHÍNH SÁCH, TÁC ĐỘNG THỊ TRƯỜNG VÀ CÁC KHUYẾN NGHỊ

Phạm Vân Nhi [1], Đoàn Thu Nguyệt, Ngô Xuân Thanh, Lê Thị Hà Thương

Sinh viên K61 CLC Kinh Tế - Viện Kinh Tế và Kinh Doanh Quốc Tế

Trường Đại học Ngoại Thương, Hà Nội, Việt Nam

Nguyễn Thu Hằng

Giảng viên Viện Kinh tế và Kinh doanh quốc tế

Trường Đại học Ngoại thương, Hà Nội, Việt Nam

Tóm tắt

Thuế tiêu thụ đặc biệt đối với nhiên liệu đã trở thành một công cụ chính sách quan trọng tại Việt Nam, nhằm điều tiết tiêu dùng nhiên liệu, tạo nguồn thu cho chính phủ và giải quyết các vấn đề môi trường. Mặc dù thuế tiêu thụ đặc biệt được áp dụng rộng rãi ở nhiều quốc gia, nhưng tác động và tính phù hợp của chính sách này tại Việt Nam vẫn là chủ đề gây tranh cãi. Một số ý kiến cho rằng loại thuế này là một công cụ hiệu quả để thúc đẩy sử dụng năng lượng tiết kiệm và bền vững, trong khi những ý kiến khác lập luận rằng nó làm tăng chi phí cho doanh nghiệp và người tiêu dùng mà không thực sự giảm đáng kể nhu cầu sử dụng nhiên liệu. Nghiên cứu này cung cấp một phân tích toàn diện về chính sách thuế tiêu thụ đặc biệt đối với nhiên liệu (xăng) tại Việt Nam, xem xét cấu trúc, mục tiêu và khuôn khổ pháp lý của nó. Đồng thời, nghiên cứu cũng phân tích các tác động của loại thuế này lên giá nhiên liệu và tiêu thụ xăng. Thông qua việc tổng hợp các nghiên cứu trước đây và so sánh với thực tiễn toàn cầu, nghiên cứu này làm nổi bật những vấn đề chính sách quan trọng và đề xuất các điều chỉnh tiềm năng nhằm nâng cao sự ổn định kinh tế và phát triển bền vững về môi trường. Cuối cùng, kết quả nghiên cứu đóng góp vào cuộc thảo luận đang diễn ra về việc liệu Việt Nam có nên cải cách chính sách thuế tiêu thụ đặc biệt đối với

[1] Tác giả liên hệ, Email: k61.2112150636@ftu.edu.vn

nhiên liệu để thích ứng với những thay đổi của thị trường và xu hướng chuyển đổi năng lượng hay không.

Từ khóa: thuế tiêu thụ đặc biệt, tiêu thụ xăng, phân tích chính sách, Việt Nam, tác động thị trường

EXCISE TAX ON FUEL IN VIETNAM: POLICY OVERVIEW, MARKET IMPLICATIONS AND RECOMMENDATIONS

Abstract

Fuel excise taxes have been a significant policy tool in Vietnam, aiming to regulate fuel consumption, generate government revenue, and address environmental concerns. While excise taxes are widely implemented across various countries, their impact and applicability in Vietnam remain subjects of ongoing debate. Some argue that these taxes serve as an effective means to promote energy efficiency and sustainability, while others contend that they increase costs for businesses and consumers without significantly reducing fuel demand. This study provides a comprehensive analysis of Vietnam's fuel excise tax policy (gasoline), examining its structure, objectives, and regulatory framework. It further explores the implications of these taxes on fuel pricing and consumption. By reviewing past studies and global comparisons, this research highlights key policy considerations and potential adjustments to enhance both economic stability and environmental sustainability. Ultimately, the findings contribute to the ongoing discussion on whether Vietnam should reform its fuel excise tax policy in response to evolving market dynamics and energy transition trends.

Keyword: excise tax, fuel consumption, policy analysis, Vietnam, market implications

1. Introduction

The Vietnam Trade and Industry Review has reported that national gasoline and oil reaches consumption of approximately two million cubic meters/tons monthly. As an essential fuel for daily commuting, transportation and manufacturing, gasoline plays a crucial role in economic activities, yet it also releases air pollutants that harm people's health and the environment. Commercial transportation contributes to air pollution, releasing contaminants such as PM2.5, nitrogen oxides, sulfur dioxide, carbon monoxide, VOCs, and greenhouse gases like carbon dioxide (CO2) and methane, which exacerbate climate change (IQAir). Numerous countries, including France, Germany, Italy, the UK, South Korea, Australia, Thailand, Singapore, China, Cambodia, and Laos, have long utilized fuel excise taxes to mitigate environmental impact. By establishing a tiered tax framework that differentiates rates based on the environmental impact of various gasoline types, excise taxes can guide market demand towards more environmentally friendly fuels.

The fuel excise tax has been in place for many years. Aside from the primary purpose of environmental protection, it also serves as a source of state revenue, which supports both environmental and social initiatives. However, recent proposals from the Vietnam Chamber of Commerce and Industry (VCCI) to exempt gasoline from excise taxes have sparked debate regarding the necessity of these taxes and the potential for alternative environmental taxation. Despite the proposals, the Ministry of Finance maintains its existing regulations, asserting their critical importance for Vietnam's sustainable development.

This study gives an overview of the excise tax policy on gasoline in Vietnam and examines the broader market implications on fuel pricing and consumption. Amid discussions about whether Vietnam should continue imposing excise taxes on gasoline, this research highlights the key policy considerations and potential adjustments that could optimize both economic growth and environmental sustainability.

2. Literature Review

2.1. Overview of Excise Tax on Fuel in Vietnam

Excise tax is levied on specific categories of goods and services not recommended by the government for frequent and excessive use. In general, excise tax raises the price, which results in reduced demand for goods and services subject to this tax. Excise tax is a legislated tax imposed on selective types of goods and services at their purchase (Investopedia, 2025). However, excise tax is indirect, so consumers may not see this cost in the items they purchase, since manufacturers have already added the tax on product prices. Excise tax is considered a regressive tax as it places more burden on lower income households than households with higher income (Worldbank, 2021). This also indicates that excise tax can worsen income inequality.

Consumption of goods and services under excise tax, mainly luxurious goods, is often elastic, so an increase in prices can lead to reductions in demand. This explains why excise tax is also called “sin tax”, which helps hamper the consumption of these harmful goods and services, reducing their impacts on social welfare and the environment.

For inelastic goods and services like alcohol and tobacco, increases in price do not have such a significant effect on them. However, consumers would often reduce their purchase on elastic goods and services to continue purchasing inelastic ones, so the government can still regulate consumption and generate state revenue for social development. This can suggest that imposing the tax would cause minimal distortions to the economy.

Vietnam has applied excise tax on fuel since 1995, stated in the Excise Tax Law of Vietnam. According to the Ministry of Finance in Vietnam, the total revenue of excise tax on gasoline in 2021 is 9,777 billion VND worth of both imported and domestically used gasoline, accounting for

6,88% excise tax revenue. In Vietnam, excise tax covers the categories of fuels like mineral gasoline, E5 gasoline, E10 gasoline and aviation gasoline, excluding diesel, oil and mazut. The reason behind this is that diesel, oil and mazut are often used in manufacturing phases, and imposing excise tax can increase products prices, causing burden for both businesses and consumers, while gasoline is more common for individual use. The government would not implement excise tax on oil, so that the manufacturing industry will not be affected and production will not be decreased. Therefore, excise tax on fuel is limited to gasoline only in Vietnam.

Vietnam's excise tax structure for gasoline also demonstrates a tiered approach, with rates of 10% for conventional gasoline, 7% for E10 (10% ethanol blend), and 8% for E5 (5% ethanol blend). This differential taxation reflects a policy aimed at incentivizing fuels with reduced emissions. The ethanol-gasoline mixtures, indicated by the 'E' designation, facilitates enhanced combustion through oxygenation, leading to substantial reductions in carbon monoxide (CO) and unburned hydrocarbon (UHC) emissions compared to pure gasoline. Specifically, research indicates that E10 can achieve approximately a 42% reduction in CO emissions relative to neat gasoline (Elfasakhany, 2015).

Recently, many controversies have been provoked around the matter of whether excise tax on fuel should be exempted. The Vietnam Chamber of Commerce and Industry (VCCI) has proposed the exemption of excise tax on fuel with the reasons mentioned above, with the view to lessen the burden of manufacturing businesses and many industry fields. However, the Ministry of Finance insisted on continuing the implication of this tax, stating that removing it would be unsuitable under the current situation of climate change, global warming and other environmental degradation. This is still an ongoing debate among policy makers and relevant authorities, and shall be discussed further in the following sections of this research.

2.2 Previous studies

Excise taxes serve multiple purposes, ranging from economic and market shaping to environmental protection. They generate state revenue and face minimal public resistance, as they are justified by their potential to mitigate the negative impacts of specific products and can also educate consumers (John F. Due, 1994). Additionally, fuel excise taxes can be utilized to stabilize inflation rates, mitigating the impact of fuel price shocks on retail prices, especially given fuel's crucial role in daily life (JaeBin Ahn, 2024).

Apart from being a powerful tool for the government to regulate fuel consumption and collect revenue, excise tax levied on fuel can be a trade-off between different objectives (Gautama et al., 2023). The reduced consumption of gasoline can lead to a negative multiplier effect, as it decreases the total aggregate expenditure. Businesses may find it no longer profitable to produce high volumes of goods using gasoline as input materials, and scale down their

production, leading to the layoff of employees. Consumers may seek other types of vehicles with more affordable prices, decreasing their purchasing power.

The government may still gain a stable revenue from excise tax to support government spendings, but overall, the economy is still negatively affected. The most obvious consequences are lower outputs, business surplus and gross value added (Prayoga Setiawan et al., 2025). However, increases in excise tax cannot hamper economic growth as much as increases in personal income tax and corporate tax, in both developing countries and developed countries (Sijbren Cnossen, 2023).

From a microeconomic perspective, fuel excise tax affects economic factors such as price, consumption and how they direct consumer behaviours.

Increases in fuel excise tax can lead to the reduction in gasoline consumption (Cnossen, 2020). It is examined that gasoline consumption is sensitive to fluctuations in gasoline excise tax rates, with the elasticity of -0,82 (Bardazzi and Pazienza, 2024). This is the case when we consider the long term impact of excise tax on gasoline, as this commodity is considered more elastic in the long run, while being rather inelastic in the short run. Therefore, excise tax's effects on shaping consumer behaviour can be seen after a period of time rather than giving immediate results.

Furthermore, excise taxes on fuel can act as a market failure corrector and better inform the market (Marius van Oordt, 2023), as it raises the price of fuel to its actual social costs. When gasoline is only transacted under private costs, consumers will tend to purchase more gasoline than the optimal social amount. Producers and consumers have to be more conscious about their behaviour and take social responsibility when entering a transaction of goods considered harmful to the environment and other social aspects like fuel.

In general, people tend to respond more intensively to changes in tax rates rather than changes in total price, even when they are of equivalent amount (Tiezzi and Verde, 2019). This can be a common mentality state as higher tax rates are more widespread publicly. The larger the change in tax rates implemented, the more aware the public will be (Sauer, 2007). A loss directly subtracted from their income can feel more painful than an implicit increase in market prices. In fact, excise tax passes the producers and places the burden completely on consumers (Bardazzi and Pazienza, 2024), so this behaviour is considered reasonable. Bogenschneider (2015) stated that 50% of the regressive effects of gasoline expenditures will increase under the impact of indirect effects of gasoline taxation.

In addition, tax charges can decrease consumers' utility than payments for the same amount (Tang and Sjoquist, 2019), emphasizing the high elasticity when tax rates fluctuate. Normal

market transactions can make buyers feel under control, while extra payments due to tax imposed can feel involuntary sacrificing a considerable amount of income.

Hence, it can be derived that excise taxes can have a greater influence on consumer behavior and their expectations of future market trends, rather than based on changes in prices (Scott, 2012). This supports the idea that excise tax can shape the purchasing behavior of buyers. They can predict that the government will continue to make significant efforts in shifting away from fossil fuel, and the price of gasoline will follow a rising trend in the future. Based on this anticipation, consumers will choose to switch to alternatives of fossil fuel and escape tax burdens. Findings by Cnossen (2020) showed that fuel excise implementation has changed consumers' choice from leaded and sulfur-rich types of fuel to more environmentally friendly alternatives.

The role in directing the market toward more sustainable solutions of fuel excise tax is also praised. Qualitative research suggested that application of per-unit tax resulted in a corresponding shift in demand toward higher-quality and premium-grade gasoline, while there was a proportional decrease in lower-quality, regular grade gasoline. Additionally, when intervened by educational advertisement campaigns, it shows a change in public behaviors in accordance with the promotion content (Todd Nesbit, 2007). Research conducted in America, Gasoline Taxes and Consumer Behaviours (2012) showed empirical evidence for corresponding change in fuel consumption and vehicle choice when there is change in gasoline tax, even more prominent than the change in gasoline retail price itself. Their studies emphasised the impact of gasoline tax on directing the market could very likely exceed beyond previous studies' expectations. Consequently, fuel tax could serve to reduce fuel consumption and drive customers toward a more environmentally-friendly choice of vehicles.

On the other hand, tax policy in France, where the country faces the trouble of excessive CO2 emissions from gasoline-fueled vehicles that push road transportation to be one of the major climate change's contributors, was hoped to shift the market to diesel cars and promote small fuel-efficient cars in concern of public health and sustainable development (Givord et al, 2018). However, after studying the effect of fuel price change on short-term car purchasing decisions of customers, the result suggested a rather insufficient connection and difference between customer and firm decision (firms generally showed stronger favor over diesel cars and are less responsive to price changes). Nevertheless, the study concludes that whether the imposition of equal diesel and gasoline tax or carbon tax, fuel consumption and CO2 emissions were not likely to reduce. The result indicates that long-lasting and more robust measures are necessary for any significant environmental impact. Additionally, two different research conducted in two separate regions has revealed contrasting outcomes, thus requiring different tax adaptation.

Overall, excise tax received rather less attention than other types in tax policy researches. The impacts of excise tax on many areas of state revenue, quality of life and fuel consumption have been examined in many countries and regions of the world, such as the US, Korea, Africa, ... Despite many intensive studies on this topic, its impact on the specific aspect of fuel consumption and the market implications in Vietnam has not been further investigated. Available researches have yet to compile the most recent statistics and data, especially after the Covid pandemic, which has shifted many consumer trends and behaviors.

Nowadays, the detrimental consequences of traffic emissions and other damages to the environment have gained more attention of the public and authorities on how to solve this matter on a comprehensive scale, while causing the least distortions possible to the economy. The rise of electric vehicles like Vinfast has also considerably changed the fuel consumption landscape in Vietnam in recent years, and is predicted to continue to develop rapidly in the future. However, the use of electric vehicles still cannot compare to the massive use of gasoline-based vehicles. Under this current situation, it is necessary to examine whether excise tax continues to be a powerful tool to collect revenue and mitigate social behavior, or should authorities implement other effective measures. Therefore, in this research, our study aims to fill this gap and suggest recommendations on how to better exploit the potential benefits of this tax, as well as minimizing its limitations.

3. Methodology

3.1. Research Design

This study uses a qualitative methodology that includes case study research and a narrative literature review.

Narrative literature review is a thorough examination of existing research on a specific topic, summarizing and synthesizing information from numerous sources to provide a full picture of the current knowledge while identifying gaps and providing context for new research. Neither the types of databases and methodological approaches used to conduct the review nor the evaluation criteria for inclusion of retrieved articles are listed in this kind of literature review (Acta paulista de enfermagem, 2007).

Meanwhile, case study research investigates contemporary cases for purposes of illumination and understanding. It may entail a detailed analysis of individuals, topics or issues, known as particular cases unique in content and character. Case studies are aimed at seeking the answers of focused questions by producing in-depth descriptions and interpretations over a relatively short period of time (Taylor & Francis, 2003).

Our research is conducted in two stages:

1st stage: In the first stage, our article will examine existing literature and prior studies concerning the gasoline excise tax in various countries. This part will focus on the impact of excise tax on reducing gasoline consumption as well as the change to use renewable energy.

2nd stage: The second stage will focus on the implementation of gasoline excise taxes in Vietnam as well as the successes and shortcomings concerning the effectiveness of the excise tax in reducing consumption among citizens. Ultimately, those analyses would be used to draw conclusions and provide suggestions to the Vietnamese government regarding the utilization of excise taxes on gasoline.

3.2. Data collection method

Data used in this article will be primarily secondary.

The literature review part will collect data from scholarly articles, books, reports, papers and journal publications relevant to the excise tax applied to gasoline. Meanwhile, the selection of the case study will be based on its alignment with the research objectives, comprising company reports, government reports, news articles, and online reviews.

4. The implications of excise taxes on gasoline price and consumption

4.1. Excise taxes on gasoline in Vietnam

In Vietnam, there are 4 primary layers of taxation on gasoline: import duties, special consumption tax (SCT), environmental protection tax and value-added tax (VAT). The first layer of taxation is applied to the actual price of gasoline calculated to the first import border gate. The second layer of excise tax is levied on factory prices (pre-tax) of all types of gasoline sold domestically. The environmental protection tax is a kind of absolute fixed rate and is calculated based on the amount of goods sold for domestically produced goods or the amount of imported goods. The final layer is the value-added tax, assessed at 10% of the gasoline's value, including import tax, special consumption tax (SCT) and environmental protection values.

Currently, the domestic gasoline supply still does not meet consumer demand, so it still must be imported from other countries. However, since Dung Quat Oil Refinery and Nghi Son Oil Refinery officially operated and supplied gasoline to the domestic market, the proportion of gasoline from imported sources has decreased significantly.

Regarding the import tax rate, according to Clause 1, Article 2 of the Law on Export and Import Tax 2016, the import tax rate for imported gasoline through Vietnam's border gates ranges from 0 to 40% of the CIF value. In particular, the FTA import tax rate for gasoline currently implemented in Vietnam is 5% for gasoline under the ASEAN Trade in Goods

Agreement (ATIGA), 8% under the Vietnam - Korea FTA (VKFTA). Meanwhile, Decree No. 26/2023/NDCP dated May 31, 2023 of the Government stipulates that the MFN tax rate for gasoline is 10%. Currently, imported gasoline mainly comes from countries that have signed agreements to establish free trade areas with Vietnam like Korea or ASEAN countries... whereas the proportion of imported gasoline according to the current MFN tax rate is insignificant.

In Vietnam, gasoline has been subject to special consumption tax since 1995. This tax rate has remained unchanged over the years, and is specifically regulated in Article 7 of the Law on Value Added Tax 2008, amended by Clause 4, Article 1 of the Law on Special Consumption Tax 2014, as follows: 10% for general gasoline, 8% for gasoline type E5 and 7% for gasoline type E7. Meanwhile, pursuant to Article 8 of the Law on Environmental Protection Tax 2010, gasoline (except ethanol) is subject to environmental protection tax with a tax rate from VND 1,000/liter to VND 4,000/liter. From January 1, 2025 to December 31, 2025, the environmental protection tax for gasoline (except ethanol) is VND 2,000/liter.

According to Article 3 of the Law on Value Added Tax 2008, goods and services used for production, business and consumption in Vietnam (including goods and services purchased from organizations and individuals abroad) are subject to value added tax, except for the subjects specified in Article 5 of the Law on Value Added Tax 2008, and of course gasoline is not subject to Article 5. Therefore, the value added tax (VAT) rate applied to gasoline is 10% calculated on the selling price.

Overall, it can be seen that gasoline in Vietnam is under many layers of taxes, therefore it can be hard to assess solely the impact of one kind of tax on the consumption of gasoline. Besides, it is noticeable that the excise tax for gasoline in Vietnam is relatively stable throughout the years.

4.2. Gasoline price and consumption in Vietnam

Gasoline is one of the most crucial sources of energy in Vietnam's economy, playing an important role in transportation, industrial production and daily life. According to the Ministry of Industry and Trade (MOIT) of Vietnam, there are over 60 million motorbikes and 4 million cars being run, which means that fuel consumption demand always remains high and considerably affects other factors such as transportation costs, product prices and even inflation. Therefore, gasoline is considered a strategic goods, significantly impacting inflation, production cost and citizen's life.

Regarding gasoline prices in Vietnam, they are relatively lower than the global average, at 65.16% of the world average price, and have a strong correlation (0.96) with crude oil prices (Figure 2), which means that fluctuations in global oil prices directly impact domestic fuel costs. Additionally, the price flexibility index of 0.62 indicates a moderate level of government

intervention, allowing for some market-driven adjustments while maintaining regulatory oversight.

Vietnam: Gasoline price analytics	Value
Percent of world average gasoline price	65.16%
Correlation with crude oil prices	0.96
Percent change if oil prices increase 10%	6.19%
Correlation with USD exchange rate	-0.19
Price flexibility index: 0 (low) - 1 (high)	0.62
Correlation with diesel fuel prices	0.93
Percent of diesel price	109.29%
Cost of 40 liter tank, percent of income	9.82%

Figure 1. Gasoline prices in Vietnam analytics

Source: Global Petrol Prices

Over the past decade, gasoline prices in Vietnam have shown significant fluctuations, reflecting both global market trends and domestic policies (Figure 3). From 2015 to 2019, prices remained stable at around 0.7-0.9 USD/L, but a sharp decline occurred in 2020 due to the COVID19 pandemic. Subsequently, prices surged, reaching a peak of 1.33 USD/L in June 2022, driven by the global energy crisis and geopolitical tensions. The correlation of 0.93 with diesel fuel prices also indicates that diesel price movements strongly influence gasoline pricing in Vietnam. By 2023-2024, prices stabilized around 0.78-0.9 USD/L, before slightly increasing to 0.79 USD/L in early 2025. While domestic fuel prices are less sensitive to USD exchange rate fluctuations (correlation: -0.19), the cost of gasoline remains a significant expense for consumers, with a 40 liter tank accounting for 9.82% of income.

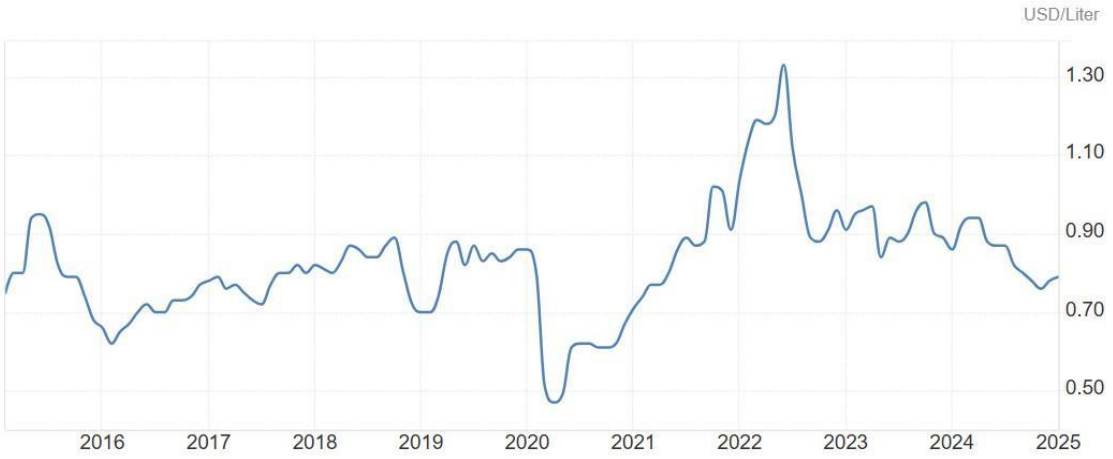

Figure 2. Gasoline prices in Vietnam from 2016 to 2025 (USD/Liter)

Source: Vietnam National Petroleum Group

In terms of gasoline consumption in Vietnam, the data (Figure 2) shows that it increased steadily from 2010 to 2019. In 2010, gasoline consumption was 95 Mb/d (million barrels per day), rising slightly to 106 Mb/d in 2011 and remaining relatively stable at 105-108 Mb/d during the 2012-2014 period. From 2015 onwards, the growth rate accelerated steadily, with consumption reaching 140 Mb/d in 2015, 146 Mb/d in 2017, and 154 Mb/d in 2019. Over the nine-year period, gasoline consumption increased by 59 Mb/d, equivalent to approximately 62% growth. Notably, the period 2015-2019 saw a more intensive increase compared to 2010-2014, reflecting a rising demand for fuel in personal transportation.

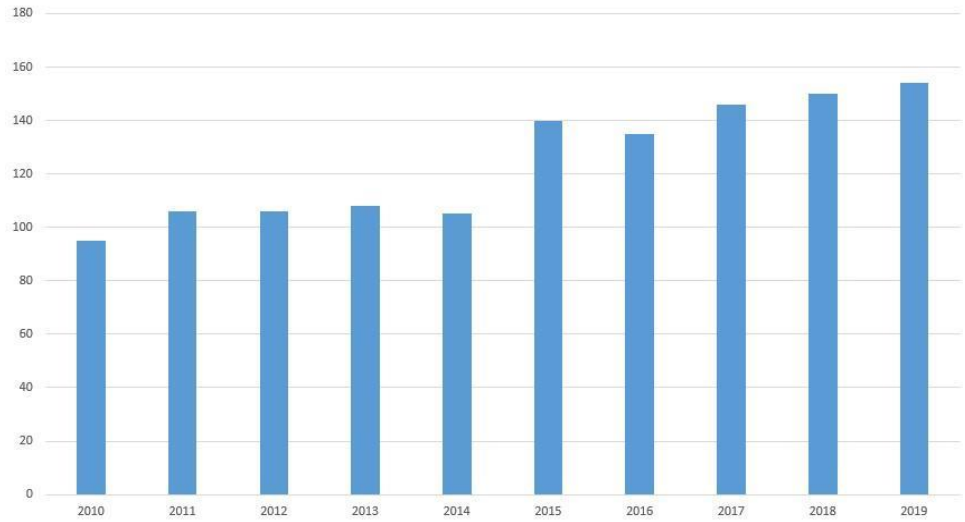

Figure 3. Gasoline consumption in Vietnam (in million barrels per day)

Source: U.S. Energy Information Administration

As analyzed above, gasoline consumption experienced a steady increase and reflected an annual growth rate. However, the COVID-19 pandemic caused a sharp decline in fuel demand, dropping to 130.5 thousand barrels per day in 2020 and further to 128.2 thousand barrels per day in 2021 (Figure 4), as lockdowns and restrictions significantly reduced mobility and industrial activity. Post-pandemic, gasoline consumption rebounded rapidly, reaching 162.5 thousand barrels per day in 2022 and 172.0 thousands barrels per day in 2023, surpassing pre-pandemic levels. This surge was fueled by renewed economic activities, increased travel, and a revival in industrial transportation needs (World Bank, 2022).

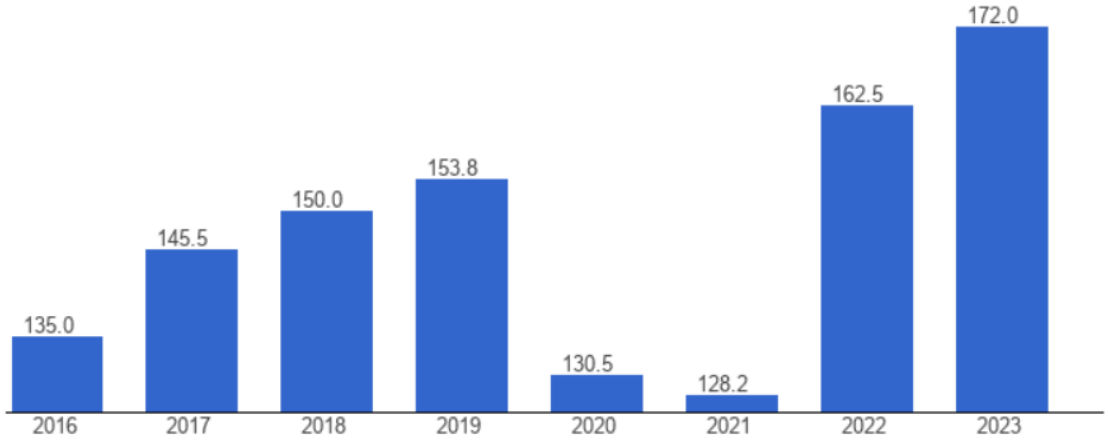

Figure 3. Gasoline consumption in Vietnam (in thousand barrels per day)

Source: TheGlobalEconomy.com

4.3. Overall conclusion

Based on the above data analysis, it can be inferred that gasoline prices in Vietnam tend to fluctuate in response to global crude oil prices but remain under government regulation, keeping them lower than the world average. As reported by the International Energy Agency, fuel prices have experienced significant volatility in recent years, notably dropping in 2020 due to the COVID-19 pandemic, then rocketed in 2022 in the event of the energy crisis and geopolitical tensions, and Vietnam is not an exception. However, since 2023, prices have gradually stabilized and declined slightly, which reflects the adjustments in the global oil market and domestic price control policies.

Additionally, as seen in the post-pandemic surge, gasoline consumption rebounded from 130.5 thousand barrels per day in 2020 to 172.0 thousand barrels per day in 2023, reflecting a return to strong economic activity, industrial transport expansion, and increased personal vehicle

usage. Given the sharp recovery, gasoline consumption is expected to continue increasing, but at a slower pace compared to 2022–2023.

To sum up, the excise tax on fuel has remained relatively stable over the years, while gasoline prices and consumption fluctuate continuously due to global events and macroeconomic factors. Therefore, the excise tax does not have a significant impact on gasoline consumption in Vietnam.

In addition, according to the Ministry of Finance, the shift toward renewable energy, the growing adoption of electric vehicles (such as Vinfast), and policies promoting biofuels (E5 and E10) need to be spread, thereby gradually reducing reliance on traditional gasoline. In the long term, Vietnam will need to balance price control measures to maintain economic stability while fostering sustainable energy solutions to mitigate the impact of global oil price fluctuations.

4.3. Evaluations

4.3.1. Benefits

Generating government revenue for infrastructure and development

Excise taxes on gasoline provide a crucial revenue stream for the government, funding essential infrastructure and development projects. With gasoline prices averaging 0.83 USD/L between 1995 and 2025, tax collection from fuel sales has significantly supported public transit expansion, road maintenance, and clean energy initiatives. Additionally, tax revenue has been allocated to environmental programs aimed at reducing CO_2 emissions and promoting sustainable energy solutions. By stabilizing government income and reducing reliance on direct taxation, gasoline excise taxes help ensure long-term national development and fiscal resilience.

Sustained growth in fuel demand reflecting economic expansion

Despite price fluctuations and government interventions, gasoline consumption in Vietnam has shown sustained long-term growth, driven by economic expansion, urbanization, and rising vehicle ownership. Vietnam's gasoline consumption surged from 135.0 thousand barrels per day in 2016 to 172.0 thousand barrels per day in 2023, highlighting the increasing reliance on personal and industrial fuel usage. This growth indicates strong economic recovery, increased travel demand, and industrial expansion, particularly in manufacturing and logistics sectors. While efforts to promote electric vehicles (EVs) and biofuels are underway, the immediate impact on consumption remains limited due to the lack of widespread EV infrastructure and affordable alternatives.

4.3.2. Limitations

Potential growth of illicit fuel markets

A significant price disparity between legal and illegal fuel sources, exacerbated by rising excise taxes, has fueled the growth of illicit fuel markets. Vietnam's lengthy borders with Cambodia and Laos have created opportunities for fuel smuggling, as consumers seek cheaper, untaxed fuel. Additionally, the price gap between diesel and gasoline in Vietnam, where gasoline costs 109.29% of diesel prices, has led some consumers to explore alternative, often unregulated fuel sources. Without stronger border enforcement and stricter regulations, high excise taxes could inadvertently encourage the proliferation of illicit fuel trade, resulting in revenue losses for the government.

Challenges in long-term fiscal stability

While excise taxes on gasoline currently provide stable government revenue, their long-term reliability remains uncertain due to evolving energy trends. With electric vehicles (EVs) gaining traction, coupled with increased investment in biofuels (E5, E10) and renewable energy, gasoline consumption may gradually decline, reducing tax revenue. Moreover, fluctuations in global oil prices, which have seen gasoline prices in Vietnam range from 0.34 USD/L (1995) to 1.33 USD/L (2022), introduce unpredictability in tax collection. To ensure fiscal stability, the government may need to diversify taxation models, such as carbon pricing or road usage fees, to sustain revenue while promoting sustainable transportation alternatives.

Negative environmental consequences of rising gasoline consumption

The continuous increase in gasoline consumption in Vietnam has led to serious environmental challenges, particularly in terms of air pollution, greenhouse gas emissions, and climate change impacts. As gasoline consumption surged from 135.0 thousand barrels per day (kb/d) in 2016 to 172.0 kb/d in 2023, the carbon footprint of the transportation sector has grown significantly, contributing to deteriorating air quality in urban areas. According to the report by the Green Innovation and Development Center (GreenID), in the second quarter of 2018, air quality in Hanoi had an average Air Quality Index (AQI) of 86 and an average PM2.5 concentration of 30.6 $\mu g/m^3$.

5. Recommendations

5.1. Controversial opinions

The Ministry of Finance has rejected the Vietnam Chamber of Commerce and Industry's (VCCI) proposal to eliminate the excise tax on fuel. This represents a renewed appeal from the VCCI, which contends that gasoline is not a luxury good. It is argued that since gasoline is

already subject to two forms of taxation - excise tax and environmental protection tax - the excise tax could be removed, and the environmental protection tax adjusted to fulfill the same purpose.

However, after the reduction in environmental taxation by 50%, excise tax became critical as a rigorous measure to mitigate environmental impact. According to the Ministry of Finance, suggestions for sustaining reduction in environment protection tax have been approved and will be effective until the end of 2025. This decision is to help foster growth, encourage businesses and achieve economic objectives. For the purpose of balancing economic growth and environment protection, decisive measures are required. Taken into consideration the role of excise tax on combating climate change, the 2050 target for cutting down net emissions to zero, the fossil- and non-renewable-natured of gasoline, and the fact that fuel excise tax is leveraged worldwide, The Ministry of Finance believed that the regulation is in line with the nation's objectives and international practice.

5.2. Recommendations for Vietnam

Encouraging alternative vehicles

The Ministry of Finance has promoted the usage of green energy vehicles over the years and the growth of electric vehicles (EVs) in Vietnam, particularly Vinfast, is following a positive trend, but EV adoption remains low. In the first half of 2023, Vinfast sold a total of 11,638 electric cars (Figure 5), which shows greater figures for Vietnam than the previous years but still lower compared to the world.

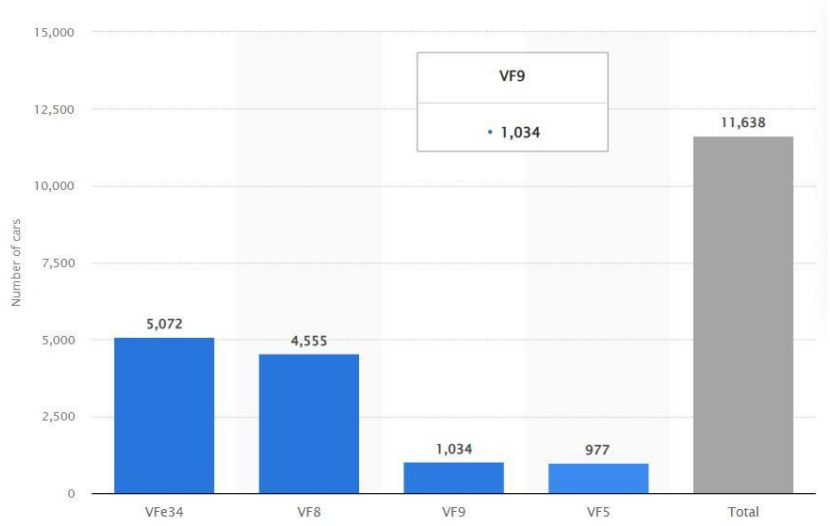

Figure 4. Number of electric cars sold by VinFast in Vietnam as of first half of 2023

Source: Statista

In fact, the global electric vehicle stock has been on the increase from 2013 to 2023, especially after 2020 (Figure 6). China (represented in light blue) holds the largest share of total electric vehicles, particularly in BEVs (Battery Electric Vehicles). Europe and the United States have also seen steady increases in both BEVs and PHEVs (Plug-in Hybrid Electric Vehicles), indicating a global transition towards environmentally friendly transportation. The "Rest of the World" category has begun to grow, though still at a lower level compared to the leading three regions.

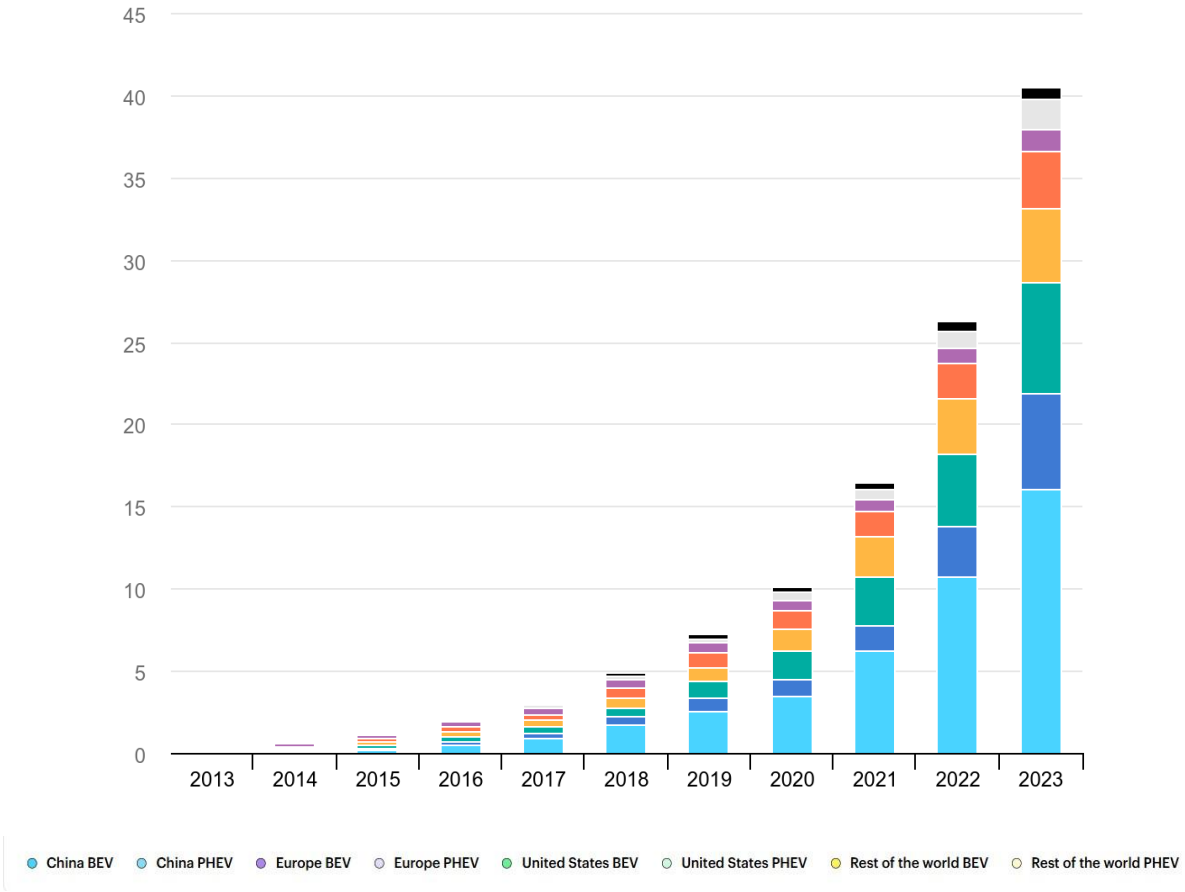

Figure 5. Global electric car stock, 2013-2023 (million)

Source: International Energy Agency (IEA, 2023)

The global trend toward electric vehicle adoption is evident, with substantial growth in BEVs and PHEVs across major markets. However, in Vietnam, gasoline-powered vehicles still dominate the market at nearly 77.49% (Figure 7), indicating that the transition to electric vehicles remains slow. According to Clause 4, Article 8 of Decree No. 10/2022/ND-CP, ownership registration fee for EV motorbikes is 2%, which is still the same as other types of motorbike. The ownership registration fee for EV cars is free until 03/2025, however, it is going to expire soon. Therefore, to align with global trends and reduce dependence on fossil fuels, Vietnam needs to

accelerate EV adoption through stronger incentives, improved infrastructure, and supportive policies.

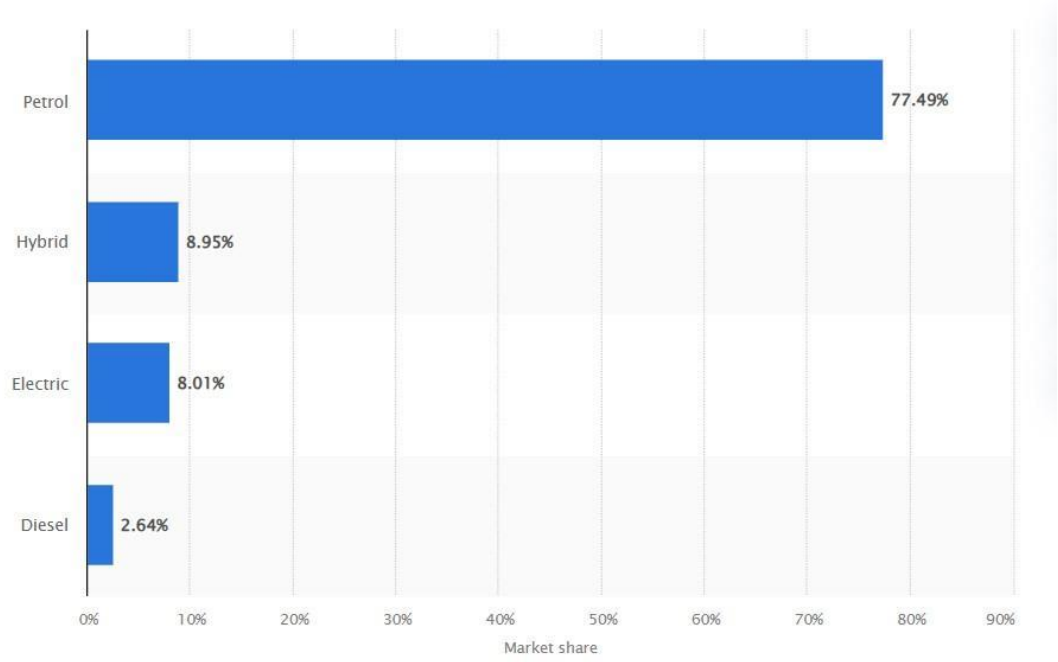

Figure 6. Breakdown of passenger cars in Vietnam in 2024, by fuel

Source: Statista

Promoting investment in renewable energy

Investing in wind and solar power can reduce dependence on fossil fuels. Germany has already achieved 52% of its total energy supply from renewable sources, which helps mitigate the impact of fossil fuel price fluctuations (German Federal Network Agency, 2023). Thus, Vietnam should increase its renewable energy usage to limit the negative environmental impacts of gasoline.

Supporting businesses in reducing dependence on fossil fuels

Currently, the transportation and manufacturing industries in Vietnam still heavily rely on gasoline and diesel. According to the Ministry of Industry and Trade, the logistics sector accounts for approximately 40% of the country's fuel consumption.

To reduce fossil fuel dependence, businesses can be supported in transitioning to:

- LNG-powered trucks (Liquefied Natural Gas), which have already been adopted by many countries as a replacement for diesel, reducing fuel costs by 30-40% and cutting CO_2 emissions by 25% (International Energy Agency, 2023).

- Electrification of bus and taxi fleets: For example, China has more than 400,000 electric buses, about 99% of the world's total, saving billions of USD in fuel costs annually (Jason Margolis, 2019).

6. Conclusion

Based on the above analysis, it can be concluded that excise tax is an effective tool to encourage efficient fuel use, as well as mitigating the consequences of fuel consumption to the environment and social welfare. Revenue from excise tax can be used for purposes of improving infrastructure and socio-economic development, as Vietnam is ascending to the era of comprehensive and sustainable development. Therefore, the imposition of excise tax on fuel is still inevitable at present.

While it is undeniable that excise tax on fuel can have certain limitations on illicit fuel markets, fiscal stability and negative impacts on the environment, the government can follow a set of specific measures to find a balance between its benefits and drawbacks. The evolution of the electric automotive industry has shown prospects of consumers switching to electric transportation alternatives. The government should provide incentives for investments in promoting renewable energy for more common use, as well as supporting businesses to reduce reliance on fossil fuel in their production processes.

The research's limitations include the dependence on secondary data, as specific data to this topic is rather limited for common access. To ensure a balanced approach, Vietnam must consider a well-structured policy framework that maintains excise tax benefits while mitigating its economic downsides. This includes promoting alternative energy sources, providing incentives for electric vehicle adoption, and refining the taxation structure to align with long-term sustainability goals. As the country navigates its energy transition, a dynamic and adaptable tax policy will be essential in addressing both fiscal and environmental challenges. Our study provided a comprehensive overview of the excise tax policy on fuel in Vietnam and examines the broader market implications in fuel pricing and consumption. Therefore, future studies can explore potential reforms in Vietnam's excise tax policy on fuel to enhance its effectiveness in balancing economic growth and environmental sustainability. Further research could assess the long-term implications of excise tax adjustments on fuel market dynamics, business operations, and consumer behavior. Additionally, researchers may investigate the interaction between excise tax and other fiscal policies, such as value-added tax (VAT) and import duties, to develop a more comprehensive and adaptive taxation framework. Analyzing external factors, including global energy market fluctuations and advancements in alternative fuels, will also be crucial in shaping a resilient and forward-looking fuel taxation strategy for Vietnam.

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