

MACROECONOMICS ASSIGNMENT

Vietnam - Group 8

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Abstract

Vietnam's economic trajectory has been marked by impressive growth and resilience, largely fueled by its export-oriented manufacturing sector, which leverages low labor costs, strategic trade agreements, and a favorable tax environment. However, while successful in the short term, this growth model reveals a critical vulnerability: an over-reliance on exports and significant exposure to geopolitical fluctuations, particularly in its relationships with major trading partners like China and the United States. The recurring strategy of currency devaluation, employed to maintain export competitiveness, has proven to be unsustainable, leading to inflationary pressures and undermining long-term economic stability. This underscores the urgent need for Vietnam to transition towards a more diversified and innovation-driven economy, moving beyond its current reliance on labor-intensive manufacturing.

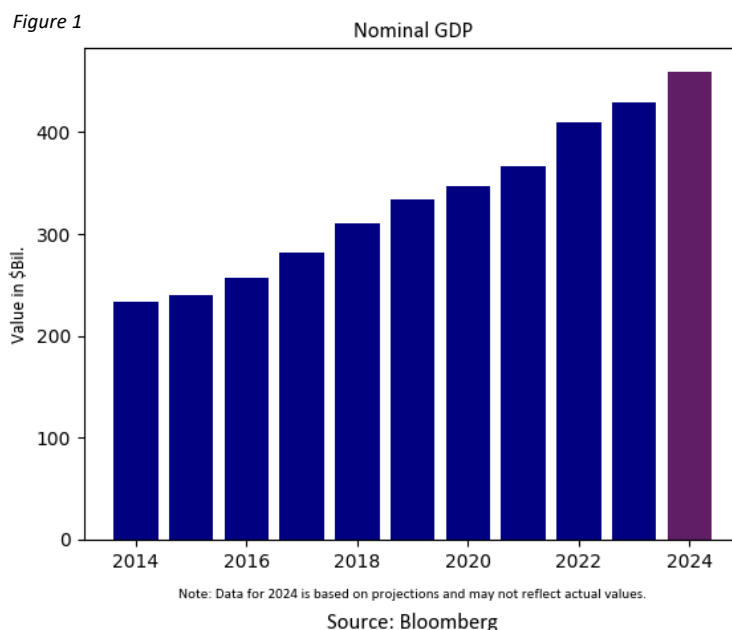
To achieve sustainable and robust economic growth, Vietnam must strategically ascend the global value chain by transforming into a technology hub focused on innovation, research, and development (R&D). This transition necessitates addressing two fundamental challenges that currently impede progress. Firstly, a significant skills gap exists within the workforce, hindering the shift towards high-tech industries and advanced manufacturing processes that demand specialized knowledge and technical expertise. Secondly, inadequate infrastructure, particularly in power supply and reliability, significantly deter foreign direct investment and overall economic efficiency.

Vietnam's Economic Resilience and Growth

Vietnam's economy has demonstrated remarkable resilience and growth over the past decade, dealing with global challenges such as COVID-19 and natural disasters like Typhoon Yagi with agility. Building on strong GDP performance, robust fiscal policies, and effective debt management, the government has set ambitious economic growth targets of 6.5% to 7% by 2025, aiming to register at least 7% growth in the current year. Key components and industries such as manufacturing, exports, and domestic consumption have driven sustained progress, supported by proactive government initiatives and an encouraging business environment. Investment growth has been strong compared to other Asian nations like China, Indonesia, and Malaysia. However, further efforts are needed in infrastructure development, innovation, and workforce upskilling to unlock the economy's full potential.

Gross Domestic Production

Vietnam experienced steady nominal GDP (Figure 1) growth from 2014 to 2019, averaging 7% annually. During the pandemic in 2020, Vietnam avoided a recession, achieving 3.6% growth due to early measures like lockdowns, contact tracing, and quarantine protocols. These actions minimized the health impact, allowing the economy to restart sooner than most nations. Key sectors such as industry and manufacturing rebounded quickly, supported by a strong export performance, stabilizing revenue even during global disruptions. From 2021 to 2023, GDP growth accelerated, averaging 7.4% annually, reaching \$430 billion by the end of 2023.



Exports, accounting for 85% of GDP where the main driver of the nominal growth, but the economy benefitted also from a rising trend in domestic consumption. According to statistics released by the General Statistics Office (GSO), the total retail sales of goods and services in August 2024 were estimated at VND 526.6 trillion (\$ 21.35 billion), an increase of 7.9% year-on-year. Still the ministry of Industry and Trade is currently looking for implementing new demand stimulation programs with the aim to boost domestic market even more.

Projections for 2024 remain optimistic, with GDP expected to reach \$460 billion, sustaining a 7% annual growth rate. Vietnam's twelfth consecutive quarter of year-over-year growth has been achieved despite challenges such as the worst typhoon in seven decades, which disrupted business activities in September 2024.

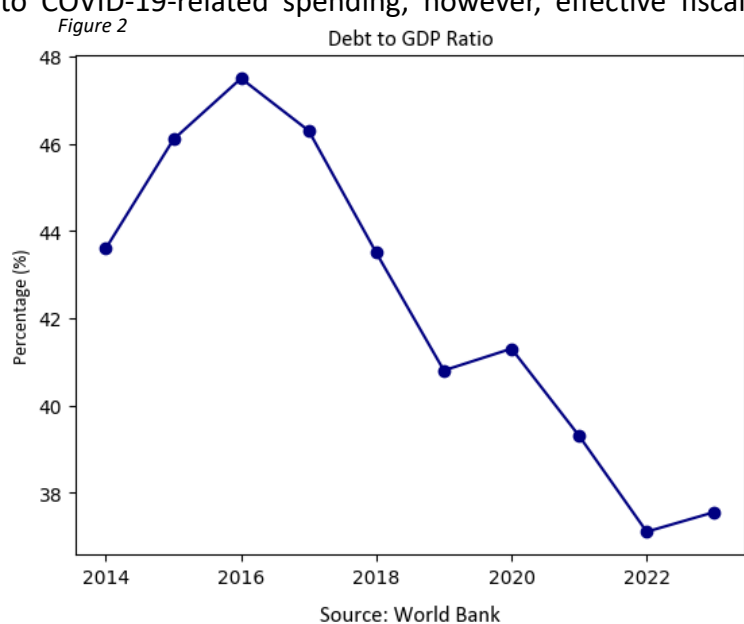
Fiscal Policies

Fiscal policies play a key role in sustaining economic growth and social welfare. Part of the post-COVID GDP rebound must be attributed to the decision to adopt Resolution 43/2022/QH15, an extraordinary fiscal policy providing tax exemptions and reductions that totaled VND 60.53 trillion (around \$2.4 billion). This measure was designed to help firms and individuals recover from the economic crisis. Moreover, it gave the Government the flexibility to manage public debt effectively, adopting expansionary fiscal policies when necessary to support economic recovery. These efforts contributed to a low unemployment rate, strong GDP growth, and state budget revenues that exceeded expectations.

The International Monetary Fund has further emphasized the importance of leveraging Vietnam's fiscal space to sustain growth. They recommend that the government continue strengthening its fiscal framework, ensuring transparency, and enhancing spending efficiency. These strategies have already shown promising results. In the first semester of 2024, the government recorded a fiscal surplus for the first time since the pandemic, supported by improved tax collection and higher-than-expected revenues. A slight but significant reduction in the Government Budget Deficit started already in 2023, when it printed at -4% of GDP in 2023, down by 0.1% from the previous year. Data for 2024 are yet to be published but expectations are positive. Such progress demonstrates Vietnam's commitment to balancing economic growth with fiscal sustainability.

Government Debt to GDP

From 2014 to 2023, Vietnam's government debt-to-GDP ratio (Figure 2), exhibited a trajectory of increase, stabilization, and eventual decline. Beginning at 43.6% in 2014 the ratio peaked at 47.5% in 2016, driven by substantial infrastructure investments and growth-oriented expenditures. By 2023, the ratio had fallen to 37.55%, highlighting significant fiscal improvements. The temporary spike to 41.3% in 2020 was attributed to COVID-19-related spending; however, effective fiscal strategies and a resilient economic recovery enabled a return to a downward trend. Notably, even as government spending increased through the years, the debt-to-GDP ratio declined due to robust GDP growth, efficient resource allocation, and disciplined fiscal policies that managed both to increase revenues and stimulate the economy. This decline underscores Vietnam's commitment to fostering sustainable growth while managing debt prudently.

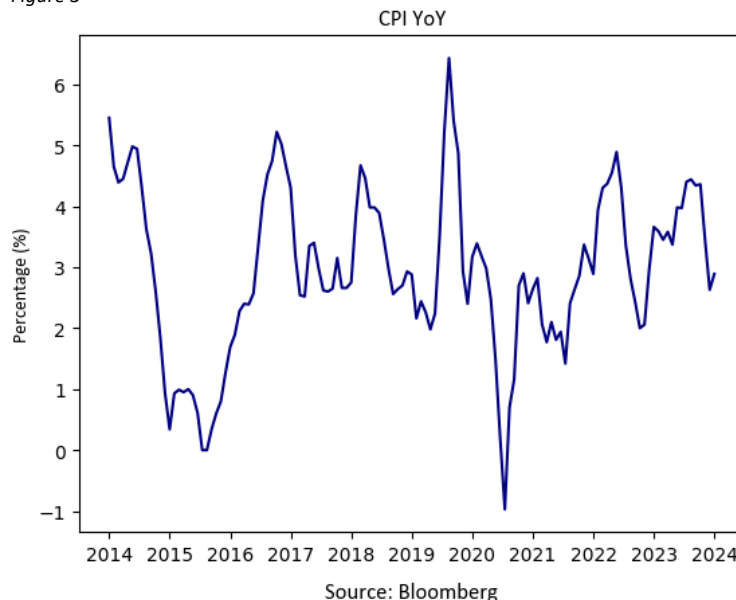


Inflation and the Implications of Monetary Policies

Inflation Rate

Over the past decade, Vietnam's inflation rate has shown significant variability (Figure 3). In 2014, inflation exceeded 5%, but tight monetary policies by the State Bank of Vietnam brought it under control in 2015. Despite efforts to manage interest rates without significantly impacting economic activity, the State Bank was compelled to devalue the dong to maintain export competitiveness, which led to inflationary pressures. By late 2019, inflation peaked at 6.23%. The COVID-19 pandemic reversed this trend, causing inflation to cool significantly, with deflation hitting -0.97% in January 2021, its lowest in a decade. Post-pandemic recovery saw inflation rebound as economic activity increased, averaging 3.1% from 2021 onward and occasionally exceeding 4% due to further Dong devaluations (currently SVD/USD stands at 0.000039). As of October 2024, inflation stands at 2.89%, reflecting moderate price increases in food, catering services, and household tools, while costs for textiles, housing, and transportation declined.

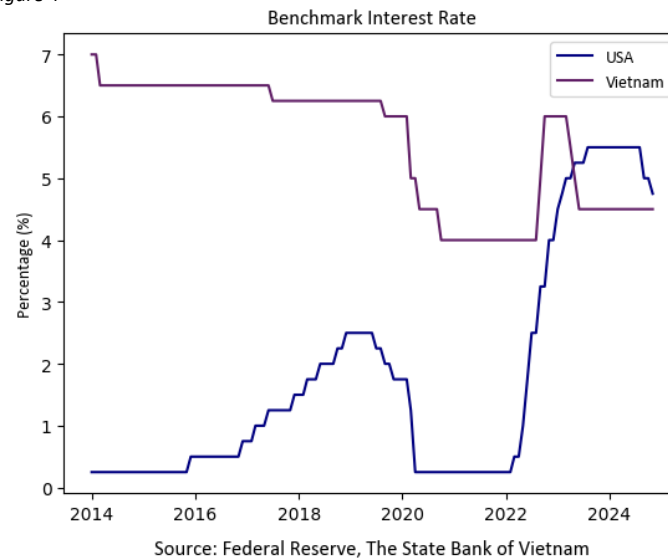
Figure 3



Interest Rate

Vietnam's benchmark interest rate (Figure 4) has been shaped by domestic economic conditions and the monetary policies of the United States. Vietnam's fixed exchange rate regime with the U.S. dollar constrains the State Bank of Vietnam (SBV) in setting independent interest rates, as significant discrepancies with U.S. rates could lead to currency instability or capital flight. Such outflows would put pressure on Vietnam's foreign exchange reserves, as the SBV would have to intervene heavily to stabilize the exchange rate. For instance, during the 2014–2019 period, as the U.S. Federal Reserve raised its federal funds rate from 0.25% to 2.50% to normalize monetary policy after the financial crisis, the SBV on the other hand maintained relatively stable rates around 6.25% to 6.50% to ensure alignment and prevent capital outflows. Pre-COVID, this strategy allowed Vietnam to achieve steady economic growth and control over currency exchange rates while attracting foreign investment and expanding exports.

Figure 4



However, the Pandemic dramatically shifted this dynamic. To revitalize the economy, the FED reduced rates to 0.25% in 2020, prompting the SBV to lower its benchmark rate to a record low of 4.00% to support domestic economic activity. Then, as inflation surged globally, the FED responded by rapidly raising interest rates to 5.5% by mid-2023. Meanwhile, Vietnam was still grappling with the challenges of reviving its manufacturing sector. Despite the pressing need to keep stimulating economic growth, the SBV faced significant limitations in setting interest rates low due to the risk of capital flight and the potential depletion of foreign currency reserves. They were forced to keep the rate constant at 4.5% for the past 18 months. Consequently, the SBV was compelled to adopt alternative strategies to boost economic activity while maintaining financial stability.

DONG Devaluation

Managing the Vietnamese Dong (VND) exchange rate against the US dollar has been a crucial point of Vietnam's monetary policy. Given the export-driven nature of its economy, maintaining exchange rate stability is vital to preserving international competitiveness and curbing inflationary pressures.

In previous years, the SBV employed managed currency depreciation as a strategy to balance the need to keep exports competitive while maintaining stable inflation. For instance, starting from 2014, the VND depreciated by 17.2% against the US dollar (Figure 5). While such measure can provide short-term benefits by boosting export competitiveness, it also carries significant risks. Devaluation can undermine investor confidence, triggering capital outflows, in particular when also other external factors make demand for foreign currencies surge. Moreover, Devaluation increases the cost of imported goods, fueling inflation and eroding the purchasing power of consumers and businesses reliant on foreign inputs and it raises the burden of foreign-denominated debt, as repayments become more expensive in local currency terms.

Figure 5

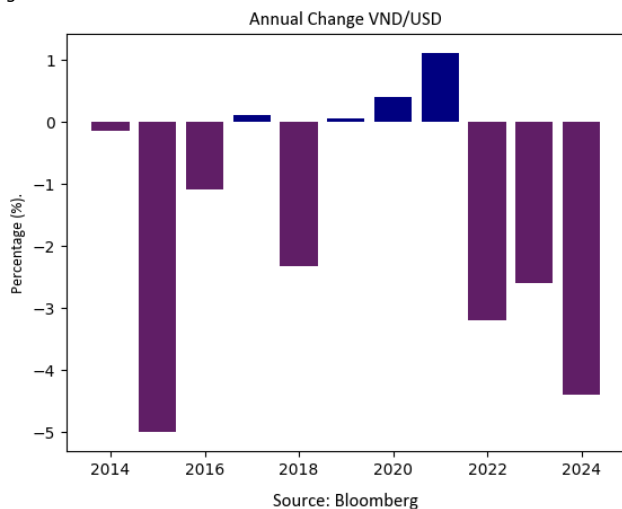
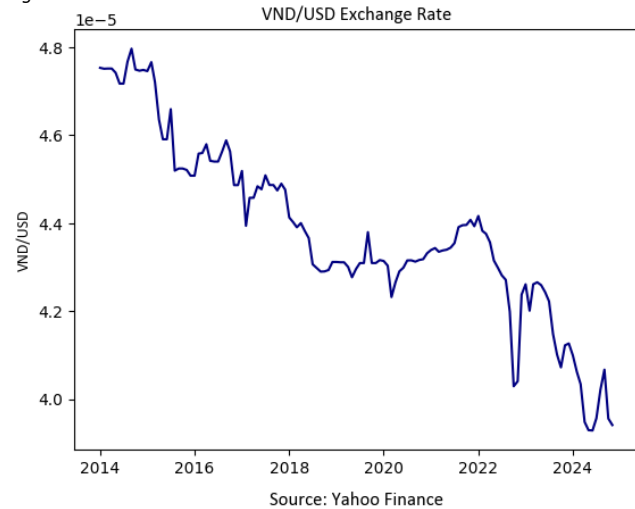


Figure 6



These risks became a reality in 2024, when the VND devaluated by approximately 4.37% against the US dollar, hitting a record low that prompted the SBV to intervene to stabilize the currency. The recent devaluation has been mostly driven by global uncertainties and a delay in the anticipated easing by the Fed, which kept US interest rates higher for longer and shifted investor preference toward dollar-denominated assets. At the same time, Vietnam faced growing internal challenges, such as import growth outpacing exports, which increased even more the demand for foreign currency. This surge in demand for US dollars exerted additional pressure on the SBV to avert an uncontrolled devaluation of the VND. In response, the SBV directly intervened in the market by selling dollars to banks with negative foreign currency positions to stabilize the exchange rate. The SBV reduced its foreign reserves from \$90 billion at the end of 2023 to around \$83–84 billion by mid-2024 maintaining a fluctuation band of approximately 5% for the VND exchange rate and implementing gradual rate adjustments. These interventions were aimed at cushioning the economy from the potential destabilizing effects of external shocks on foreign investments and excessive currency fluctuations. However, room for this maneuver is limited as the central bank's forex reserves are decreasing and approaching the safety threshold of three months of import cover recommended by the International Monetary Fund.

Complicating this situation further is the impact of Vietnam's low-interest rate policy. As previously mentioned, the SBV from 2023 on forward has struggled to balance its domestic interest rates with those of the United States. While maintaining relatively low rates, the SBV has supported economic growth, but it has also weakened the appeal of dong-denominated assets. This eventually resulted in rising pressure to increase interest rates to attract capital and stabilize the VND. Although the SBV, wary of potentially stalling economic momentum, has hesitated to hike interest rates, allowing for further devaluation without slowing economic activity.

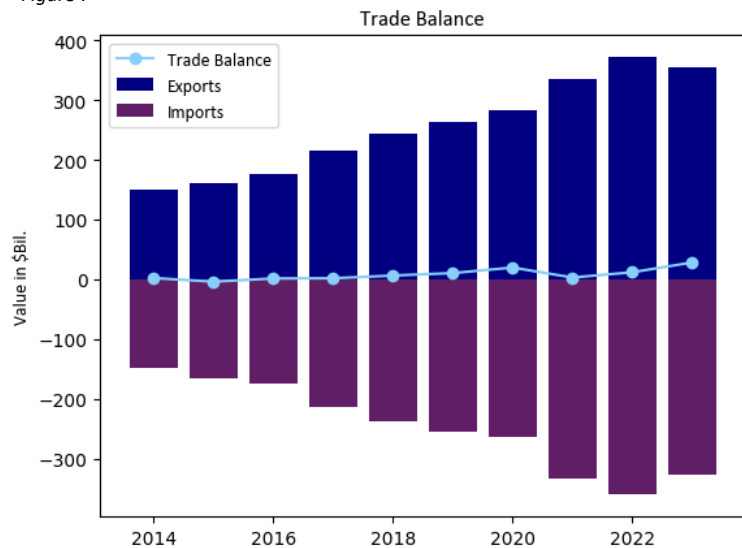
In conclusion, one must outline that, for Vietnam, devaluation may have provided temporary relief in the past by improving the affordability and competitiveness of its exports. However, it did not tackle the fundamental challenges the country is currently facing and certainly it cannot be seen as a sustainable long-term solution.

Trade Balance and Capital Flows

Trade Balance

Vietnam's trade balance from 2014 to 2023 highlights its evolution into a competitive export-driven economy. Despite occasional deficits, such as in 2015, the country has consistently achieved trade surpluses in recent years, supported by strong export growth that over the reference period, particularly in electronics, textiles, and machinery. By 2023, the trade surplus peaked at \$28.36 billion (Figure 7), highlighting its integration into global supply chains, and its export-oriented economic model.

Figure 7

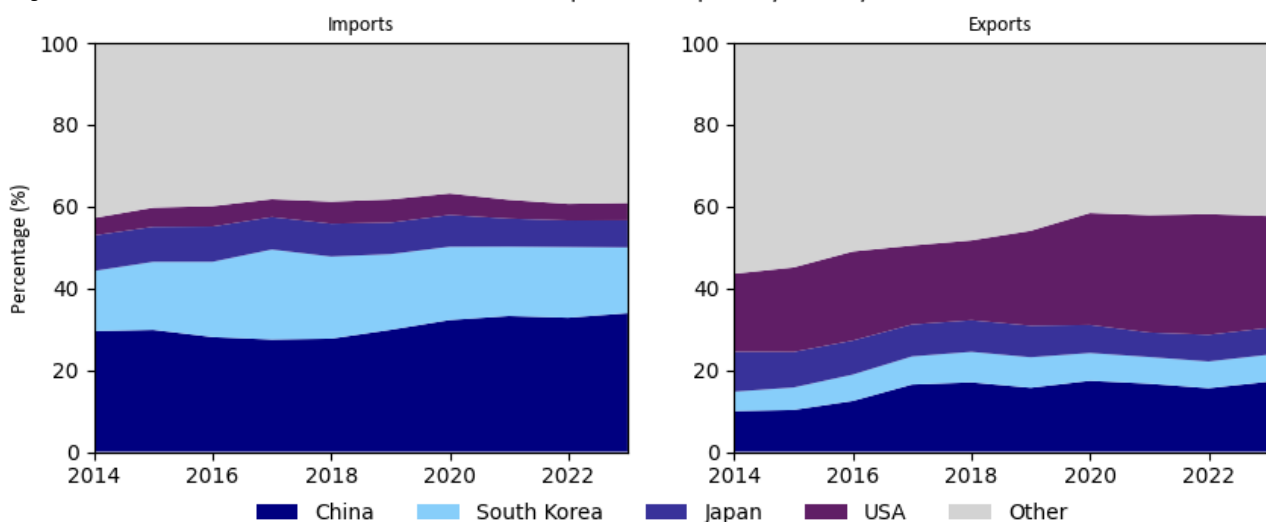


Source: General Statistics Office of Vietnam

The trend from 2014 to 2023 highlights Vietnam's strategic growth, supported by foreign investment and trade agreements in high-tech manufacturing and key export sectors. China remains its largest import partner, accounting for 37% of Vietnam's total imports in 2024 (Figure 8), and the United States is its top export market, accounting for approximately 30% of the whole exports (Figure 8). The significant growth in imports has been driven by the country's expanding manufacturing sector, particularly in electronics, textiles, and footwear, which relies heavily on imported raw materials and components. Notably, in October 2024, nearly 94% of Vietnam's imports consisted of raw materials needed for manufacturing.

Figure 8

Share of Imports and Exports by Country



Source: World Bank

Foreign Investments Policies

To mitigate the effects of increasing imports and being conscious of the reliance on Foreign Capital Inflow to maintain an exchange rate stable, in the past years, the Vietnamese Government introduced new reforms directed toward the development of domestic capital markets. They indeed

managed to increase participation from institutional investors and diversify the range of available financial instruments. These efforts seek to strengthen the financial infrastructure, fostering deeper and more effective market operations to support a robust development trajectory in a larger strategy aimed at attracting new capital inflow to the country. Moreover, Vietnam has adopted a proactive approach to attract foreign direct investment (FDI) through the establishment of investment and industrial park zones, equipped with essential infrastructure and offering tax incentives. The country has achieved notable success in attracting FDI through policies that promote the development of these special economic zones and free trade zones. Being highly industrialized and providing significant tax benefits, they can make Vietnam an attractive destination for global investors. The Government has also prioritized the development of national logistics infrastructure to ensure reliable connectivity, power, and support for these major production areas. The efforts combined with a young and competitively priced workforce have successfully attracted large multinational companies and facilitated the transfer of technology and knowledge, even though the problems in infrastructure are not yet completely solved. Leveraging its strategic geographic position, the country has implemented an ambitious plan to deepen integration with global supply chains, further strengthening its competitive position in the region.

US Strategic Partnership and Regional Dynamics

An additional factor driving increased FDI to Vietnam is the shift of U.S. companies away from China due to trade tensions and supply chain disruptions. This trend aligns with Vietnam's proactive foreign investment policies, enhancing its appeal as a prime destination for global investors seeking stability and diversification.

In September 2023, the US and Vietnam upgraded their relationship to a "comprehensive strategic partnership," reflecting Hanoi's efforts to counterbalance China's growing assertiveness in the South China Sea. This partnership includes a critical focus on semiconductors, with a US-Vietnam chip agreement aimed at building resilient supply chains and expanding Vietnam's production capacity. The shift of semiconductor production from China to Vietnam is driven by U.S.-China trade tensions, geopolitical risks associated with dependence on China (including uncertainties over Taiwan) and supply chain disruptions from the COVID-19 pandemic. Multinational tech companies, such as Apple, Dell, and HP, are diversifying their supply chains by expanding manufacturing operations in Vietnam, underscoring the country's rising significance in global technology supply chains.

Vietnam's geographical proximity to major Asian markets—including China, Japan, and South Korea—makes it an efficient location for production. Its strategic location and expanding infrastructure such as industrial parks and logistics networks further enhance its appeal as a manufacturing hub. The nation's economic reforms and favorable trade policies have made it a vital alternative for technology companies seeking stability and diversification. While this move strengthens Vietnam's economic and strategic ties with the US, it risks straining Hanoi's delicate relationship with Beijing. Closer alignment with Washington could provoke China, a longstanding partner, especially amid heightened tensions over South China Sea disputes and regional rivalries, further reshaping Southeast Asia's geopolitical dynamics.

Vietnam's Paradox

Despite consistent growth in Foreign Direct Investment (Figure 9), which accounted for 3.4% of GDP in Q1 2024, Vietnam faced a negative net capital flow (Figure 10) due to significant portfolio outflows and informal capital movements. Global factors, such as rising U.S. interest rates and a stronger U.S.

dollar, have made American assets more attractive and perceived as safer, prompting investors to withdraw capital from Vietnam. Domestic challenges compounded the issue. Political uncertainties, including intensified anti-corruption measures, and expectations of further depreciation of the VND drove both local and foreign investors to sell VND in favor of U.S. dollars, leading to increased capital outflows. These dollars were then used to purchase foreign assets or gold, fueling demand for safe-haven assets. Gold purchases surged by 28.6% year-on-year, reflecting growing investor caution. The depreciation of the VND further worsened the situation, creating a vicious cycle of capital flight. Unrecorded capital flows soared to 7.9% of GDP in Q1 2024, quadrupling from the previous year. Despite a current account surplus of 5.1% of GDP, Vietnam posted a \$1.37 billion balance of payments deficit during the same period, highlighting the destabilizing effects of these dynamics.

Figure 9

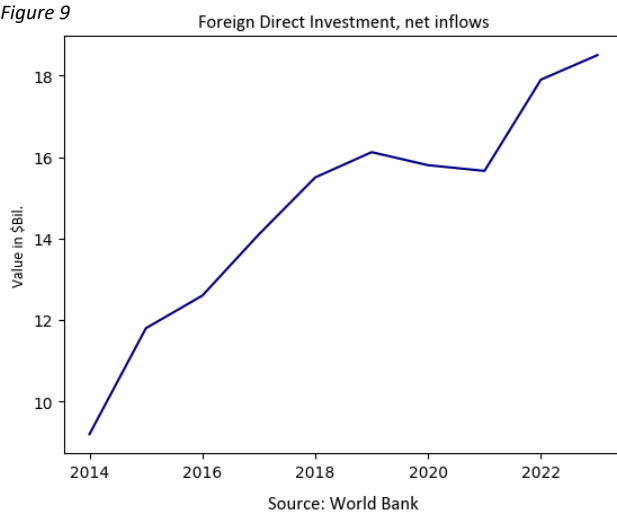
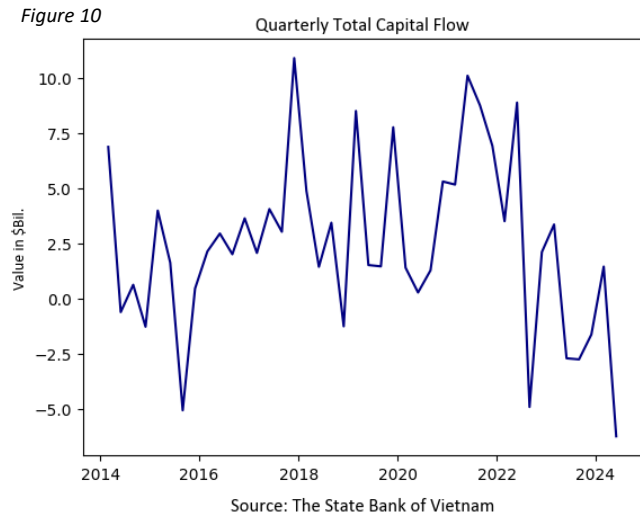


Figure 10



Economic Vulnerabilities and Political Uncertainty

Vietnam's economic growth, heavily reliant on foreign direct investment (FDI) and manufacturing exports, is increasingly challenged by global and domestic pressures. Rising risks from global trade volatility and shifting geopolitical dynamics threaten its position in global supply chains. The World Bank has cautioned that without significant upgrades in infrastructure and workforce skills, Vietnam's competitive edge may erode.

Adding to these concerns, President-elect Donald Trump's proposed tariffs—potentially up to 60% on Chinese goods and 20% on other imports—pose a significant threat. With 30. Something of its total exports and a \$100 billion trade surplus coming from the U.S., Vietnam's economy is highly exposed. Tamara Mast Henderson of Bloomberg Economics predicts slower growth across Southeast Asia, while Vietnam's President Luong Cuong has warned against rising protectionism at APEC, emphasizing adherence to WTO standards. Vietnam also faces uncertainty over its "market economy" status and strategic partnerships with the U.S., further complicating its economic outlook.

Domestically, political instability has heightened investor concerns. A sweeping anti-corruption campaign has shaken Vietnam's leadership, leading to the resignation of several high-ranking officials and making Luong Cuong the fourth president in less than two years. While the campaign aims to boost transparency and attract investment, it has inadvertently caused bureaucratic paralysis, as officials fear approving projects that could later be scrutinized. This hesitation has delayed decision-making and undermined confidence in the government's ability to implement reforms.

The American Chamber of Commerce in Vietnam has stressed the urgent need for a fair and predictable regulatory environment to maintain investor trust. Without addressing governance challenges and ensuring political stability, Vietnam risks losing foreign investment despite its strong economic potential.

Vietnam's Transition to a Tech Hub

Vietnam is working to address its economic vulnerabilities and move up the value chain by diversifying through an ambitious digital transformation agenda. The country aims to transition from a low-cost manufacturing hub to a high-value, innovation-driven economy under the framework of the "4th Industrial Revolution." Guided by Resolution No. 52-NQ/TW, the government has set bold goals: by 2030, the digital economy is expected to contribute 30% of GDP, with the ultimate goal of achieving high-income status by 2045.

To realize this vision, Vietnam must shift foreign direct investment (FDI) from manufacturing toward research and development (R&D) and high-value sectors. Encouraging foreign firms to establish R&D centers and invest in local workforce development, as seen with companies like Samsung, Meta, and Apple, would foster technology transfer, strengthen innovation capacity, and integrate Vietnam more deeply into global value chains. At the same time, government initiatives to support startups and innovation ecosystems will further accelerate this transformation.

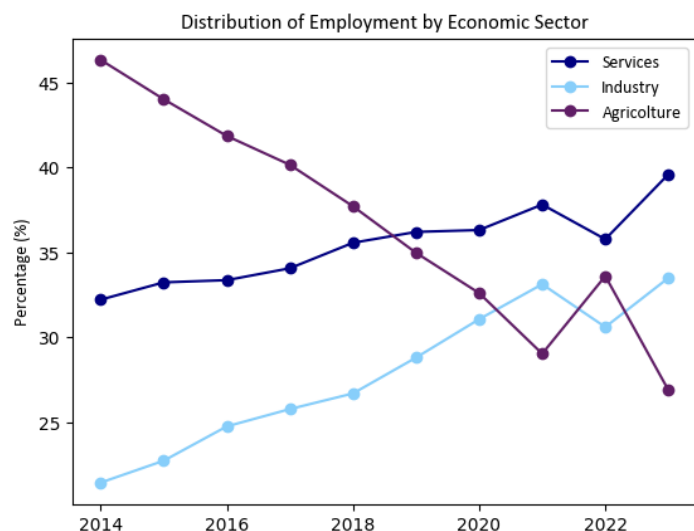
However, two critical challenges must be addressed. First, a significant skill gap prevents the transition from low-skill manufacturing to a high-value tech hub, where advanced technical expertise is essential. Secondly, an inadequate power supply infrastructure is deterring FDI across sectors, undermining Vietnam's attractiveness as an investment destination. Overcoming these barriers is vital for Vietnam to attract high-value investments, build a skilled workforce, and move up the value chain.

Labour Market

As of 2023, Vietnam's labour force comprises approximately 52.4 million individuals, marking an increase of 665,500 from the previous year. Despite 62.7% of the workforce residing in rural areas, posing challenges for mobilizing labour to urban industrial hubs, 51.3 million individuals from Vietnam's working-age population are classified as employed. It is important to mention, however, that in Vietnam, a person is counted as employed if they have completed at least one hour of paid work during the reporting period.

Vietnam's labour market is undergoing a notable sectoral shift (Figure 11), evident in the steady decline of agricultural employment, moderate growth in the industrial sector driven by ongoing industrialization, and the expanding

Figure 11



Note: From 2021-2023 people working for producing self-sufficient products in Agriculture sector are not counted as employed

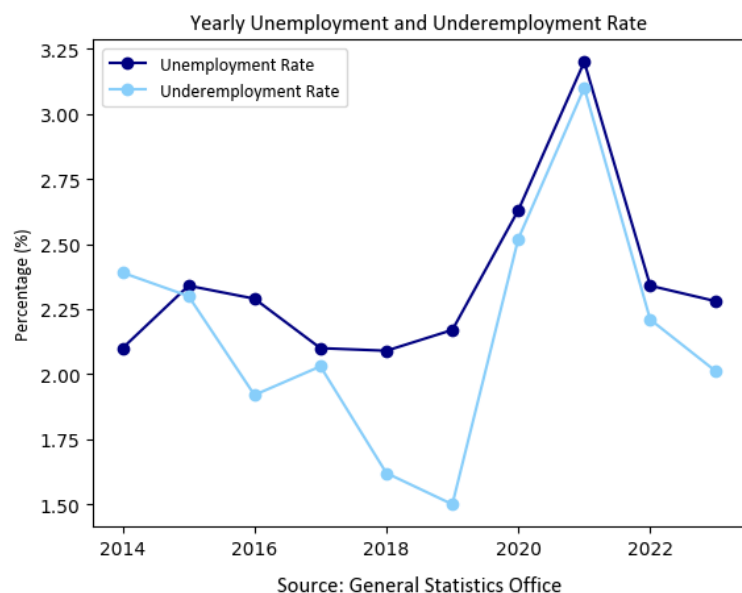
Source: World Bank

service sector, fueled by activities like tourism, retail, and finance. The service sector led job creation, adding 553,600 positions in the last year, followed by the industrial and construction sectors, which gained 248,200 jobs. Meanwhile, the agriculture, forestry, and fisheries sector saw a decline of 118,900 jobs, marking a continued transition from agriculture to manufacturing and services.

Unemployment and Underemployment

Vietnam's unemployment rate (Figure 12) has historically remained low, typically below 3%. However, the COVID-19 pandemic caused widespread job losses and reduced working hours across various sectors, pushing the unemployment rate to 3.98% in September 2021 and prompting many migrant workers to return to rural areas. Cost-cutting measures by businesses, such as reducing employee hours and benefits, along with challenges in the service sector, exacerbated the situation. This not only increased unemployment but also led to a spike in

Figure 12



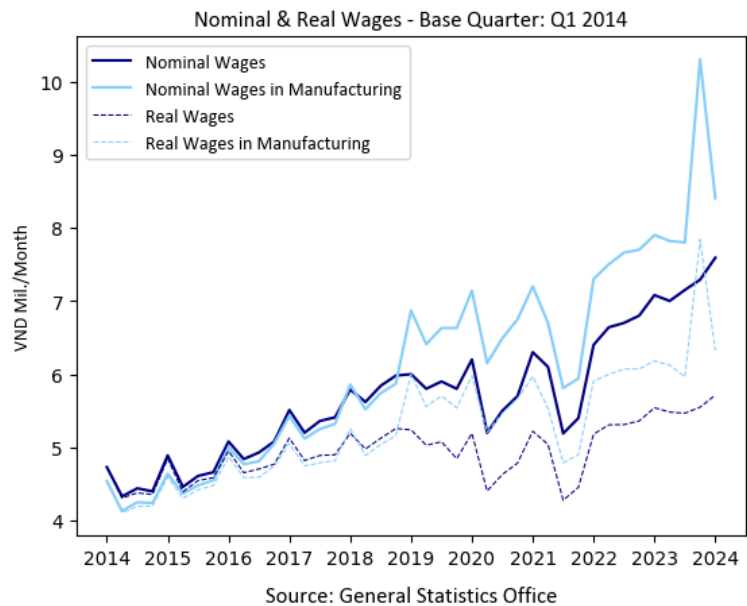
underemployment, with many workers forced into roles that underutilized their skills, qualifications, or availability for full-time work. Notably, in 2020, the underemployment rate rose to 2.60% in the service sector and 4.18% in industry and construction, nearly ten times higher than two years earlier. The post-pandemic recovery brought increased employment opportunities and wage growth, with the unemployment rate falling to 2.24% in Q3 2024, aligning with the pre-pandemic average. However, labor force participation has not fully recovered, dropping from 76.6% in Q4 2019 to 68.5% in Q3 2024. This reduction has caused the total number of employed individuals to decline from 55 million in 2019 to 51.3 million in 2024, despite demographic growth.

Wages

Over the past decade, wages in Vietnam have shown a steady upward trend (Figure 13), reflecting the country's economic growth and the increasing cost of living. The data from the General Statistics Office of Vietnam highlights this trend, showing a consistent increase in average monthly wages from around VND 4.2 million (approximately \$190) in 2014 to over VND 7.2 million (approximately \$300) in 2024. However, it is worth noting that this increase is influenced by the government's regular adjustments to the minimum wage, aimed at addressing inflation and improving the standard of living for low-income workers. The minimum wage started at around VND 2.2 million (approximately \$100) per month in 2014 and has risen to approximately VND 4.8 million (approximately \$200) by the latest data, reflecting a substantial increase driven by government policies to ensure fair compensation.

However, significant wage disparities were observed. By gender, men earned an average of VND 8.1 million (\$332.38) per month, while women earned VND 6 million (\$246.20). Geographic location also influenced wages: urban workers earned an average of VND 8.7 million (\$356.96) monthly, whereas rural workers earned VND 6.2 million (\$254.38). This urban-rural gap aligns with differences in living costs and could present an opportunity for foreign companies to benefit from lower labor costs.

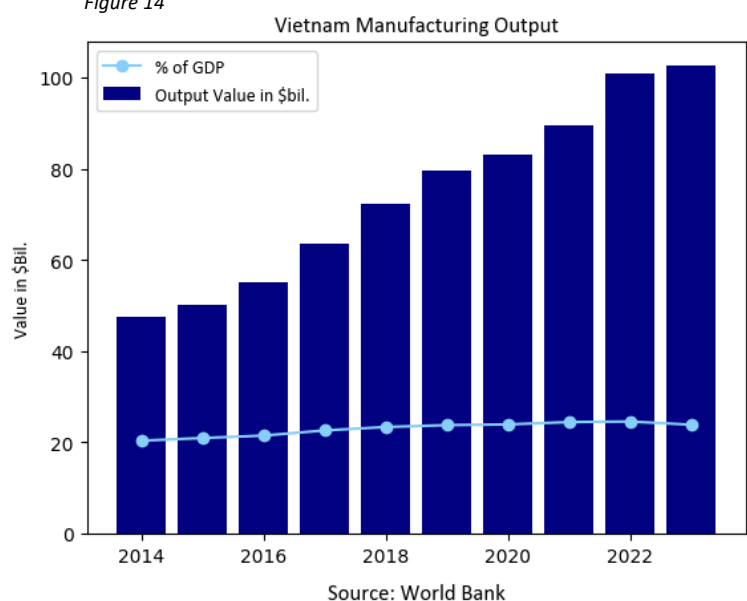
Figure 13



Development Opportunities in Manufacturing

Vietnam's manufacturing sector has shown consistent growth over the years, more than doubling from approximately \$40 billion in 2014 to over \$100 billion by 2023 (Figure 14). This reflects Vietnam's industrial expansion and increasing capacity in the manufacturing sector. This growth is largely attributed to Vietnam's young, abundant, and cost-effective workforce, which has helped the nation become a significant exporter and attract substantial foreign direct investment. With a median age of 32.5 years, Vietnam is in a demographic "golden age," giving it an advantage over regional neighbors like Japan, South Korea, and China. Competitive labor costs further enhance its appeal for foreign direct investment. The government continues to leverage this workforce to boost manufacturing and exports. However, while this labor force was instrumental in achieving initial economic growth, it currently lacks the necessary skills for Vietnam's future economic plans.

Figure 14



Skilled Labour Shortage

This skill gap poses a challenge as the country aims to embrace the Fourth Industrial Revolution and move up the global value chain. Moreover, it hinders the ability to secure both foreign and domestic

investment in a sustainable high-tech industry, given the low proportion of skilled workers. Despite an increase in trained workers from 18% in 2014 to 27% in 2023 (Figure 15), this remains insufficient for meeting investor demands for advanced technological skills and productivity (Figure 16).

Figure 15

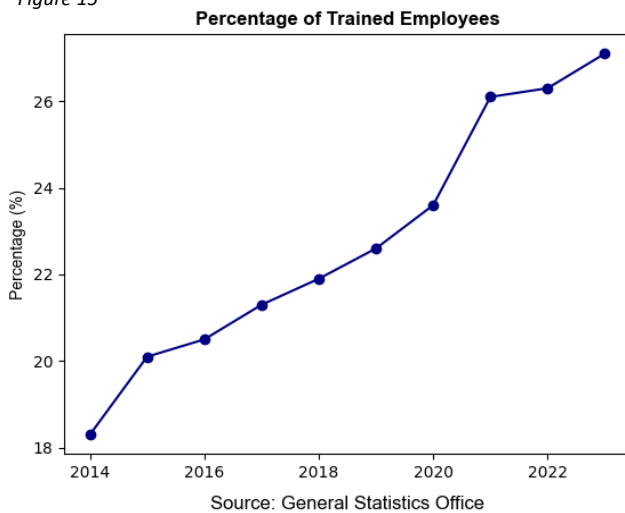
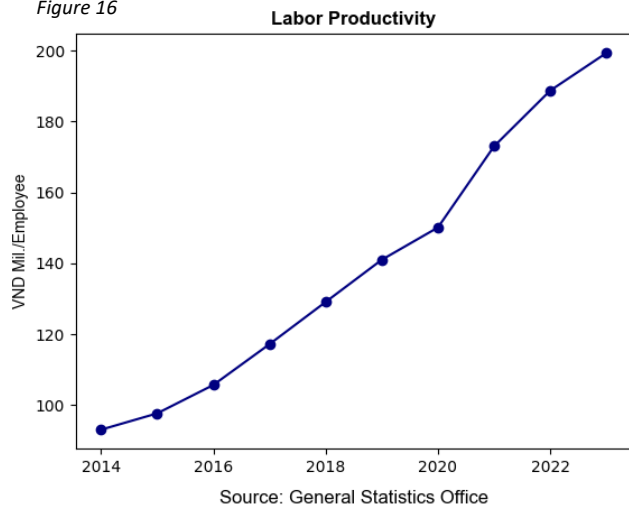


Figure 16



Over 60% of companies report difficulties in finding skilled professionals, with significant gaps in analytical, digital, and practical skills, as well as limited English proficiency. Structural issues in the education system, high training costs, and poor internet access further hinder workforce development.

To address these challenges, Vietnam must implement strategic investments in education and training, focusing on vocational and technical programs and modernizing infrastructure, particularly in underserved areas. Encouraging knowledge transfer from multinational corporations (MNCs) to local firms through fiscal incentives can strengthen domestic value chains and workforce capabilities.

Vietnam should also prioritize foreign direct investment (FDI) in research and development (R&D) and workforce upskilling, transitioning from reliance on low-cost labor to a knowledge-driven economy. Encouraging global firms to establish local R&D centers and invest in workforce development, as seen with companies like Samsung and Apple, can foster technology transfer and innovation. By aligning investments with human capital development, Vietnam can bridge its skills gap, achieve sustainable growth, and position itself as a leader in global technology.

Infrastructural Challenges

As of now has become clear how Vietnam could be one of the top destinations for companies looking to shift manufacturing from China amid geopolitical tensions between Beijing and Washington. Still, a second issue must be faced before the country can reach its full potential in attracting investors from abroad: infrastructure, including mostly power, has struggled to keep up with the burgeoning demand.

Energy Supply Shortage

Consider energy, Vietnam has successfully connected nearly 100% of rural households to the power grid, up from just 14% in 1993. However, growing industrial demand is outstripping supply, leading to power shortages that are particularly concerning for foreign investors who worry about

disruptions in their supply chains. Energy shortages and blackouts are becoming significant deterrents for potential investors. According to the World Bank, investment is particularly lacking in the north and in transition lines connecting the north to the south, where electricity supply is abundant. Consider that only last year's summer blackouts resulted in an economic loss of 1.4\$bn, or 0.3% of Vietnam's GDP, according to preliminary estimates from the World Bank.

To address energy shortages, Vietnam has dramatically increased coal imports (Figure 17), compromising its renewable energy goals and making it less attractive to investors committed to decarbonizing their supply chains. Vietnam relies heavily on imported coal and oil, with 82.8% (Figure 18) of energy supply from fossil fuels, mainly consumed by the industrial sector.

Figure 17

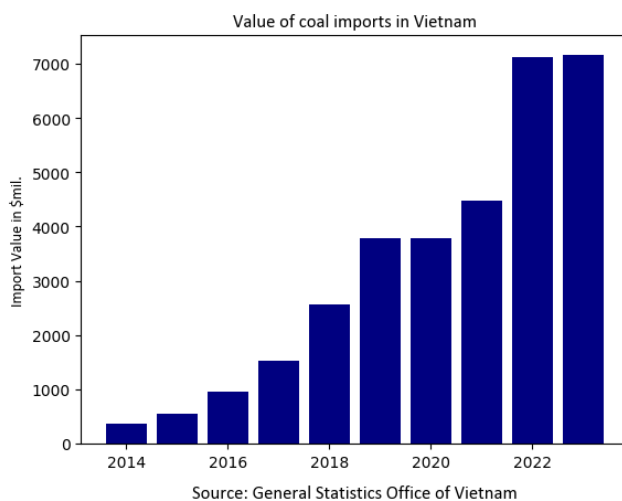
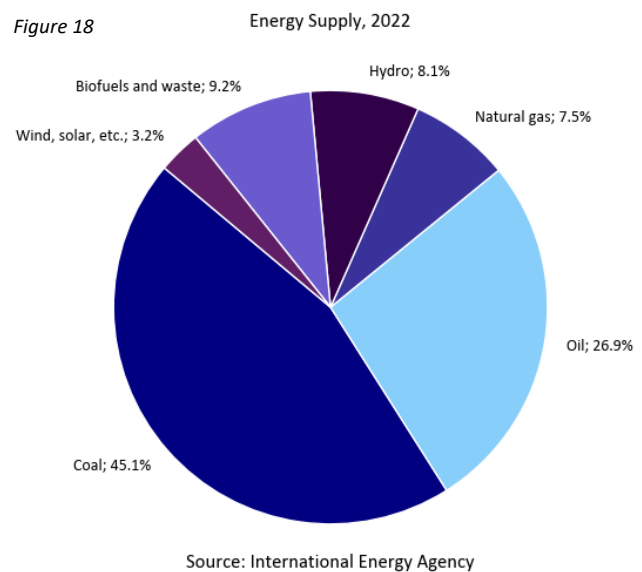


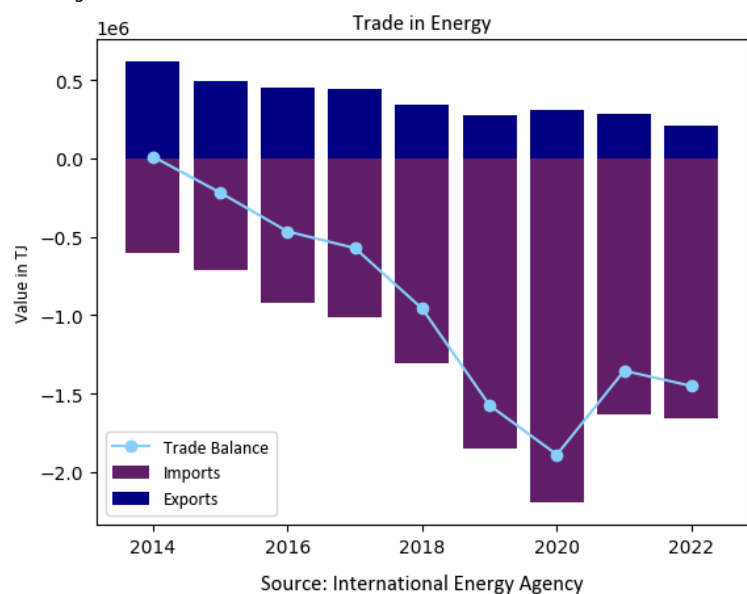
Figure 18



This reliance on imports (Figure 19) leaves Vietnam vulnerable to external disruptions. This possible price volatility becomes riskier, especially when large producers like Indonesia and China in the coal industry, or OPEC in the oil industry, cut production and are moving towards new businesses. The impact of such a trend can be felt so intensely in emerging markets because energy costs are a big part of industrial expenses. An increase in fossil fuel prices often means increased costs of transportation, manufacturing, and energy production, intensifying inflationary pressure on the national economy.

According to the Bank of America Commodities Research team, although concerns that led to price spikes in October have eased, with a projected target price for Brent Crude Oil at \$75 per barrel for 2025 (potentially dropping below \$65 per barrel), coal prices are expected to remain stable at around \$140 per ton. U.S. energy policy shifts, such as potential tariffs, and changes in relations with countries like

Figure 19



Russia, Iran, and China, will most likely influence global supply and demand. Such dynamics may support stable or rising energy demand from emerging markets, keeping prices relatively stable.

However, in recent years, we've seen how quickly market expectations can shift and drive price volatility as global stability wavers and the threat of conflict looms. This heightened uncertainty has raised investors' risk perceptions toward emerging, less-established economies like Vietnam, slowing the inflow of new capital into the country.

Sustainable Energy Development

If Vietnam wants to be an industrial powerhouse it should bet on the clean technologies of the future, not the dirty ones that much of the world is trying to scrap. But faster reform is needed if Vietnam is to fulfill its demand while meeting its climate pledges. Moreover, to become a high-income nation, Vietnam must be able to adopt a whole new socio-economic model, and that certainly cannot be done if at the base there is not a solid and reliable physical infrastructure that can guarantee well-being of all the population.

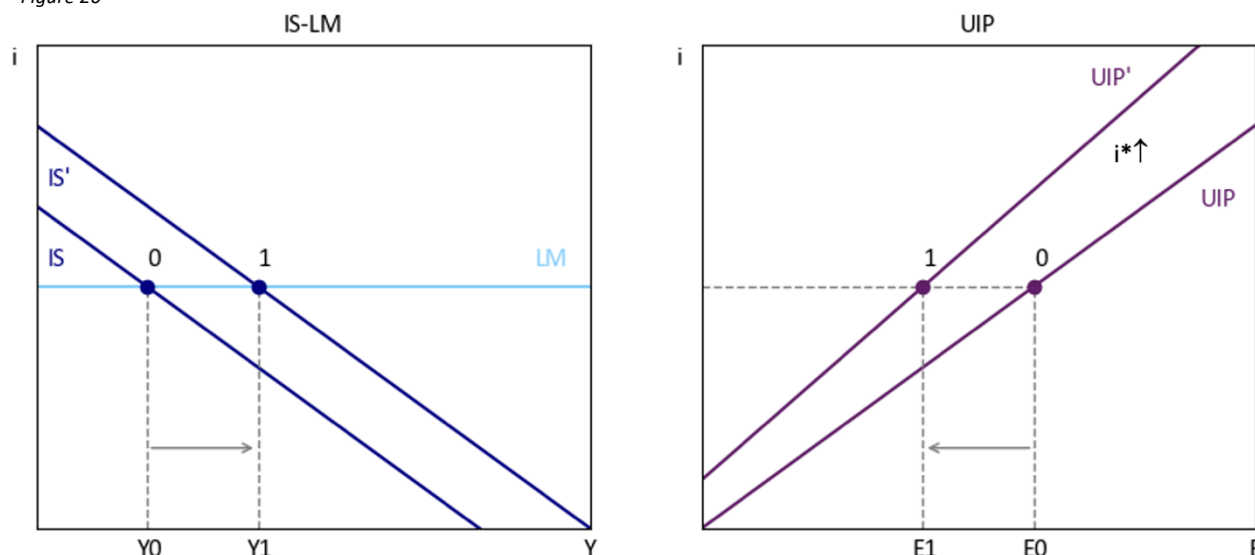
One key factor for sustainable growth is the Government's commitment to renewable energy through strategic investments. Through a shift towards green energies, they can create a more reliable and stable energy framework that not only would meet the demands of a growing economy but also align with global trends in sustainable development. This is worth pursuing even if it may temporarily increase government debt, as the long-term return on investment would ultimately be more beneficial. Investing in renewable energy infrastructure now would yield significant dividends in the future, reducing reliance on fossil fuels and diversifying the risk of supply chain disruption.

Indeed, the development of a resilient and stable green energy infrastructure will likely also make Vietnam more appealing to foreign investors, especially those committed to sustainability. To pursue this task Vietnam has started talking with the United States to deploy small nuclear reactors as part of a broader energy strategy for Southeast Asia. However, the long timetable for nuclear reactors would not fulfill the imminent needs of the country. This means that also other sources of green energy must be investigated to solve a problem that cannot be postponed anymore.

Models and Conclusions

To analyze how domestic and international factors affected Vietnam's short-run economic performance over the last year, we present a $IS - LM - UIP$ model (Figure 20). While Vietnam's interest rate remains unchanged due to its managed exchange rate regime (as explained in the monetary policy section), the increase in the US interest rate creates a differential that, under uncovered interest parity (UIP), and assuming unchanged exchange rate expectations, shifts the UIP curve upward, leading to a depreciation of the Vietnamese. This devaluation, coupled with increased foreign demand (particularly post-COVID), stimulates exports. Simultaneously, domestic fiscal policies, exemplified by Resolution 43/2022/QH15 which increases government spending (G) and reduces taxes (T), contribute to rising aggregate demand, shifting the IS curve upward and resulting in higher output (Y). The combined effect of these factors moves the equilibrium from point zero to point one in the $IS - LM - UIP$ diagram.

Figure 20

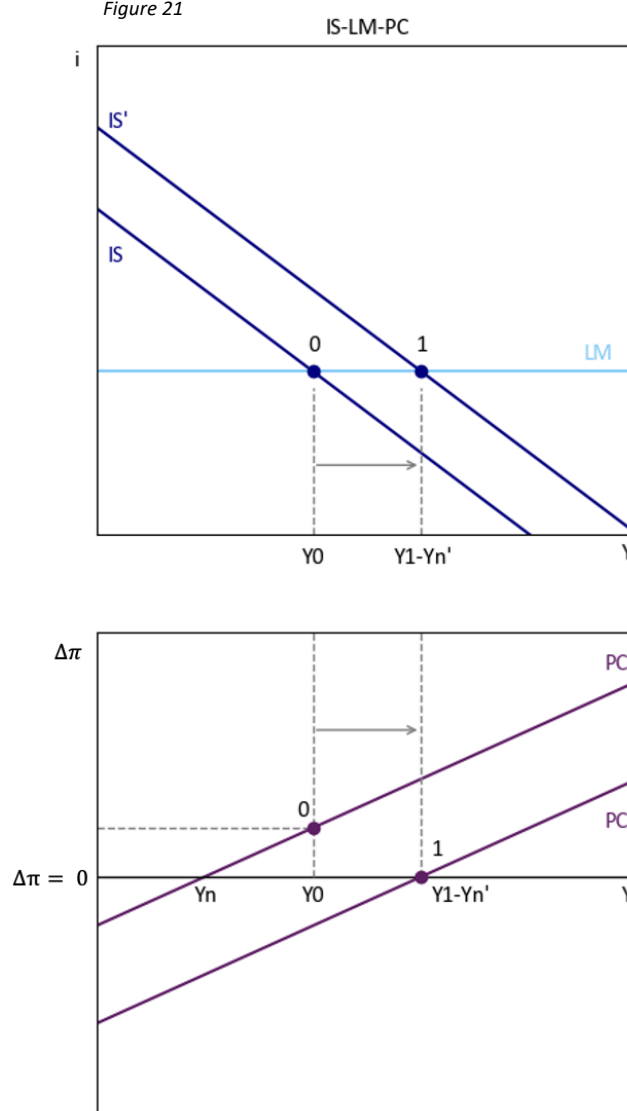


However, these policies are primarily demand-side measures and do not address underlying structural issues or expand the economy's potential output. While fiscal stimulus and currency devaluation can temporarily boost GDP, they also risk fueling inflation without leading to sustainable long-term growth. This highlights the need for complementary supply-side reforms, such as investments in infrastructure and human capital, to enhance productivity and support long-term economic expansion.

To achieve sustainable long-run growth, Vietnam must implement structural policies that enhance potential output (Y_n). Addressing the identified skill gap and inadequate power infrastructure is crucial. Increased government spending (G) on infrastructure and education, coupled with policies that foster innovation and private investment (I), will boost aggregate demand, shifting the IS curve upward in the $IS - LM - PC$ model (Figure 21). This leads to higher output in the short run.

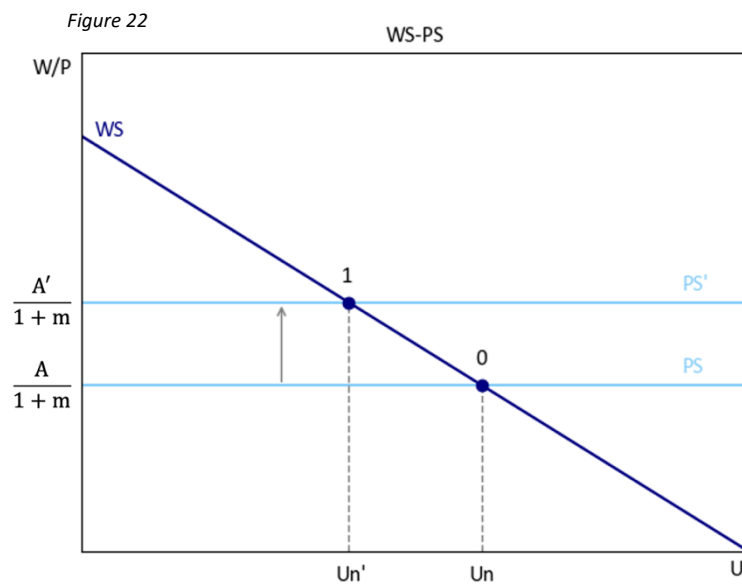
Simultaneously, these investments, combined with effective structural reforms, should increase productivity (A). In the $WS - PS$ model (Figure 22), this positive productivity shock shifts the PS curve upward, resulting in a new equilibrium (point 1) characterized by higher real wages (W/P) and lower natural rate of unemployment (U_n). Higher productivity allows firms to produce more output at the same cost, increasing revenues and enabling them to offer

Figure 21



higher wages. This, in turn, reduces frictional unemployment as workers are incentivized to enter the labor market.

Critically, the increase in productivity (A) and the decrease in the natural rate of unemployment (U_n) in the $WS - PS$ model translate to an expansion of potential output (Y_n) in the $IS - LM - PC$ model. This results in an upward shift of the PS curve, consequently, the initial increase in output driven by higher aggregate demand can now be sustained without inflationary pressures. The economy can produce more without overheating. As demonstrated by the Solow growth model, long-run economic growth is fundamentally driven by growth in productivity. Therefore, Vietnam's focus on structural reforms and productivity enhancement is essential for achieving sustainable economic development.



In conclusion, Vietnam's evolution from an agricultural economy to a leading manufacturing hub is among Asia's most remarkable success stories. However, its integration into global supply chains, has come at a cost. The economy's heavy reliance on exports makes it vulnerable to external shocks, while the ongoing practice of currency devaluation to maintain competitive advantage raises sustainability concerns. Although government fiscal policies have provided short-term stimulus, and a strong strategic partnership with the United States has opened new opportunities, achieving long-term prosperity will require addressing deeper structural issues. As highlighted by our macroeconomic model, addressing the skills gap and modernizing infrastructure, particularly in the energy sector, are essential not only to maintain Vietnam's position in global supply chain, but also to attracting high-value investments and transitioning toward a technology-driven, high-income economy. Vietnam's long-term growth will depend on shifting from short-term demand management, to focus on enhancing productivity, building human capital, and fostering sustainable development. This transformation will require strategic investments and a strong commitment to creating a regulatory framework that is stable, transparent, and reliable, ensuring confidence among both domestic and international investors.

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