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Combining Export- and Domestic Demand-Led Growth Hypotheses: Key Sustainable Development Amidst Global Dynamics

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Abstract

Export-led growth has conventionally been regarded as a pivotal determinant of economic growth in developing countries. The article aims to affirm the vulnerability of Vietnam's export sector due to its dependence on foreign direct investment flows and external market demand and evaluate the validity of the export-led growth strategy being applied in Vietnam among evolving global dynamics. The review of relevant literature explored the theoretical foundations, theories, and concepts of export-led and domestic demand-led growth with regard to the causal link between exports and economic growth. Qualitative and secondary research methods were used to analyze statistical data sets on imports and exports and domestic demand components to highlight their impact on the country's GDP growth. The results showed that it is necessary to embrace both export-led growth and domestic demand-led growth as concurrent development paradigms, thereby ensuring the sustainability of Vietnam's economic growth.

Keywords: Economic Growth; Export-Led Growth; Domestic Demand-Led Growth; Global Dynamics; Sustainable Development; Innovations; Vietnam.

1. Introduction

Vietnam, a developing country in Southeast Asia with a population of nearly 100 million people, is in the process of industrialization and extensive international integration into the global economy, transforming from a centrally planned economy to a market economy. During the period 1986–2005, the “open door” policy and export-led growth (ELG) strategy were chosen by Vietnam as one of the priority economic development paradigms for socio-economic development and improving people's living standards.

Vietnam's open, outward-oriented economy and import-export activities have a positive impact on the country's economic development when accelerating industrialization and modernization are given priority. Exports create important foreign exchange reserves to cover import needs, opening up and promoting the country's economic growth and advantages and contributing to transforming Vietnam's economic structure. It stimulates the production of key export goods in localities and regions in Vietnam, thereby creating more jobs, increasing income, and affirming the

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country's position in the process of global integration and participation in the global value chain. In Vietnam, over the past 30 years, ELG has been considered a driving force for development to solve problems related to socio-economic development; the disadvantages of ELG have not been fully researched, and domestic demand-led growth (DDLG) has not been put on the agenda even though this development paradigm was always present in Vietnam's centrally planned command economy before 1986 and later when Vietnam shifted to the market economy.

Vietnam's exports do not bring much added value and contribute little to economic growth because of their dependence on foreign direct investment (FDI) inflows and foreign-invested enterprises (FIEs), whose export processing activities are capital- and labor-intensive and prioritized for outsourcing and assembling final products. The recent contraction in both exports and economic growth in Vietnam has prompted an inquiry into the continued validity of the ELG hypothesis for the country's economy as a development paradigm and the need to shift to the DDLG strategy.

2. Literature Review

Since the 1970s, the relationship between exports and economic growth has been the subject of widespread debate among development economists who study the economic aspects of the development process in low- and middle-income countries [1, 2]. The rapid and impressive economic growth of South Korea, Taiwan, Hong Kong, and Singapore, known as the "Four Asian Tigers" from the 1960s to the 1990s was considered a prime example of the relationship between exports and economic growth. This relationship has been confirmed by Michalopoulos & Jay [3] and Michaely [4] using a research method based on the correlation coefficient between export growth and economic growth. Later, it was clearly verified to be causal in studies conducted by Jung & Marshall [5], Bahmani-Oskooee & Alse [6], Ghartey [7], and Xu [8], who used the causality test method developed by Granger [9] to investigate lead-and-lag relations. Yang Yao [10] believed that the causal relationship between exports and economic growth is the foundation of the ELG hypothesis that stimulates economic growth based on an export-led outward trade policy. Studying the experiences of newly industrialized economies. Jinjun (1996) [11] defined ELG as an economic strategy adopted by developing countries to achieve economic growth. This strategy refers to a country with an outward-oriented economy that is mainly focused on expanding exports, which leads to an increase in its national income and economic growth.

Export growth has a positive impact on economic growth by affecting total factor productivity through its influence on the rest of the economy, which in turn affects GDP growth. This means that the increased impact of exports will create a spillover effect, stimulating other areas of the economy to develop together to meet export demand, thereby creating high economic efficiency [12]. In contrast, a reasonable and sustainable economic growth rate will significantly affect domestic production, business activities, and export value [13]. Based on Indonesia's manufacturing export data from 2010 to 2019, Sumiyati [14] found that export determinants are inflation, exchange rate, GDP, and FDI, in which GDP has a more positive impact on manufacturing exports than the other factors in both the short and long term.

Many scholars studying the success of Asian countries have concluded that ELG should be considered as an appropriate strategy for developing countries to promote development [15, 16]. ELG encourages countries to focus on exporting goods abroad as one of the key determinants or drivers of national economic growth [17, 18]. In essence, ELG is a development paradigm that enhances production capacity by focusing on overseas markets [19]. The ELG hypothesis posits that export expansion is one of the main factors determining growth because a country's economic growth can be achieved not only by increasing the amount of labor and capital within the economy but also by expanding exports [20, 21]. Development economists have used the ELG hypothesis to explain the rapid development of the "Asian Tigers", rapid growth can be achieved through free markets, their outward-oriented economy, and the ELG strategy [22, 23].

However, criticisms of the ELG strategy and doubts about its validity have arisen because of its concentration in a specialized, outward-oriented economy that is vulnerable to changes in global demand [15, 19]. Referring to the disadvantages of ELG, Palley [19] commented that unfair competition between exporting countries often harms themselves through efforts aimed at attracting foreign investment, expanding export production, or reducing tax, which can cause overproduction or oversupply, creating the premise of a race to the bottom on a global scale.

In certain cases, the ELG strategy is not necessarily a suitable choice for poor countries that do not have export processing industries, favorable geographical locations, and large human resources. In the existing literature, the relationship between ELG and economic growth is revisited. The warning conclusions drawn by Odhiambo [24] are that poor low-income countries in the Saharan desert region should not rely too much on ELG strategies to achieve sustainable growth because no causality between exports and economic growth has been found in those countries. Using time series data on Sri Lanka's GDP, exports, imports, and remittances over four decades from 1980 to 2019, Sumudu Kumari [25] found that the long-run relationship between exports and GDP cannot be clearly confirmed.

As ELG has superficial, exploitative characteristics and potential problems, Palley [26] argued that developing countries need to aim for growth based on the in-depth development of the domestic market, which is called DDLG. The basic idea behind the DDLG hypothesis is that the level of aggregate output is determined eventually by aggregate demand (DA) [27]. Domestic demand has the advantages of encouraging economic growth, reducing dependence on external demand, and enabling more balanced, higher-quality economic growth and efficient use of resources [28].

The need to shift from an ELG to a DDLG paradigm seems inevitable for export-oriented economies. Felipe & Lim [29] argued that Asian developing countries should begin to shift their focus from ELG policies to domestic demand-driven policies to achieve a more balanced growth strategy. This opinion is in agreement with the view of Yeah [28], who analyzed Malaysia's growth performance into various components and demand sources and found that DDLG in Malaysia can compensate for the weak export demand that the country faced in the post-global financial crisis period.

According to the DDLG hypothesis, expansion of the components of domestic demand such as consumption, private investment, government expenditure, etc. will lead to an increase in economic growth, and accordingly, GDP growth is likely to be maintained with an increase in domestic demand; that is, output growth can be started by growth in DA [28, 30]. Analyzing annual data taken from 16 European transition economies in Central and Eastern Europe, Southeast Europe, and the Balkans for the 1990–2015 period, Sağlam & Egeli [31] asserted that both ELG and DDLG strategies are accepted in transition economies in Europe; although the relationship between growth and trade is bilateral, the contribution of domestic demand to growth is seven times higher than net exports.

Employing the Dumitrescu-Hurlin [32] causality test and using common correlated effects mean group estimator for panel data for 1991–2018, taken from the BRICS organization, Neha [33] also found that there is a bidirectional causal relationship between both net exports and domestic demand with economic growth, and the percentage increase in domestic demand contributes more to economic growth than the percentage increase in net export; it means that both ELG and DDLG hypotheses were accepted in the BRICS member-states for the period 1991–2019.

Some studies suggest that the ELG's characteristics are its focus on overseas markets, i.e., it depends on external demand [19, 31, 34]. As a result, economies adopting ELG are vulnerable and affected by their openness and external demand [35, 36]; the DDLG strategy proves its advantages. Therefore, the adoption of the ELG or DDLG strategy or both depends on the development conditions and resource potential of each country.

In Vietnam, although the ELG theory has been applied for more than 30 years, there are few studies on the relationship between exports and economic growth. The reasonableness of Vietnam's ELG strategy in relation to economic growth as well as the dependence of Vietnamese exports on the US and Chinese markets were described by Chaponnière & Cling [37]. This relationship was verified in a study conducted by Cong [38], who tested the impact of exports on economic growth by using the causality test model of Granger [9], Balassa [39], and Feder [11] and found that exports not only play an important role in promoting the country's economic growth but also actively contribute to the development of non-export. This argument was further confirmed by Phan [40], who found the existence of a causal relationship between exports and economic growth in Vietnam in a positive direction with a lag of at least two quarters, using a vector autoregressive model to analyze the time series data collected at the quarterly frequency of economic growth and exports in Vietnam for the period from the first quarter of 2002 to the first quarter of 2018.

The aforementioned studies have proven the existence of a causal relationship between exports and economic growth and the wisdom of adopting ELG as a development paradigm in Vietnam. However, they have also left behind theoretical and empirical gaps that can be summarized as follows: (a) export growth is affected by dependence on FDI and FIEs and fluctuations in external market demand caused by ongoing global changes; (b) domestic demand and the objective existence of DDLG as a determinant of economic growth in the Vietnamese context have not really received the attention of researchers and policymakers. Reviewing theoretical issues and previous studies on ELG and DDLG and analyzing data on Vietnam's export practices and economic growth over the past 10 years, especially in the first 6 months of 2023, this study aims at: (i) clarifying the dependence of Vietnam's exports on external factors and assessing its contribution to economic growth; (ii) verifying the presence of DDLG and its contribution to Vietnam's GDP growth. Based on the above research issues, the following hypotheses are formulated:

- Vietnam's exports are vulnerable to its dependence on FDI and supply chain disruptions or fluctuations in external demand caused by global market dynamics;
- DDLG has a profound impact on Vietnam's economic growth; both ELG and DDLG need to be seen as development paradigms to achieve sustainable economic growth in Vietnam.

3. Aims

A review of previous studies shows that ELG is not an exemplary development paradigm for all developing countries. It is researched, regulated, and adopted concurrently with other development models depending on the specific stages of socio-economic development in certain countries. In the case of Vietnam, where there still exist different discussions and arguments on the role and suitability of ELG and DDLG in the country's current development stage, it is necessary to clarify the following research inquiries: (i) the correlation between exports and economic growth in the context of Vietnam's economy; (ii) the dependence on FDI and the vulnerability of Vietnam's exports amidst global market fluctuations and the continued viability of ELG for Vietnam, particularly as a middle-income developing country in the context of potential unpredictable fluctuations occurring globally; (iii) the role and contribution of domestic demand to

Vietnam’s economic growth. This study aims to determine whether a transition from an ELG to a DDLG strategy is necessary or whether it would be more reasonable to adopt both these development models.

4. Material and Methods

In this article, the vulnerability of Vietnamese exports due to dependence on FDI and fluctuations in global market demand (Hypothesis 1) is illustrated in Figure 1. The dependence of Vietnam’s imports and exports on FDI and its modest contribution to economic growth are demonstrated through the authors’ calculations based on statistical data; inflation and supply chain disruptions caused by fluctuations occurred worldwide, especially in Vietnam’s main import-export markets, and have been seen as causes of the decline in external demand, as evidenced by data from statistical agencies of relevant countries. Secondary research methods were used to analyze the statistical data set on imports, exports, and economic growth disseminated by the General Statistics Office and Vietnam Customs for the period 2010–2023.

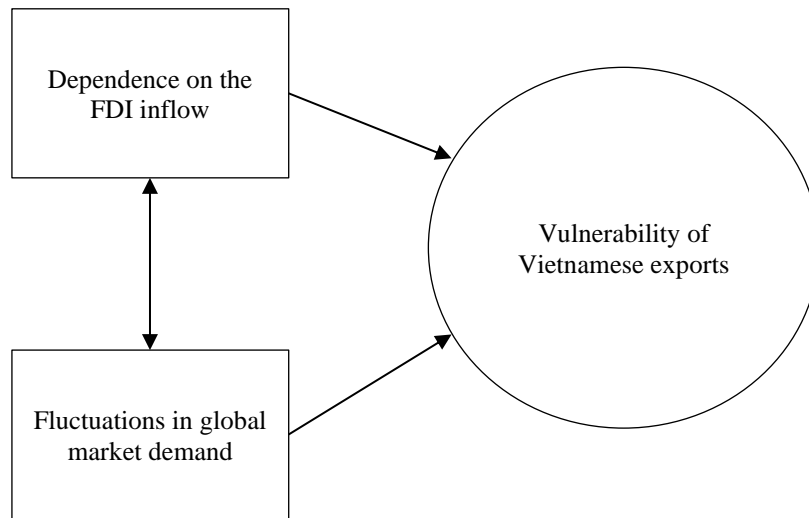


Figure 1. The vulnerability of Vietnamese exports

To verify the role and contribution of domestic demand components to Vietnam’s GDP growth (Hypothesis 2), the authors use the following simple GDP calculation formula:

$$GDP = C + I + G + NX \tag{2}$$

where C (household consumption) corresponds to the spending that individuals, households, and NGOs make on goods and services to meet their daily needs, excluding housing costs; I (investment) represents spending on durable goods by companies that produce other goods and services, including inventory costs (raw materials, semi-finished products, etc.) and purchasing costs household's home; G (government expenditure) is the expenditure (both consumption and investment) made by government agencies at all levels to perform their activities; NX is net export (Export - Import). To clarify the contribution of domestic demand (DI) components, such as household consumption, government spending, and private investment, to Vietnam’s GDP according to the following formula:

$$DI = C + G + I \tag{3}$$

where C + G = Final Consumption Expenditure

Thereby, we emphasize the role and contribution of the DDLG model to economic growth in Vietnam.

5. Results

Export statistics for the period 2013–2022 illustrated in Figure 2 show that the FIEs’ contribution to total export turnover was high with an average share of over 68.1% in the period 2013–2017 and fluctuated at 70–74% in the period 2018–2022.

The import value of FIEs was US\$74.435 billion in 2013, accounting for 56.38% of Vietnam’s total import value; in 2022, this rate was 64.84%. In the period 2010–2022, the average ratio of FDI to total annual investment capital was 17.7%, maintaining the sustainable export growth of FIEs (in Table 5). Thus, FIEs of foreign transnational corporations increasingly dominate both Vietnam’s exports and imports [41].

During 2013–2022, the average annual contribution rate of net exports to GDP was only approximately 2.5% (Table 1).

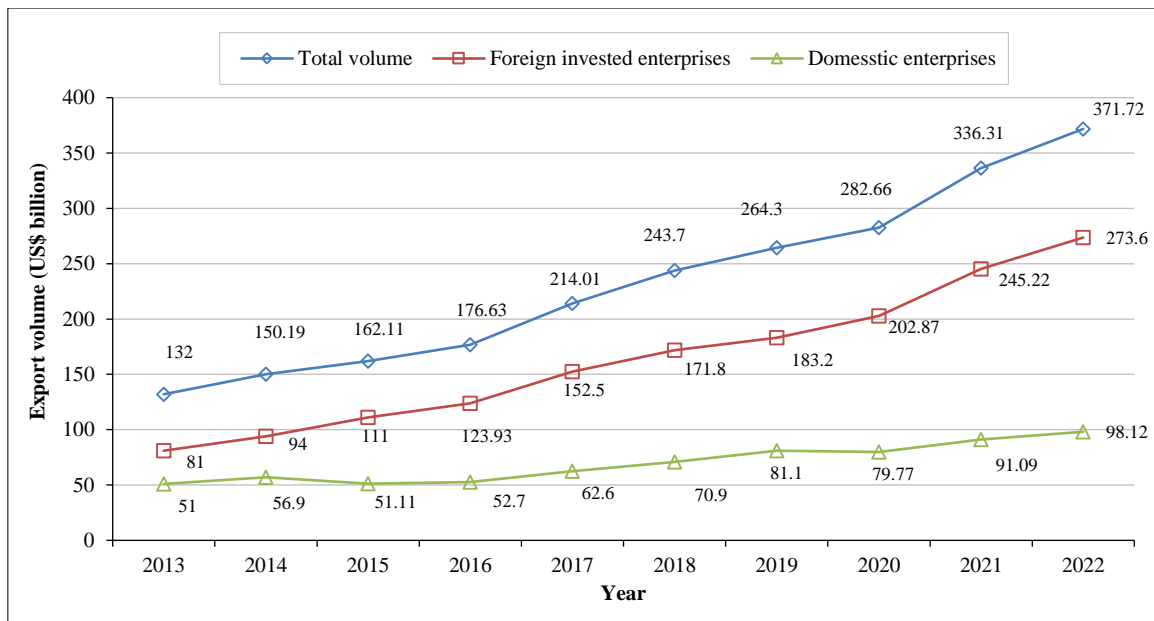


Figure 2. Export volume from 2013 to 2022 by type of enterprise (US\$ billion) [41]

Table 1. Export growth and contribution rate of net export to GDP in 2013–2022 [41-43]

| | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Total export value (US\$ bin.) | 132.0 | 150.2 | 162.1 | 176.6 | 215.1 | 243.7 | 253.4 | 282.7 | 336.3 | 371.7 |
| Total import value (US\$ bin.) | 132 | 147.9 | 165.6 | 174.8 | 213.0 | 215.1 | 264.3 | 262.7 | 332.8 | 359.6 |
| Net export (US\$) | 0.00 | 2.33 | -3.5 | 1.8 | 2.1 | 28.6 | 10.9 | 20.0 | 3.5 | 12.1 |
| Export growth (%) | - | 11.38 | 10.79 | 10.89 | 12.18 | 11.33 | 10.40 | 11.16 | 11.90 | 11.05 |
| GDP (current US\$, bn) | 213.71 | 233.45 | 239.26 | 257.10 | 281.38 | 310.11 | 334.37 | 346.62 | 366.14 | 408.80 |
| Contribution rate of net export to GDP | - | 1.0% | - | 0.7% | 0.75% | 9.2% | 3.26% | 5.8% | 0.96% | 3.3% |

Thus, in general, the contribution of exports to economic growth is more modest than expected when the YoY rate of export growth during this period was over 10%.

Because of the long-lasting effects of the COVID-19 pandemic and the consequences of the war that began in Ukraine in early 2022, the global economic growth rate reached only 2.9%; in the United States and the Eurozone, GDP growth comprised 1.9% and 3.3%, respectively, in 2022. In 2023, global economic challenges were expected to increase due to high inflation, deteriorating financial conditions, and the continuing consequences of wars [42]. In 2022, EU annual inflation reached the highest level ever measured, at 9.2%, three times higher than that in 2021 [44]. The average annual US inflation in 2022 was 8.0%, and this rate decreased to 4.9% in the first 6 months of 2023 [45]. Thus, the high cost of living and tightening policies in the US and EU during this time reduce demand in these regions.

The Chinese domestic market in 2019–2022 is unlikely to change much, with an inflation rate of 2.49% in 2022 and 1.88% in 2022 [46], but import and export activities slowed down during this period due to the zero COVID policy; next, extreme drought and historic floods occurred in 2022–2023. These fluctuations have caused supply chain disruptions, seriously affecting Vietnam's imports and exports. China is Vietnam's second largest export market with 15.5% of total export value by 2022 (after the US with 29.5%) and represents Vietnam's largest import market with 32.9% of total import value, eight times more than the import value of 4% from the US [47].

The consequences of the fluctuations that occurred in 2022–2023 in Vietnam's largest import and export markets have had a strong impact on the country's exports. According to statistics from Vietnam Customs [47], Vietnam's exports and imports in 2022 have recovered quickly with a total merchandise trade value of US\$731.3 billion, making an increase of 10.93% compared to 2021, in which the total merchandise export value increased by 11.05% and the total merchandise import value rose by 10.80%. Accordingly, Vietnam's net exports reached US\$12.7 billion (Table 1). However, in the first six months of 2023, the export value of goods to all markets has decreased significantly, of which the US and EU are the two markets with the most severe decline in both value and market share (Table 2).

Table 2. Total merchandise export and import value and growth rate by markets in the first half of 2023 compared with the first half of 2022 [47]

| Market | Export | | | Import | | |
|--------------|-------------------|-------------------|----------------|-------------------|-------------------|----------------|
| | Value (US\$ bill) | Annual change (%) | Proportion (%) | Value (US\$ bill) | Annual change (%) | Proportion (%) |
| Asia | 80.34 | -6.9 | 48.8 | 124.65 | -19.2 | 82.1 |
| ASEAN | 15.91 | -9.7 | 9.7 | 20.06 | 17.9 | 13.2 |
| China | 25.90 | -0.7 | 15.7 | 49.65 | -19.1 | 32.7 |
| Korea | 11.05 | -9.1 | 6.7 | 24.25 | -25.6 | 16.0 |
| Japan | 11.06 | -2.9 | 6.7 | 10.20 | -15.4 | 6.7 |
| America | 53.28 | -20.3 | 32.3 | 11.01 | -17.5 | 7.2 |
| USA | 44.42 | -22.1 | 27.0 | 6.87 | -9.0 | 4.7 |
| Europe | 26.34 | -8.5 | 16.0 | 9.16 | -12.5 | 6.0 |
| EU-27 | 21.37 | -10.7 | 13.0 | 7.14 | -9.6 | 4.7 |
| Oceania | 2.93 | -12.0 | 1.8 | 4.75 | -15.9 | 3.1 |
| Africa | 1.80 | -4.6 | 1.1 | 2.28 | 2.6 | 1.5 |
| Total | 164.68 | -12 | 100.0 | 151.84 | -18.4 | 100.0 |

Vietnam’s exports to key export markets such as ASEAN countries, the US, and the EU 27 in the first 6 months of 2023 have negative growth rates of -9.7%, -22.1% and -10.7% respectively compared to the same period in 2022 (Table 2).

The COVID-19 pandemic, natural disasters in China, and economic recession in the US and European markets in recent years have led to a decline in global demand, supply chain disruptions, and slowdown of orders, which have resulted in the country’s export decline.

During the COVID-19 pandemic, export growth reduced from 11.33% in 2018 to 10.40% in 2019 and 11.16% in 2020; similarly, GDP growth decreased with lag, from 7.36% in 2019 to 2.87% in 2020 and 2.56% in 2021, respectively (Figure 3).

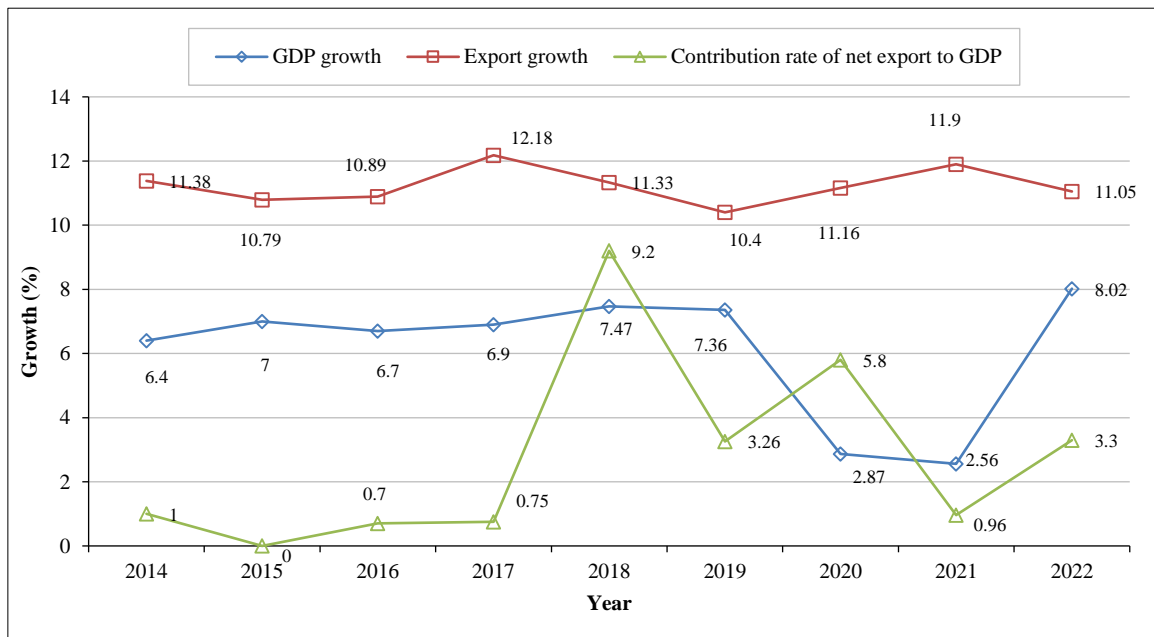


Figure 3. Export growth and GDP growth in 2014–2022, in % [47, 48]

After the spectacular recovery of GDP growth recorded at 8.2% in 2022 as the COVID-19 pandemic was being well controlled in the country, Vietnam’s export reversed in the first half of 2023. Deep negative growth was registered in January, April, and May 2023 (Figure 4).

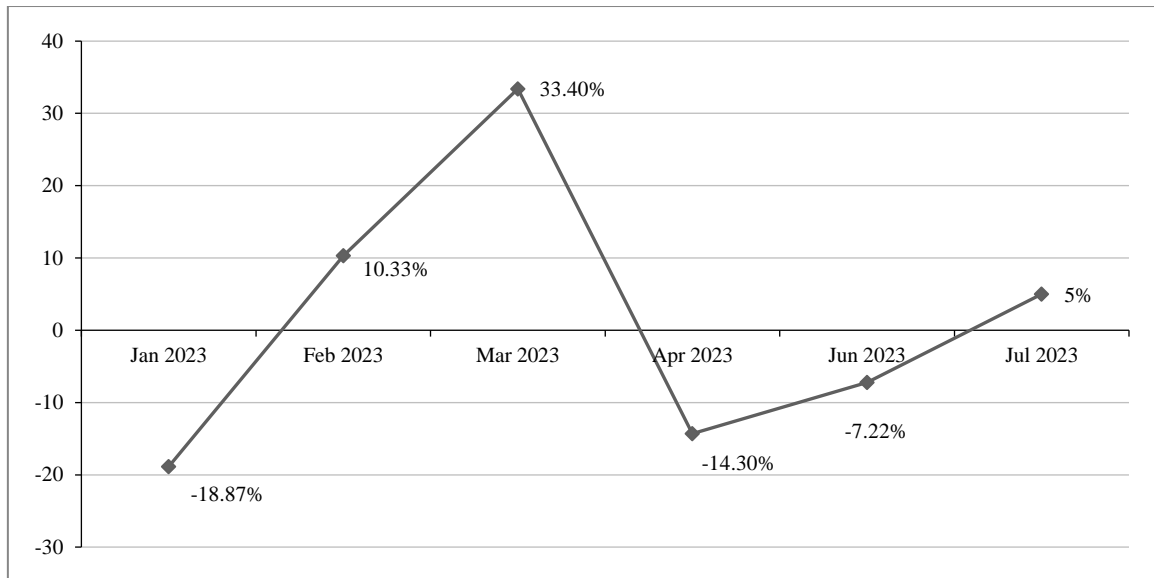


Figure 4. Export growth in the first half of 2023 (in %) [41]

Compared with the same period in 2022, export negative growth in the first half of 2023 (except February) was observed with the highest rate of -25.07% in January and the lowest rate of -9.14% in May (Table 3).

Table 3. Export value in the first half of 2023 compared with the first half of 2022 (US\$ billion) [41]

| | January | February | March | April | May | June |
|---|------------|-----------|------------|------------|-----------|---------|
| 2022 | 31.89 | 23.35 | 34.75 | 33.26 | 30.86 | 32.84 |
| 2023 | 23.61 | 26.05 | 29.71 | 27.86 | 28.04 | 29.45 |
| Percentage of increase, decrease over the same period of 2022 | -25.07% | 11.56% | -14.50% | -16.24% | -9.14% | -10% |

Due to the impact of a two-way causality, GDP growth in the first half of 2023 increased slightly by 3.72% , which was just higher than the 1.74% growth rate in the first half of 2020 (when the pandemic was at its peak) during the observation period 2011–2023.

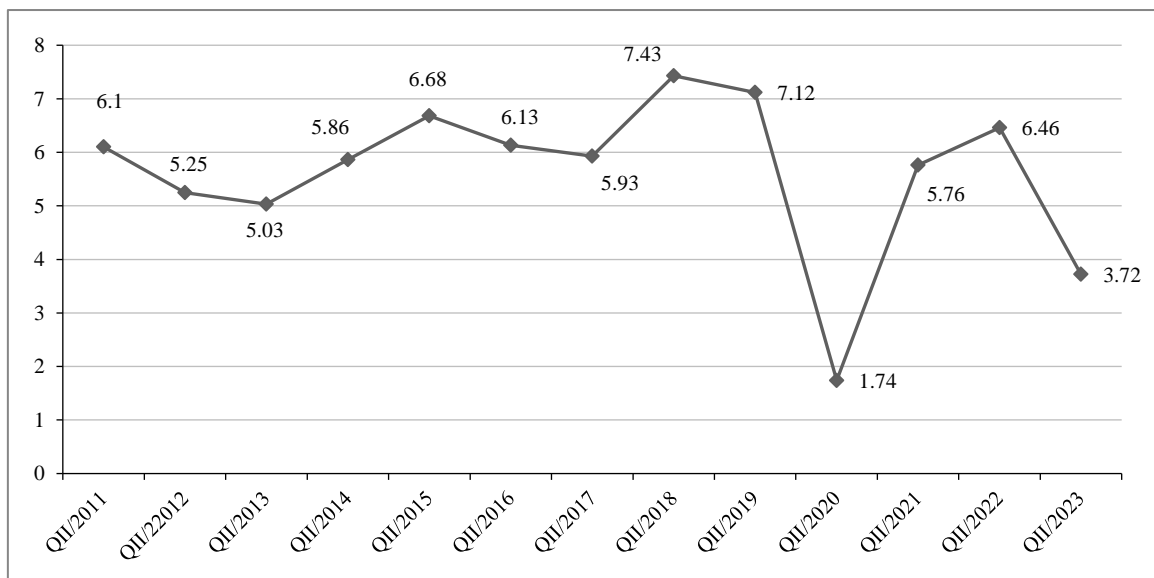


Figure 5. GDP growth (in %) in the first 6 months of 2011–2023 [49]

The above-mentioned data shows that the changes that occurred in the world after the pandemic and the recession in Vietnam’s main import and export markets in 2022 have reduced external demand, directly affecting Vietnam’s export and causing its negative growth in the first half of 2023.

Though in 2020, the contribution of net export to GDP was 5.8% , GDP growth comprised 2.87% ; but in 2022, GDP growth reached 8.02% , while the contribution of net export was 3.3% .

Data presented in Table 4 show that, in terms of consumption, in the five years from 2018 to 2022, household, individuals, and nonprofit organizations' spending was on average about six times higher than government (state) expenditure (excluding public investment) and accounted for about 55% to 57% of GDP each year.

Table 4. GDP by expenditure category at current prices (VND bill.) [50]

| | 2018 | | 2019 | | 2020 | | 2021 | | 2022 | |
|----------------------------------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|
| | + | % | + | % | + | % | + | % | + | % |
| Total | 7009042 | 100 | 7707200 | 100 | 8044386 | 100 | 8479667 | 100 | 9513327 | 100 |
| Gross capital formation | 2244260 | 32.02 | 2464760 | 31.98 | 2567421 | 31.92 | 2837932 | 33.47 | 3178082 | 33.41 |
| Gross fixed capital formation | 2126648 | 30.34 | 2340104 | 30.36 | 2435664 | 30.28 | 2686169 | 31.68 | 3014478 | 31.69 |
| Changes in inventories | 117612 | 1.68 | 124656 | 1.62 | 131757 | 1.64 | 151763 | 1.79 | 163604 | 1.72 |
| Final consumption* | 4683637 | 66.83 | 5118113 | 66.41 | 5264720 | 65.45 | 5515650 | 65.04 | 6081072 | 63.92 |
| State | 683094 | 9.75 | 738260 | 9.58 | 762512 | 9.48 | 815016 | 9.61 | 854654 | 8.98 |
| Household | 4000543 | 57.08 | 4379853 | 56.83 | 4502208 | 55.97 | 4700634 | 55.43 | 5226418 | 54.94 |
| Trade balance (goods & services) | 293187 | 4.18 | 432448 | 5.61 | 443836 | 5.51 | 6432 | 0.08 | 213360 | 2.24 |
| Statistical discrepancy | -212042 | -3.03 | -308121 | -4.00 | -231591 | -2.88 | 119652 | 1.41 | 40812 | 0.43 |

* The state final consumption includes the State final expenditure serving the community and individuals; household final consumption includes household final consumption and non-profit organization serving the household.

Regarding investment, during 2015–2022, the annual contribution of disbursed investments (including private and public investment) to GDP has always fluctuated between 33% and 34%. Analysis of the data presented in Table 5 shows the following:

- In terms of total investment capital realized in the country at current prices, in the period 2010–2022, the proportion of state (public) investment and the proportion of FDI increased by 2.26 times and 2.43 times, respectively. However, the contribution rate to total investment capital tended to decrease over 13 observation years. For example, the public investment rate fell from 34.9% in 2010 to 25.6% in 2022; similarly, the FDI rate in total investment capital realized in the country decreased from 20.5% in 2010 to 16.2% in 2022;
- The proportion of domestic private investment in total investment capital increased from 44.6% in 2010 to 58.2% in 2022, and the total amount increased four times. On the contrary, the proportion of FDI decreased from 20.5% in 2010 to 16.2% in 2022, with a total capital increase of 2.4 times.

Table 5. Investment at current prices by types of ownership in 2010–2022 (VND bill.) [50]

| Year | Total | | Of which | | | | | | Percentage to GDP |
|------|---------|-----|-----------------------------------|------|--|------|---------------------------|------|-------------------|
| | | | State sector (public investment*) | | Non-state sector (domestic private investment) | | Foreign investment sector | | |
| | + | % | + | % | + | % | + | % | |
| 2010 | 1044875 | 100 | 364286 | 34.9 | 466083 | 44.6 | 214506 | 20.5 | 38.14 |
| 2011 | 1160185 | 100 | 387576 | 33.4 | 545718 | 47.0 | 226891 | 19.6 | 32.77 |
| 2012 | 1274196 | 100 | 459504 | 36.1 | 596119 | 46.8 | 218573 | 17.2 | 31.28 |
| 2013 | 1389036 | 100 | 493724 | 35.5 | 655200 | 47.2 | 240112 | 17.3 | 31.05 |
| 2014 | 1560135 | 100 | 529468 | 33.9 | 765267 | 49.1 | 265400 | 17.0 | 31.60 |
| 2015 | 1756240 | 100 | 556380 | 31.7 | 881760 | 50.2 | 318100 | 18.1 | 33.83 |
| 2016 | 1926864 | 100 | 587110 | 30.5 | 988651 | 51.3 | 351103 | 18.2 | 34.17 |
| 2017 | 2186560 | 100 | 616459 | 28.2 | 1173901 | 53.7 | 396200 | 18.1 | 34.74 |
| 2018 | 2426400 | 100 | 630142 | 26.0 | 1361156 | 56.1 | 435102 | 17.9 | 34.62 |
| 2019 | 2670471 | 100 | 643094 | 24.1 | 1557937 | 58.3 | 469440 | 17.6 | 34.65 |
| 2020 | 2803065 | 100 | 734735 | 26.2 | 1605050 | 57.3 | 463280 | 16.5 | 34.84 |
| 2021 | 2896728 | 100 | 719293 | 24.8 | 1719354 | 59.4 | 458081 | 15.8 | 34.16 |
| 2022 | 3219807 | 100 | 824657 | 25.6 | 1873209 | 58.2 | 521941 | 16.2 | 33.85 |

* Government expenditure on public infrastructure.

This study confirmed the hypothesis about the vulnerability of Vietnamese exports under the impact of global market dynamics attributed to the dependency of Vietnamese exports on FDI and profound changes occurring in the world and

corroborated the decline in export growth and economic growth in the first six months of 2023 related to a global demand slowdown caused by world-shaking changes started in early 2022 by relevant statistical data.

The analysis of the aforementioned data concludes that household and non-government organizations' consumption, government expenditure, and private investment (regardless of domestic or foreign sources), the components of domestic demand, are the main drivers of DDLG directly affecting economic growth in Vietnam and confirms the need to adopt both ELG and DDLG strategies for sustainable development in Vietnam's specific conditions.

6. Discussion

Vietnam's exports are vulnerable to external factors, of which the most notable are the dependence on the operations of FIEs and external demand fluctuations caused by global market dynamics.

First of all, this dependence is reflected in FDI capital flows and the contribution rate of FIEs to the total annual export value. According to the Ministry of Planning and Investment [51], accumulated from 1987 to June 20, 2023, the whole country has 37,541 valid projects with a total registered capital of US\$449.48 billion. This dependency poses many risks for exports in particular and economic development in general, as most FIEs rely on multinational corporations whose activities dominate Vietnamese export-oriented industries and depend on investors' decisions related to global market dynamics.

In addition, export production efficiency is low because: (i) most enterprises involved in export processing, including both domestic enterprises and FIEs, are capital and labor intensive and inclined toward outsourcing and assembling final products; (ii) the supporting industry is underdeveloped, resulting in very few domestic suppliers; and (iii) the "transfer pricing" tactics of transnational companies to reduce tax payable to gain high profits by increasing the price of equipment, technology, and raw materials imported from their subsidiaries [53, 52]. Thus, the direct contribution of exports to GDP is still very modest, and this does not contradict similar conclusions in the study of Sahoo & Kumar [54].

Second, Vietnam's exports are strongly influenced by the dynamics of the external market. A typical example is the recession in Vietnam's main import and export markets. Due to the enduring impacts of the COVID-19 pandemic and the repercussions stemming from the war that started in Ukraine in early 2022, the global economic growth rate was low.

Negative growth rates of Vietnam's exports to key export markets such as ASEAN countries, the US, and the EU 27 in the first 6 months of 2023 compared to the same period in 2022 occurred mainly due to the economic decline around the world. Vietnam's exports rely on export-oriented FIEs and are vulnerable to changes in external market dynamics. The data presented in Figure 3 partially corroborates the causal effects between exports and economic growth. Besides the net export, domestic demand also contributes to GDP growth when export growth does not change suddenly.

Analyzing statistical data related to Vietnam's export and economic growth over the past 10 years, this study found authentic evidence supporting the following conclusions: (i) there exists a causal relationship between exports and economic growth in Vietnam; exports have an impact on GDP growth and vice versa with a lag of at least two quarters; (ii) exports stimulate the development of other supporting and non-export industries through spillover effects on other economic sectors. These conclusions are similar to the findings of previous studies during 2011–2020, when ELG was part of Vietnam's socio-economic development strategy, and coincide with the theoretical aspects and empirical research results of Michalopoulos & Jay [3], Michaely [4], Feder [11], Ghartey [7], and Xu [8].

Recently, global trade has been deeply affected by ongoing challenges such as natural disasters, epidemics, armed conflicts, trade protection policies, embargoes, and economic sanctions. Vietnam's exports are no exception. Supply chain disruptions and a slowdown in global demand due to external market changes taking place in the world, including the largest import and export markets of Vietnam (China, US, and EU), have impacted Vietnam's export-oriented manufacturing industries as well as investment in production, causing deep negative export growth and slowing down economic growth from 8.02% in 2022 to 3.72% in the first 6 months of 2023. Thus, this study's confirmed hypothesis that Vietnam's exports are vulnerable to external market dynamics due to changes occurring in the world is consistent with the argument by Palley [19, 26] and Matthew [15] on the vulnerability of an open, outward-oriented economy based on ELG.

The disadvantages of the ELG model converge in that it creates unfair competition among countries adopting it due to demand shortages and thereby causes a race to the bottom through low quality growth and a negative impact on labor, wages, the business environment, and working conditions. Therefore, there is a need for a realignment of the global economy, whereby ELG can be replaced by a development model based on the DDLG model [19].

In Vietnam's case, the ELG strategy has regularity expressed through requirements and the ability to implement it. First, objectively speaking, Vietnam is still a developing country with a GDP per capita of about US\$4,110 in 2022 [48]; therefore, adopting an ELG strategy is an objective requirement for industrialization and modernization of the country,

narrowing the gap with other countries in the region and the world. An export-oriented economy can grow rapidly because the increase in DA is not limited by domestic demand. Second, in terms of implementation ability, the export-oriented industrialization strategy is essentially based on the rules of the market economy. This strategy is being adopted in Vietnam because it allows taking full advantage of the country's comparative advantage based on its scale, ability to appropriate capital, and large workforce of 52.1 million people [48].

The validity of the DDLG strategy in contributing to Vietnam's GDP growth is also proven by the analysis of data related to the key DA components. Household consumption and non-government organizations' spending on domestic demand accounted for 55%–57% of DA (GDP) and are six times higher than government expenditure in total amount (Table 4). In 2022, the rate of private investment was 2.4 times higher than that of state investment (public expenditure on infrastructure) (Table 5). Therefore, the confirmed hypothesis of this study that DDLG has a profound impact on Vietnam's economic growth is similar to the assertions in the studies conducted by Palley [26], Matthew [27], and Yeah [28].

This study's hypothesis that in the Vietnamese case, both ELG and DDLG should be accepted and considered as development paradigm to achieve sustainable economic growth, proven by analysis of their impact on GDP growth, is consistent with the recommendations of leading researchers such as Palley [26], Mishra & Nancharaiyah [53], and Yeah (2017), who argue that for a developing country starting the industrialization process, DDLG should not be considered a complete replacement for ELG; the complementarity of the two these development paradigms creates growth opportunities arising from increase in external and domestic demand, minimizing the adverse impacts on output and employment due to instability of export market by strengthening the resilience of domestic demand. The balance between ELG and DDLG strategies for sustainable economic growth is the premise for appropriate macroeconomic policies because there is a significant positive relationship between net exports, domestic demand, and economic growth.

It is believed that in the context of a rapidly changing world, monitoring and researching the impact of both internal and external market dynamics to devise reasonable development policies will be the direction of further research.

7. Conclusions

The objective of this study was to reassess the validity of the ELG hypothesis for Vietnam in light of global dynamics and determine if there is a need for a shift to DDLG. The results show that both ELG and DDLG should be development strategies simultaneously operating in Vietnam. Therefore, it is necessary to have appropriate policies to promote the advantages and mitigate the disadvantages of each paradigm. To successfully utilize ELG and promote exports in width and depth, it is necessary to continue to implement appropriate policies aimed at the following:

- Completing mechanisms and policies to encourage export of the country's staple key products and to create a favorable macro-environment for attracting FDI, manufacturing, and exporting goods; encouraging domestic investment enterprises engaged in supporting industries to expand production and increase the localization rate and value added of export goods and services, thereby increasing net exports and GDP growth.
- Enhancing national competitiveness by encouraging exports of key export goods produced by domestic and local businesses to promote Vietnam's competitive advantage in the diversity of typical products of tropical countries, such as wooden furniture, agricultural, forestry, and fishery export products.

To promote the DDLG strategy in accordance with Vietnam's specific conditions, it is necessary to have policies to encourage household consumption, government expenditure, and public and private investment, specifically:

- Controlling inflation and sustainable economic development; ensuring safe, healthy, and stable operations of credit institutions and the financial system; stabilizing and balancing investment sources, including both private and public investment.
- Creating an attractive and fair investment environment for both domestic private investment and FDI; enhancing indirect financial support policies through tax incentives.
- Improving people's living standards and increasing income for workers and social security beneficiaries in accordance with the country's socio-economic development; solving labor-related issues. These measures are to encourage consumption and private investment through savings channels.

Vietnam is located in a dynamic development region of the world and has a highly open economy that depends on FDI inflows, global supply chains, and external market demand. Therefore, combining the ELG and DDLG hypotheses and adapting them to the specific conditions of the country is the key to Vietnam's sustainable development among global dynamics, ensuring its resilience against headwinds and reducing possible risks.

8. Declarations

8.1. Author Contributions

Conceptualization, N.T.X.H. and T.T.B.N.; methodology, T.B.B.N.; validation, N.T.X.H., T.S.L., and D.T.B.; formal analysis, D.T.P.A.; investigation, T.T.B.N.; resources, T.S.L.; data curation, D.T.B. and D.T.P.A.; writing—original draft preparation, T.T.B.N., D.T.B., and T.S.L.; writing—review and editing, N.T.X.H.; visualization, T.S.L. and D.T.P.A.; supervision, T.T.B.N.; project administration, N.T.X.H.; funding acquisition, T.T.B.N. All authors have read and agreed to the published version of the manuscript.

8.2. Data Availability Statement

The data presented in this study are available in the article.

8.3. Funding

The authors received no financial support for the research, authorship, and/or publication of this article.

8.4. Institutional Review Board Statement

Not applicable.

8.5. Informed Consent Statement

Not applicable.

8.6. Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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