EXPORT

COMPETITIVENESS

AND THE EVOLUTION OF
VIETNAMESE TRADE

2023 Policy Brief series

Export Competitiveness and the Evolution of Vietnamese Trade

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Ha Noi, June 2023

INTRODUCTION

In the public imagination, international integration is often seen as incompatible with or in opposition to economic autonomy. Champions of national self-reliance urge us to "consume what we produce and produce what we consume," to reduce our exposure to unpredictable, and at times volatile, import and export markets in favor of domestic demand. This way of thinking, still influential in many parts of the world, has gained adherents in Europe and North America in reaction to the rise of East Asia as the hub of global manufacturing.

Over a period of three decades, Viet Nam has shown that international integration and economic security are in fact complementary rather than antagonistic. Viet Nam's leaders recognize that self-reliance can only be achieved and maintained from a position of economic strength, and that global competition is a powerful stimulus to efficiency, dynamism and prosperity. Put simply, there is no conflict between international economic integration and national self-reliance. As Prime Minister Pham Minh Chinh remarked at the Fourth Annual Viet Nam Economic Forum in 2022,

Viet Nam affirms our consistent policy of not choosing a closed economy, but instead staying steadfast to the direction of *doi moi, building an independent, self-reliant economy in combination with proactive and active international integration*.

The Government of Viet Nam's commitment to self-reliance through integration has propelled the country's rapid economic development for three decades. Export growth, and the relentless diversification of exports of goods and services and new markets, continues to play a vital role in building the national resilience. Exports remain central to the development strategy despite claims from some quarters that the pace of globalization is stalling ('slobalization") or that rising protectionist sentiment in high-income countries has reduced the viability of export-led growth (Aiyar & Ilyina, 2023).

This policy brief[1] makes three main points. First, across a wide range of developing countries, growth of gross domestic product (GDP) is strongly correlated with export growth, especially growth of *domestic content of exports*. With few exceptions, developing countries are *foreign exchange constrained*, meaning that access to dollars (or other currencies that can be used to settle international obligations) is a limiting factor on the rate of GDP growth. Export growth relaxes the foreign exchange constraint because exports—unlike foreign borrowing or foreign direct investment—do not create dollar-denominated financial liabilities.

Second, the capacity to sustain export growth reflects the *competitiveness* of exports, or the capacity of domestic producers to maintain or increase global market share for its goods and services. Two common measures of competitiveness are the price elasticity and the income elasticity of demand for exports. This policy

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[1] An earlier version of this paper was presented at the Viet Nam Economic Pulse held in Ha Noi on November 22, 2022.

brief introduces two simple measures of competitiveness that approximate trade elasticities with easily calculated and tracked indicators. Using these measures, we show that Viet Nam has increased its share in world markets across a wide range of product categories. Moreover, Viet Nam exports many goods that are *increasing* as a share of world trade. This suggests that Viet Nam is extremely competitive on price and is increasing its presence in markets for dynamic, fast-growing product categories.

Third, the policy brief concludes with evidence showing that economic growth in lower- and middle-income countries is closely associated with the competitiveness of exports in both senses: increasing market share across all products and exporting goods whose share of global trade is increasing.

The main policy conclusion is that export growth is important, and that it also matters what countries export. Viet Nam is correct to pursue a policy of self-reliance through integration, aiming to increase market share in the goods and services that the country exports, including dynamic goods and services for which global demand is increasing. Dynamic goods are not limited to high-tech or sophisticated manufactured goods: many traditional manufactures, like garments and footwear, and agricultural commodities, are also dynamic in the sense that global demand for these goods is growing. In the long term, it is likely that Viet Nam will lose competitiveness in some price sensitive exports, especially labor-intensive manufactures. This makes it all the more important to contest new markets, particularly markets for goods and services in which global demand is rising.

Economists, who disagree about nearly everything, agree on this: exports are good for economic growth. Neoclassical economists argue that trade brings about a more efficient allocation of resources, boosting productivity growth (Balassa, 1978; Feder, 1983). Structuralists see exports as a means to realize economies of scale in production and relax the foreign exchange constraint on growth (Kaldor, 1975; Thirlwall, 2012). Whatever the theoretical interpretation of the relationship, the evidence in incontrovertible that countries that achieve sustained export growth grow faster. The relationship is stable regardless of the countries included in the sample and the period studied.

Some may object that exports and GDP growth are related because net exports are a component of GDP, and so the proposition is true by definition. This problem can be addressed by subtracting exports from GDP and testing the relationship between the growth of non-export GDP (GDP minus net exports) and export growth. Figure 1 presents the results of such an exercise for 66 countries for the years 2000-2018.[2] The vertical axis measures the growth of GDP less the domestic content of exports, while the horizontal axis shows the growth of domestic content of exports. From the figure it is apparent that export growth is closely associated with the growth of economic output other than exports. The statistical relationship is robust and significant: exports explain about 74% of the variation in growth rates among the countries included in the sample. Viet Nam's experience is consistent with the overall pattern: export growth was the fastest in the sample over this period, and growth was also among the top four or five countries.

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[2] The 66 countries were included based on the availability of supply and use tables from OECD for the years 2000 to 2018 www.oecd.org/sti/ind/input-outputtables.htm.
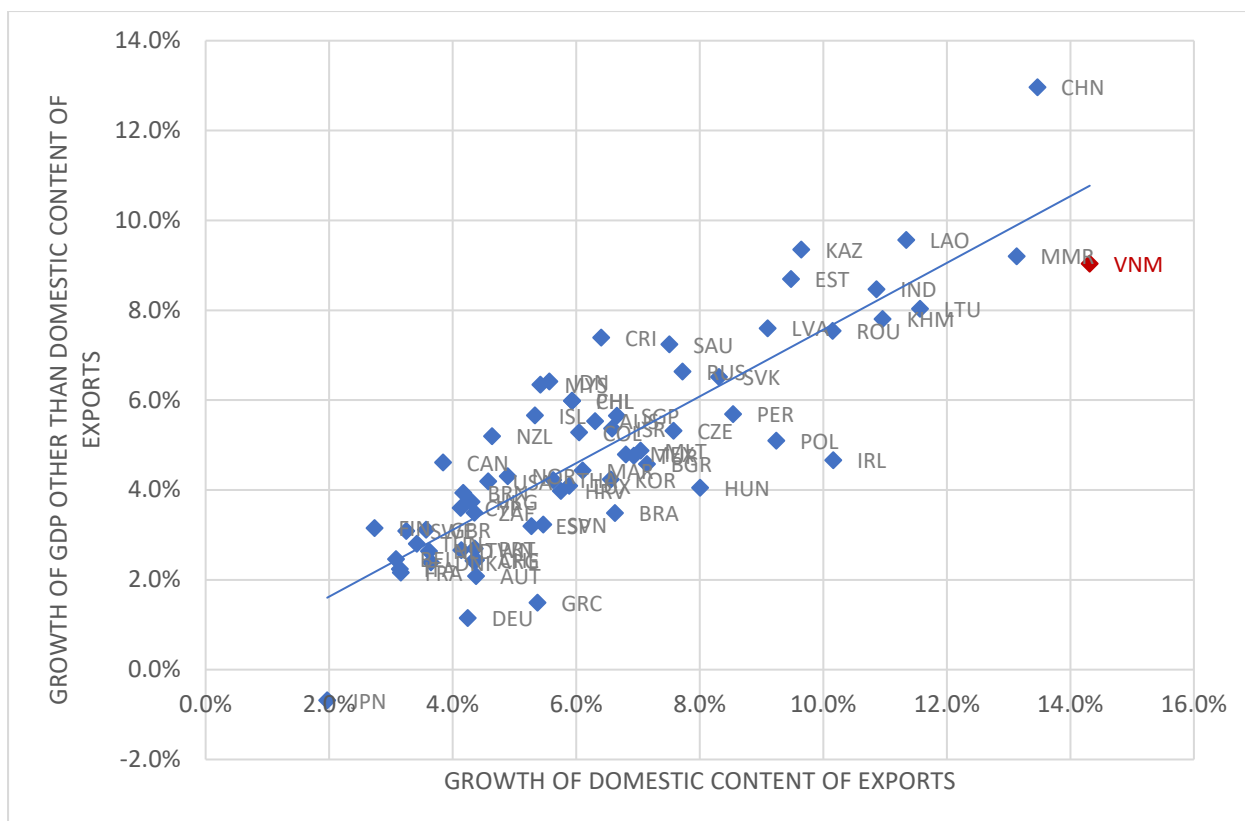
Figure 1. Growth of GDP less domestic content of exports and growth of domestic content of exports, 2000-2018 (Source: OECD supply and use tables)

MEASURING EXPORT COMPETITIVENESS

Having established that exports are important to growth, the next question is how can countries sustain export growth over the long period? How can they ensure that their goods and services stay competitive on international markets?

Exports rise and fall with shifts in global demand, the development (of lack thereof) of domestic technological and managerial capacity and changes in prices. Costs arising from compliance with international treaties have increased in recent years with the proliferation of bilateral and regional trade arrangements, rising protectionist sentiment, and the resulting multiplication of import rules and standards. The weakening of multilateral enforcement and adjudication mechanisms has emboldened countries seeking to protect their markets through unfair means.

Scale economies play a central role in productivity growth, and therefore export competitiveness. For example, large shellfish exporters invest in hatcheries and nurseries, locking in a steady supply of juveniles at stable prices. Vertical integration allows for tighter control of production, and hence standardization and compliance with international rules. In all sectors, increasing the scale of production creates opportunities for "learning by doing" or dynamic increasing returns. Businesses of all sizes benefit from scale economies external to the firm such as improvements to logistics and transport infrastructure, and knowledge and skills accumulated in local firms and

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universities. In most countries, domestic demand is insufficient to generate regional agglomeration effects that arise when firms in one industry or industry segment are concentrated in a city or sub-region.

Shifts in relative prices affect export prospects for goods and services for which close substitutes are readily available. If the price of Korean video panels increases due to rising labor costs, some of that demand will be satisfied by exports from other countries. However, for some categories of goods and services, close substitutes do not exist, and as a result export volumes of these products are insensitive to price changes. Rice export volumes increase (or at least not fall) when prices rise because Asian consumers are disinclined to substitute other grains.[3] In most categories of exports, income effects, technology and preferences are more important than relative prices in shaping demand patterns.

Sustaining export growth over the long period depends, among other things, on the composition of exports. Growth is more durable when countries export relative price inelastic goods and services for which global demand is rising. Making fax machines or floppy disk drives more cheaply than everyone else is not a winning strategy because global demand for these products is falling. Lithium exporters, by way of contrast, are enjoying higher prices and rising volumes—at least for now—as the world gears up for the transition from fossil fuels to renewable energy. Producing income elastic goods—that is, goods that people buy more of as their incomes rise—also helps sustain export growth. Mobile phones and luxury apparel have high income elasticities, as do expensive agricultural and aquacultural products like organic strawberries and oysters.

Thirlwall's Law posits that the long run rate of economic growth is limited by the ratio of export growth to the income elasticity of demand for imports (McCombie & Thirlwall, 1994). Export growth is a binding constraint on GDP growth because income effects exert a stronger influence on the balance of payments than price effects. Empirical testing has generally supported Thirlwall's Law in developing countries because price movements— changes in the real exchange rate or in the prices of imports and exports—are in most instances confined to a narrow band, and are therefore dominated by income effects (Thirlwall, 2012). In developing countries, the price elasticity of imports is low because substitutes for many essential goods are not available in domestic markets.

Gaps in the international trade statistics complicate efforts to calculate price and income elasticities for imports and exports.[4] This policy brief adopts two simple measures of competitiveness to compare export performance of countries over time. The first indicator, which we refer to as "competitiveness," is the percentage of export earnings that accrue to goods in which the country has *increased its global market share* between two points in

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[3] Rice is an example of a Giffen good, defined as an inferior good for which prices rise as the quantity demanded increases. The demand curve for a Giffen good is upward sloping because in the absence of adequate substitutes consumers will sacrifice disposable income to ensure access. As consumer buy more of an inferior good when incomes fall, the decline in disposal income is associated with an increase in demand for the Giffen good.

[4] Elasticity is defined as the percent change in quantity demanded divided by the percent change in price. Statistics on quantities of exports and imports are unavailable for many goods and countries.

time. Countries that are competitive in this sense have been able to increase market share in most of the export markets in which they participate.[5]

The second measure, which we call "dynamic competitiveness," measures the share of a country's exports that is comprised of goods for which *total global demand has increased*. For example, semiconductors are a dynamic good, as export demand has grown rapidly as a percentage of total world trade. Conversely, fax machines are not a dynamic good because their share in global trade has fallen. A list of the twenty most dynamic goods for the period 2003-2018 is presented in Table 1. High-value manufactured goods dominate the list: electronics components and equipment like mobile phones, computers, electrical switches, transistors, and batteries; pharmaceuticals and chemicals; and aircraft components. However, labor-intensive manufactured goods like garments and footwear also make the list, as do commodities like coal, liquified natural gas and gold.

Table 1. 20 Most Dynamic goods exports to OECD countries, 2003-2018

Rank	SITC Code	Description	USD billion 2018	Share 2018
1	7643	Mobile phones (radio transmission equipment)	302	2.6%
2	9710	Gold non-monetary ex ore	164	1.4%
3	6732	Flat rolled steel-2 and cold rolled steel	41	0.4%
4	7522	Digital computers	111	1.0%
5	3431	Natural gas, liquified	77	0.7%
6	7726	Electric switch boards	42	0.4%
7	7149	Parts turbo engines and turbines/turbo jets	106	0.6%
8	7929	Aircraft parts	68	0.9%
9	8722	Medical apparatus and orthopedic appliances	123	1.0%
10	7731	Insulated wire and cable include optical fiber cable	87	0.8%
11	3212	Bituminous coal	63	0.6%
12	7781	Storage batteries	38	0.3%
13	7763	Diodes, transistors and semi-conductor devices	42	0.4%
14	5422	Medicaments containing insulin and other hormones	37	0.3%
15	6911	Iron and steel bridges, towers, doors, frames, scaffolding	31	0.3%
16	5989	Various chemical products including dyes, plasticizers, modeling pastes, soldering and welding, cement additives	43	0.4%
17	8442	Women's outerwear	22	0.2%
18	579	Fresh and dried melons, berries, pears, pineapples, dates and avocados	32	0.3%
19	8515	Footwear with uppers made from textiles	18	0.2%

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[5] Trade data were obtained from the UN Comtrade database, which tracks the US dollar value of trade in goods.[5] Exports of services are not included. Imports are limited to the OECD countries to eliminate distortions resulting from missing data in some product categories and years.[5] Comparisons were made between the years 2003 and 2018, calculated as three-year averages to minimize the impact of outliers.

20	7436	Filtering and purifying equipment for water, oil and petrol, air filters, other liquids and gases	35	0.3%
		Total	1,482	13.1%

The results of the exercise reveal some interesting patterns (Figure 2). We can discern three groups of countries among the countries in the sample. China and Viet Nam are hypercompetitive, and a relatively large share of exports are dynamic competitive products. China and Viet Nam are also the fastest-growing economies in Asia during this period.
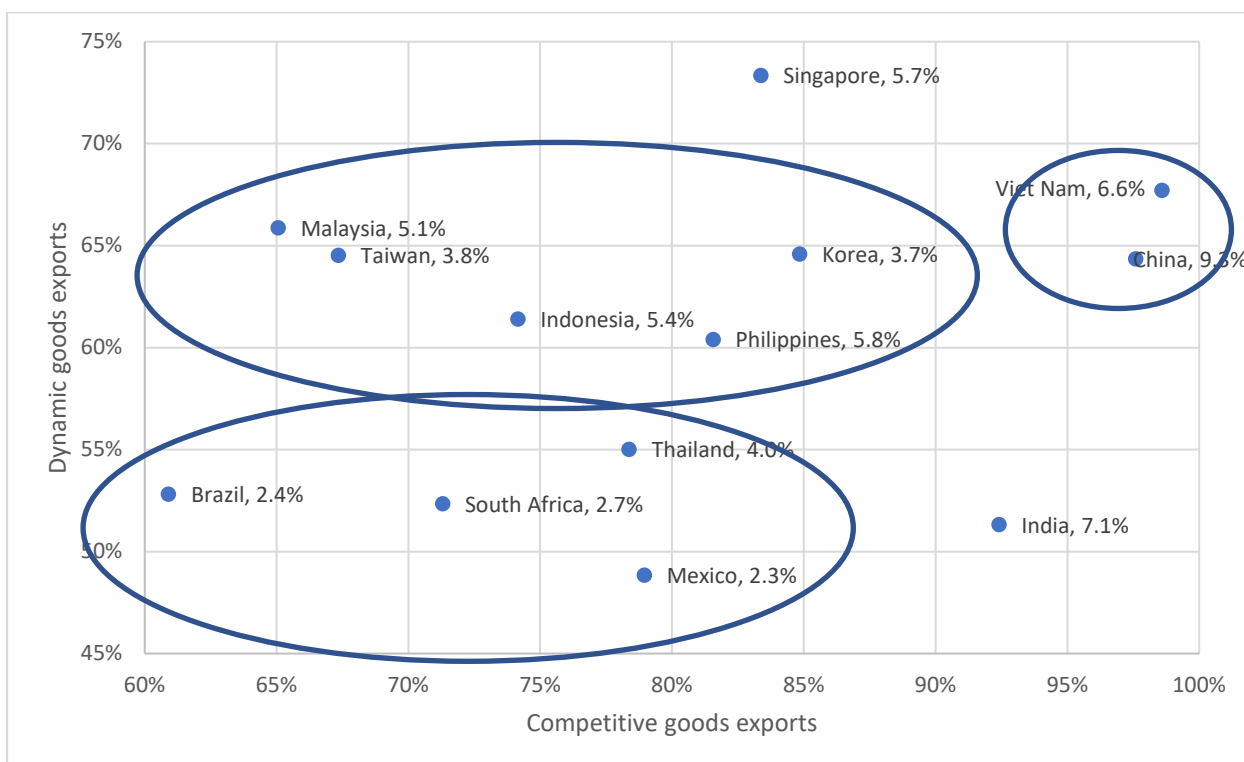

Figure 2. "Static" and "Dynamic" commodities as share of total exports, 2003 and 2018. Figures next to country names are average GDP growth 2003-2018.

The second group of countries recorded various levels of competitiveness but most exports in 2018 (more than 60%) were dynamic in the sense that these were products that were increasing as a share of world exports. Korea, Taiwan and Malaysia export electronic and other high value-added manufactures, while losing market share in labor-intensive manufactures. Indonesia's dynamic goods are coal and palm oil rather than manufactures.

The third group ranks lower on measures of competitiveness, losing market share in their existing export markets and achieving less penetration of export markets for products that are growing as a share of world trade. Lack of dynamism in Mexico, Thailand and South Africa partly reflects conditions in the automobile and auto parts industries. Global overcapacity and slow growth of demand have contributed to a fall in these industries' share

of global trade. Although Brazil has a dynamic aircraft industry, the country relies heavily on bulk agricultural commodities and metal exports.

Two outliers in the group are Singapore and India. Singapore increasingly specializes in sophisticated manufactured goods, making it an exceptionally dynamic exporting country. India is extremely competitive, with 92% of the country's exports gaining market share between 2003 and 2018. However, only half of India's exports fall into the category of dynamic goods, about the same level as South Africa and Brazil.

Figure 3 extends the analysis to the period 1988-2003 to show changes in competitiveness over time. A smaller proportion of exports from Malaysia, Thailand and the Philippines gained market share in the second period, reflecting increasing competition from China, Viet Nam and India for inward investment in labor-intensive industries. Between the first and second periods, growth of export values declined by a third in Thailand, nearly half in Malaysia and two-thirds in the Philippines. The exception was Indonesia, which enjoyed a long commodity boom during this period. Growth of export values remained steady over the two periods at about seven percent per annum, although the composition of exports shifted from manufactures to commodities. Mexico's loss of export dynamism is largely explained by the relatively slow growth of auto exports. Growth of Mexican export values fell by 40% in the second period to six percent per annum.

Although data are not available for Viet Nam for the earlier period, export values increased 22% per annum from 1988 to 2003, albeit from a low base. Exports of goods and services, which were equivalent to just four percent of GDP in 1988, rose to 57% of GDP by 2003. Implementation of the US-Viet Nam Bilateral Trade Agreement and other bilateral agreements signed in the lead up to World Trade Organization (WTO) membership in 2007 sparked a new export surge that lasted until the onset of the Global Financial Crisis in 2008. Export values rose 16% per year from the recovery in 2011 until 2019.
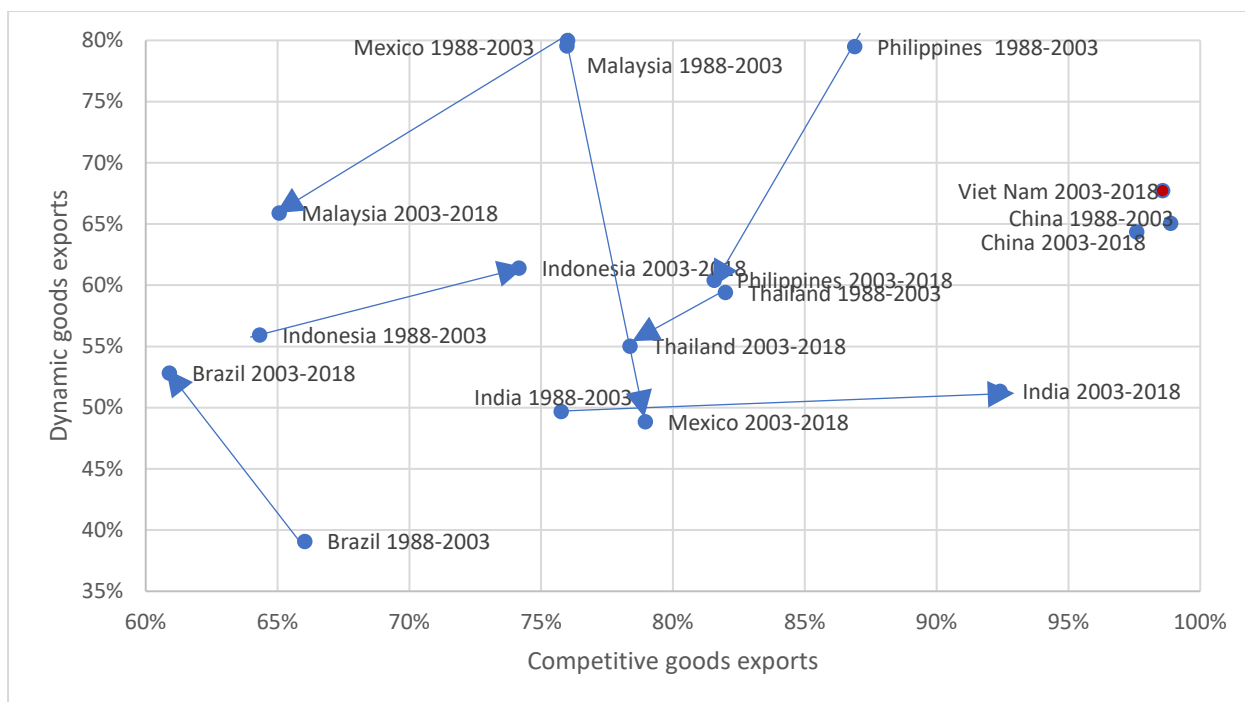
Figure 3. Change in competitiveness, 1988-2003 vs 2003-2018

Table A1 presents Viet Nam's most important competitive exports. Mobile phones, which accounted for a remarkable 17% of goods exports in 2018, topped the list of products gaining market share globally and for Viet Nam. Other labor-intensive manufactures, such as garments, footwear, furniture, computers and electronics components, make up most of the list. Agricultural commodities are represented by nuts (cashews), coffee and prepared shellfish. Mobile phones also top the list of dynamic exports, followed footwear, garments, electronic components, computers and various other manufactured goods. Agriculture and aquaculture are represented by nuts, coffee and fish fillets.

DOES COMPETITIVENESS MATTER?

This policy brief has introduced two simple indicators of competitiveness. The first indicator calculates the share of the country's exports that have increased global market share over a given period. A competitive economy will increase the market share of the goods that it exports. The second indicator is more concerned with *what* is exported than with how much. We measure dynamic competitiveness in terms of the share of a country's exports that is made up of goods that are becoming more important in world trade; that is, goods that record a rising share of global exports. This can be interpreted as an indicator of potential *future* competitiveness.

Earlier we saw that export growth bears a strong and consistent relationship to economic growth. It therefore stands to reason that competitiveness is also closely associated with growth. This section presents a simple statistical test of this proposition.

We have constructed a simple model to test the proposition that competitiveness in both senses described above is related to economic growth. The sample consists of 65 developed and developing countries for which

data are available over the period 1995 to 2018.[6] Our hypothesis is that GDP growth is associated with *competitiveness*, or the share of exports that have increased market share over time, and *dynamic competitiveness*, meaning the share of exports in categories that have increased as a share of world exports.

The results, shown in Table 2, confirm the strong relationship between export competitiveness and growth of national output. As expected, GDP per capita in the initial period bears a significant negative relationship with the rate of GDP growth.[7] An increase competitiveness of one percent as defined in this policy brief is associated with an 0.36 percent increase in average GDP growth. An increase of one percent in the share of the country's exports that consists of goods that command and increasing share of global exports (dynamic goods) is associated with an increase in GDP of 0.44 percent. These relationships are reproduced in Figure 4, which shows the strong robust relationship between exports gaining market share (x-axis) and average GDP growth (y-axis).

Table 2. Competitive and dynamic exports and economic growth

Dependent variable	Average rate of GDP growth		
Adjusted R^2	55%		
F statistic	27.1		
		T statistic	p value
Intercept	0.87	1.01	0.39
GDP per capita 1995	-0.30	5.28	0.00
Competitive exports	0.36	3.66	0.00
Dynamic exports	0.44	2.42	0.02

N=65, variables express in logarithms

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[6] The time period For Cambodia and Viet Nam is 2002 to 2018. Data are calculated as three-year averages.

[7] Countries that record lower per capita incomes employ less capital per worker, and therefore tend to grow faster than rich countries as they use more capital and approach the technological frontier.
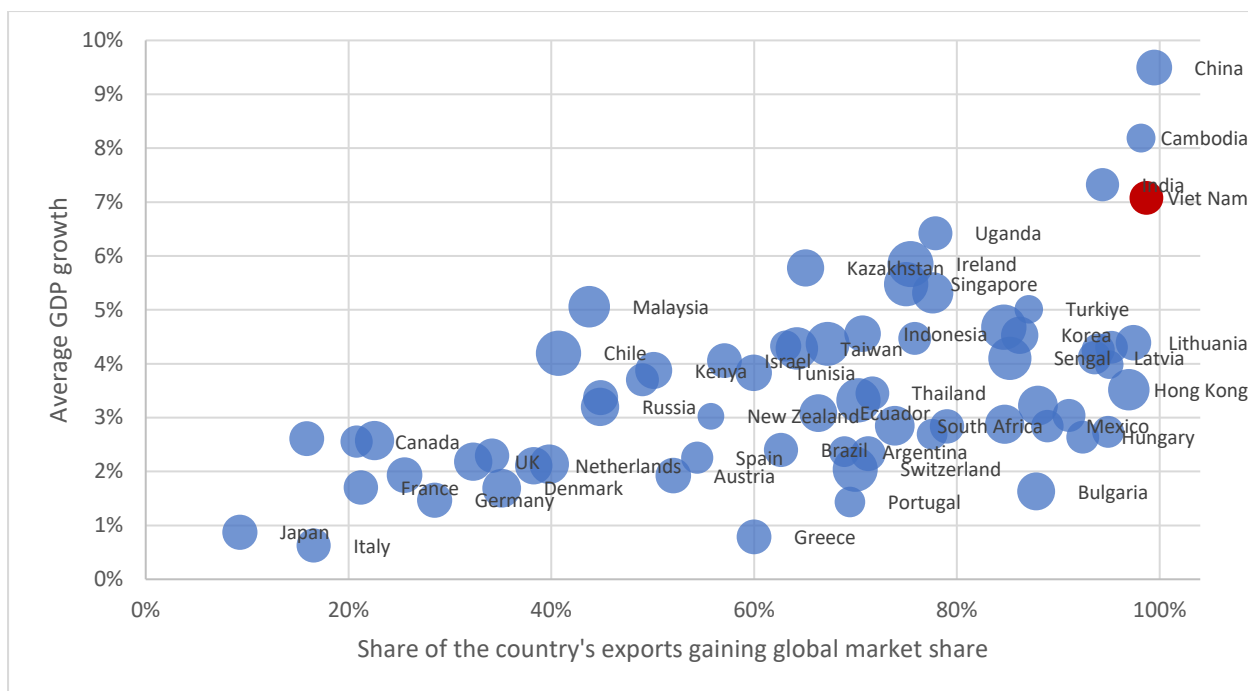
Figure 4. Average GDP growth and competitiveness, 1995-2018. The size of the bubbles represents the share of dynamic exports (Source: Calculated from UN Comtrade database and IMF growth data).

Finally, there is some evidence indicating that rapid growth of exports is not just good for growth but is also associated with lower levels of income inequality in developing countries. Figure 5 presents the relationship between income inequality, as measured by the Palma ratio, and average growth of exports for the period 1995 to 2018 for fifty developing countries.[8] The relationship is far from perfect: some countries achieved rapid growth of exports but are relatively unequal (Ghana and Uganda) while others recorded low levels of inequality but were not successful exporters (Cote d'Ivoire and Mauritius). One thing to bear in mind when using inequality data is that definitions and survey methods differ markedly from country to country, which reduces the precision of international comparisons (Alvaredo & Gasparini, 2015).

The mechanism linking export growth to equality is employment. Some exports are better than others at job creation, and in particular adding jobs that pay a decent, steady wage. Labor-intensive manufacturing, agriculture and some services (for example, tourism, transport and logistics) tend to create more jobs than mining and drilling for oil. Even countries that create plenty of new jobs may experience rising inequality if workers lack bargaining power to force employers to pay a living wage. Real hourly wage growth in Mexico averaged 1.1% from 2000 to 2022 despite consistently ranking among the top destinations in the world for foreign direct investment in manufacturing. FDI has created new jobs, but largely in the poorly paid segments of manufacturing, while liberalized trading rules likely destroyed higher paying jobs in domestic industries (Saucedo et al., 2020).

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[8] The Palma ratio is defined as the ratio of the income share of the richest 10% of the population to the poorest 40%.
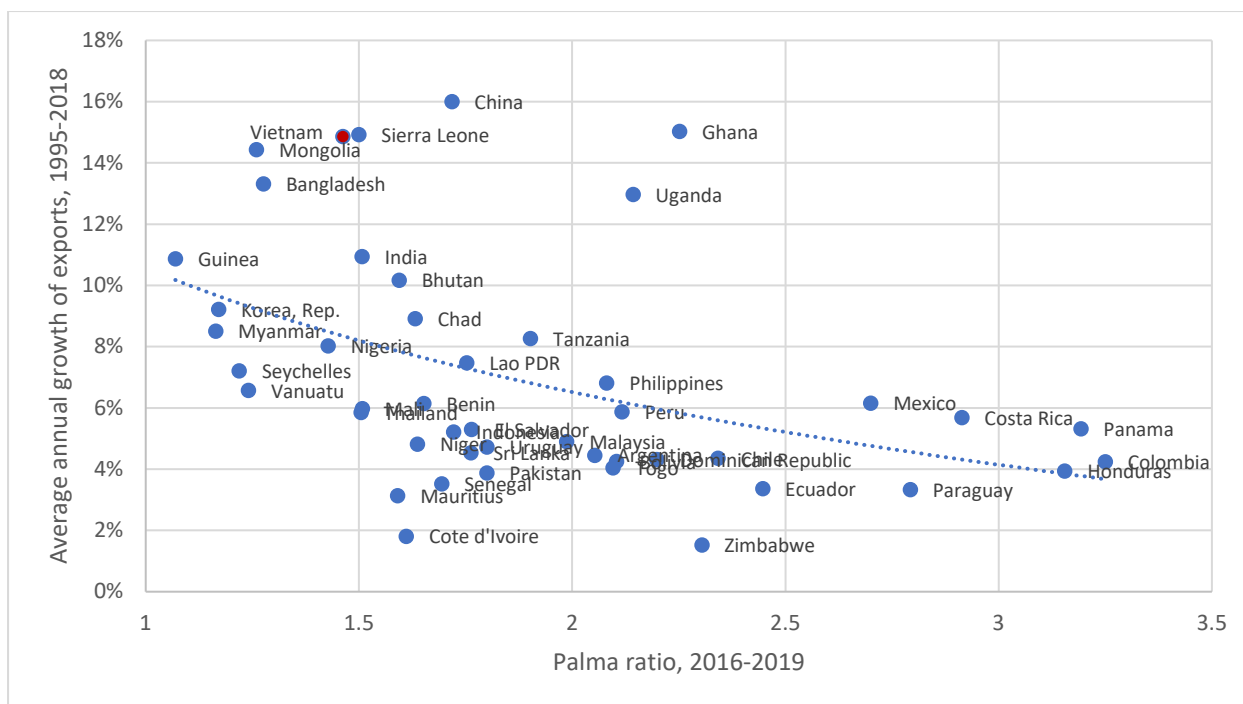
Figure 5. Average growth of exports and Palma ratio, 1995-2018 (Source: World Development Indicators)

More research is needed on the relationship between export growth and economic inequality. But there can be little doubt in the Vietnamese case that the rapid expansion of wage labor employment has increased earnings among lower income groups, which has helped the country maintain modest levels of measured inequality (Benjamin et al., 2017). Agricultural exports have played an important role, especially employment creation in the aquaculture sector (Gorman, 2022).

POLICY IMPLICATIONS

The main conclusion of this policy brief is that exports are important, and what countries export also matters. International integration has been a consistent driver of Viet Nam's economic progress, raising the rate of income growth, and strengthening national resilience and security. The government will continue to prioritize policies that support exporters—especially domestic companies—in their efforts to increase global market share in the goods and services they produce, and to penetrate new markets in which global demand is growing. This includes but is not limited to high-tech or sophisticated manufactured goods. Many agricultural commodities, traditional manufactured goods and services like tourism and transportation are dynamic exports.

This policy brief has not addressed policies to promote national competitiveness. In previous policy studies, UNDP has emphasized: i) enhancing forward and backward linkages between foreign invested firms, state-owned enterprises and domestic private companies; ii) improving coordination between strategic economic objectives, industrial policies, enterprise development initiatives and trade negotiations; using public investment to generate agglomeration effects and stimulate domestic innovation; iii) intensifying efforts to expand and improve the quality of higher and vocational education; and, iv) increasing investment in research and development, including attracting foreign R&D investments, and encouraging collaboration between

businesses—especially domestic firms—and research institutions (UNDP, 2018). Government policy should encourage the growth and development of domestic private firms, especially firms that have demonstrated a capacity to compete in international markets.

These policies remain relevant despite the growing awareness of the negative effects of climate change and the government's new commitments to transition from fossil fuels to renewable energy and achieve net-zero carbon emissions by 2050. The need for better coordination among trade, enterprise development and industrial policies has if anything become more urgent given recent developments. In the coming years, access to global markets and participation in trade agreements will be increasingly tied to the achievement of sustainability benchmarks such as the use of renewable energy and non-polluting materials in production. Government policies are also needed to support domestic firms in sustainable industries including renewable energy and energy efficiency.

Evidence is also mounting that the fragmentation of production that gathered pace in the 1990s had peaked by the time of the Global Financial Crisis in 2008. Manufacturing is still global, but rising protectionism—especially restrictions on trade in technologically sophisticated goods and services—has reduced the number of stages in production and shortened the geographical distance traveled by inputs (Miroudot & Nordström, 2020). Shorter value chains and a shift from global to domestic sourcing will present both opportunities and challenges for Viet Nam. If production of high-tech components like semiconductors is reshored to America and other advanced countries, Viet Nam could lose some foreign investment and foreign markets in these industries. However, Viet Nam still offers investors many advantages in terms of production costs, improving infrastructure, political stability and a growing domestic market. Capitalizing on these advantages, while also encouraging production of higher value-added products and components, upgrading technological capacity and workforce quality, and completing the transition to sustainable energy, could increase the country's competitiveness vis-à-vis other investment destinations.

In the long term, Viet Nam will lose competitiveness in some price sensitive exports, especially labor-intensive manufactures. Preparing for these changes in national comparative advantage should begin now. The lesson from the successful economies of East Asia is that building domestic exporting firms is crucial: over-reliance on foreign companies to drive productivity growth and expand access to international markets can create vulnerabilities as the experience of some of the ASEAN countries has shown. Sustaining the pace of job creation, especially in sectors that can achieve rapid productivity growth, will be crucial (Palma & Pincus, 2022).

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Table A1. Viet Nam's static and dynamic exports, 2018

Static Competitive Exports				Dynamic Competitive Exports		
Product	**Exports 2018**	**%**		**Product**	**Exports 2018**	**%**
Mobile phones	24,398	17%		Mobile phones	24,398	17%
Sports footwear	4,869	3%		Sports footwear	4,869	3%
Footwear with leather uppers	4,033	3%		Insulated wire and cable include optical fiber cable	3,131	2%
Office, kitchen, bedroom wooden furniture	3,397	2%		Women's knitted or crocheted outer garments	2,558	2%
Jerseys, pullovers, cardigans, waistcoats, knitted or crocheted	3,211	2%		Digital computers	2,438	2%
Insulated wire and cable include optical fiber cable	3,131	2%		Fresh or dried edible nuts	2,401	2%
Women's knitted or crocheted outer garments	2,558	2%		Footwear with uppers made from textiles	2,261	2%
Digital computers	2,438	2%		Diodes, transistors and semi-conductor devices	2,260	2%
Fresh or dried edible nuts	2,401	2%		Aircraft, motor vehicle, office, and outdoor chairs	2,108	1%
Footwear with uppers made from textiles	2,261	2%		Coffee, not roasted	1,893	1%
Diodes, transistors and semi-conductor devices	2,260	2%		Footwear with uppers of rubber or plastic	1,833	1%
Aircraft, motor vehicle, office, and outdoor chairs	2,108	1%		Woven coats, men and boys	1,545	1%
T-shirts, singlets and other vests	2,016	1%		Cases for cameras, spectacles, etc	1,415	1%
Trousers, men and boys	1,950	1%		Fish fillets, frozen	1,368	1%
Coffee, not roasted	1,893	1%		Woven coats, women and girls	1,356	1%
Footwear with uppers of rubber or plastic	1,833	1%		Lasers, telescopic sights	1,332	1%
Trousers, women and girls	1,791	1%		Handbags	1,051	1%
Telecoms parts and accessories	1,641	1%		Plastic for packing, stoppers, llids	908	1%
Woven coats, men and boys	1,545	1%		Microphones, stands loudspeakers	901	1%
Prepared and preserved shellfish	1,536	1%		Coated, rubberized garments	820	1%
Total	71,271	49%		Total	60,847	42%