

Chapter 5

Maximisation of Economic Benefits and Industrial Development Strategies through the Vientiane–Hanoi Expressway: The Case of Viet Nam

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Chapter 5

Maximisation of Economic Benefits and Industrial Development Strategies through the Vientiane–Hanoi Expressway:

The Case of Viet Nam

Vo Tri Thanh

1. Introduction

Since the start of Doi Moi (market-oriented economic reforms) in 1986, Viet Nam has embarked on comprehensive market-oriented institutional reforms, macroeconomic stabilisation, and proactive economic integration. In particular, proactive economic integration sought to enhance Viet Nam's access to much-needed foreign resources for its development, including from foreign markets, foreign investment, technology, and technical assistance. Over time, Viet Nam has gained more experience and adopted best practices in economic integration with the aim of facilitating the flow of goods, services, and people more broadly rather than merely complying with its obligations to phase out tariff and non-tariff barriers.

For decades, Viet Nam has attempted to enhance physical connectivity, particularly road links. The Socio-Economic Development Strategy, 2011–2020 emphasises infrastructure development, including roads, as one of the three major breakthroughs. The Government of Viet Nam in its Strategy for Transport Development up to 2020, with its vision toward 2030,¹ views road transport as essential for gathering and delivering passengers and cargo over short to medium distances. This emphasis also opened the way for Viet Nam's participation in international initiatives such as the Master Plan for ASEAN Connectivity (ASEAN Secretariat, 2010), and the Asia-Pacific Economic Cooperation Framework on Connectivity. In such frameworks, Viet Nam's road projects no longer serve only domestic needs, but incorporate the facilitation of cross-border links for smoother and less costly flows of goods, services, and people.

¹ Decision No. 355/QD-TTg dated 25 February 2013 by the Prime Minister approving amendment of the Strategy for Transport Development up to 2020, with its vision toward 2030. Hanoi.

The Vientiane–Hanoi Expressway (VHE) is an initiative to enhance road links between Hanoi in Viet Nam and Vientiane in Lao PDR. It will pass through several provinces in the northern and central regions of Viet Nam, thereby enhancing their connectivity with Hanoi. Along different segments of the expressway, options may include upgrading or new construction, each of which has different implications in terms of impact, finance, site clearance, and resettlement of affected people. It is therefore crucial to examine the socio-economic effects of the VHE to validate support for the initiative. This paper aims to (i) assess impacts of the VHE on the economy and industries of Viet Nam based on existing literature, data, and a survey; and (ii) illustrate the industrial development strategies of Viet Nam that may expedite the formation of the Hanoi–Vientiane–Bangkok industrial corridor with possible contributions from the VHE.

The paper is structured as follows. Section 2 describes the current development context; Section 3 discusses the potential impacts of the VHE on Viet Nam's economic development; and Section 4 makes some recommendations on steps Viet Nam should take to maximise the benefits from the VHE.

2. Current Development Context

2.1 Road development policy in Viet Nam

There is a clear decentralisation of investment in and management of the road system in Viet Nam. The central government manages the national roads system, the provincial government manages the provincial roads, the district administration is responsible for the inter-commune roads, and the commune administration oversees rural transport. Viet Nam has high density of national roads in the northern and southern delta regions. Many new national roads are being built in the northern mountainous area, the Central Highlands, and the Mekong River Delta. However, road quality is a concern. Limited and dispersed investment capital has prevented integrated development of the road network. In some regions, surveys indicate modest compatibility between bridges and roads, especially in the Mekong River Delta, with its interlacing system of canals and arroyos. Many national road routes have a loading capacity of up to 30 tonnes, but some bridges along these routes can only accommodate 10 tonnes, or even 7 tonnes, thus undermining capacity utilisation along the entire route. This incompatibility also presents a major barrier for attracting investment.

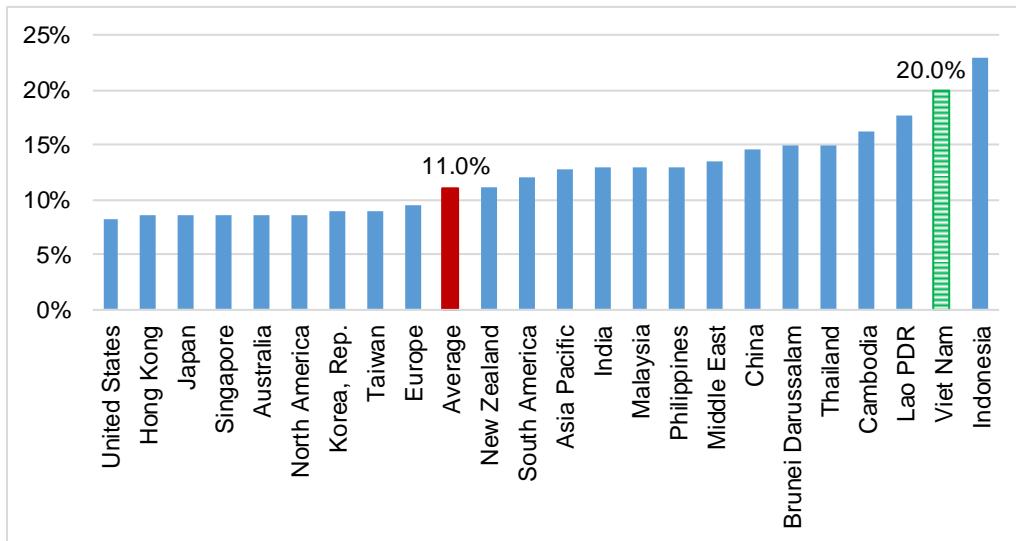
The provincial roads also assume a very important role by connecting national roads with important

areas in the provinces. Investment in provincial roads comes from local budgets. However, underdeveloped provinces have limited budgets and are normally located in remote regions such as the northern mountainous area, the central region, the Central Highlands, or the Mekong River Delta region. In these provinces, the investment demand to develop the transport system is huge and the investment cost per kilometre (km) of road is much higher than in other regions. (In the Mekong Delta region, for example, the land is often unconsolidated and has many canals, leading to higher construction costs.) As a result, despite higher levels of state support, the quality of these provinces' road systems is still far below that of roads in other delta regions.

Viet Nam has a total road length of about 319,206 km, including 13 segments of expressway with a total length of 746 km (0.2% of the total) and 105 sections of national highway with a total length of 22,660 km (7.1% of the total). National highways of grades I–III account for 43% of the total highways. On the main north–south route, a project to upgrade and expand National Highway No. 1 to four lanes from Hanoi to Can Tho Province has been completed. However, as this highway passes through many cities with different traffic conditions (e.g. urban and rural areas, different speed controls, and different secondary road links), it cannot meet the growing demand for transport.

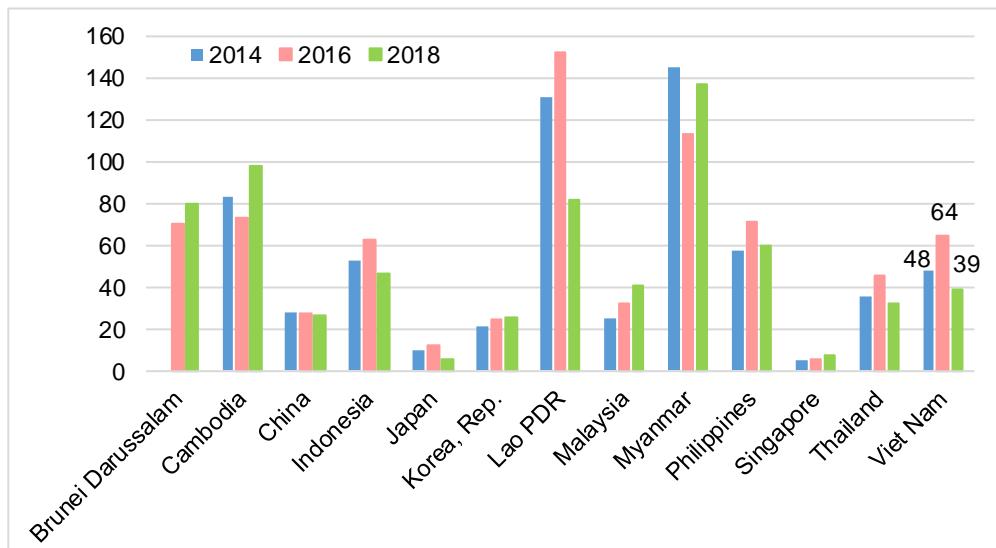
Underdevelopment of the road system is amongst the reasons for the country's high logistics costs. At 20% of gross domestic product (GDP), Viet Nam's logistics costs are almost twice the international average, making the country uncompetitive in this cost area (Nathan & Associates, 2018) (Figure 5.1). Viet Nam's logistics costs are a little higher than those of Lao PDR and significantly higher than Thailand's. In addition, Viet Nam's rank in the World Bank's Logistics Performance Index slid from 48th in 2014 and 2018 to 39th in 2016 (Figure 5.2). Amongst member countries of the Association of Southeast Asian Nations (ASEAN), Viet Nam outperforms Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, and the Philippines. Joint efforts by Lao PDR, Thailand, and Viet Nam to improve road links could therefore be mutually beneficial for enhancing logistical competitiveness.

Figure 5.1: Logistics Cost as a Percentage of Gross Domestic Product, 2018



Source: Armstrong & Associates (2018).

Figure 5.2: Logistics Performance Index Rankings

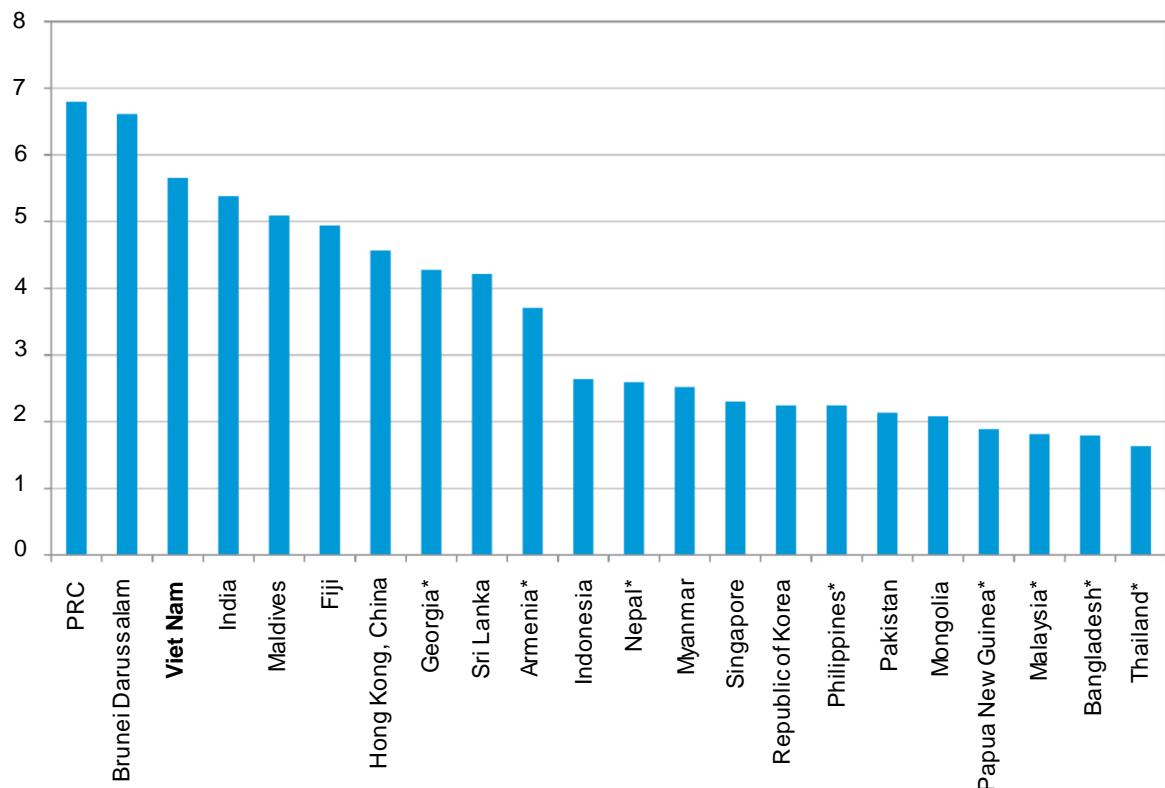


Source: World Bank.

Viet Nam's continued emphasis on infrastructure development, especially roads, is shown by the relatively high share of budget-funded investment in infrastructure (Figure 5.3). Roads accounted for 88% of public expenditure on transport during 2009–2012.

Figure 5.3: Budget+PPI Infrastructure Investment Rate, Various Years

(% of gross domestic product)



PPI = private participation in infrastructure, PRC = People's Republic of China.

Note: The asterisk denotes central government budget only.

Source: Asian Development Bank (2017).

However, the country suffers from a serious shortage of funds for road development and maintenance. In 2016, the Ministry of Transport projected that Viet Nam would need D1,015 trillion (about \$48 billion) for transport development, of which road development projects would account for D651 trillion (Tram Anh, 2016). The capital of the Central Fund for Road Maintenance, which came into operation in 2013, does not meet the minimum requirement for practical road maintenance. In 2018, it could only provide 35% of the needed capital. To mobilise funds for road development, Viet Nam has had to rely in part on foreign borrowing, mostly by the government. As Table 5.1 shows, transport accounted for the largest share of foreign borrowing in both 2010–2015 and 2016–2017. This reflects the government's continued emphasis on road development despite the reduced access to official development assistance and concessional loans that accompanied Viet Nam's transition to middle-income status in 2008.

Table 5.1: Foreign Borrowing by Sector, 2010–2017

Sector	Total Foreign Capital	Amount (\$ million)		Share (%)	
		Loans	Grants	2016–2017	2010–2015
Transport	3,124.67	3,093.46	31.21	35.89	35.68
Environment (water supply, drainage, climate change response, etc.), urban development	2,575.75	2,546.98	28.77	29.58	18.65
Energy and industry	1,127.36	1,127.36		12.95	17.14
Agriculture and rural development, poverty reduction	715.53	712.99	2.54	8.22	9.47
Health – social affairs	259.79	257.29	2.50	2.98	4.65
Education and training	297.88	297.88	0	3.42	3.35
Others (science and technology, institutional capacity building, etc.)	605.88	594.412	11.46	6.96	11.05
Total	8,706.85	8,630.36	76.49	100	100

Notes: Numbers may not sum precisely because of rounding. Percentages may not total 100% because of rounding. Figures for 2017 are estimates.

Source: Government of Viet Nam, Ministry of Planning and Investment.

Since 2011, acknowledging its reduced access to official development assistance and concessional loans, Viet Nam turned its attention to leveraging domestic private investment for road development projects. To this end, the government has gradually amended the legal framework to legitimise and facilitate public–private partnership in road development. By mid-2015, the Ministry of Transport had implemented 71 build–operate–transfer and build–transfer projects with a total investment of D202,6 trillion (Le et al., 2018). However, these projects have experienced a range of problems, including poor evaluation of project costs, excessively long payback periods, and restricted consumer choices as a result of the design of the toll collection booth. In August 2018, the Ministry of Finance asked the Hanoi People’s Committee to postpone the settlement of costs for five build–transfer road projects by using publicly owned land.

2.2 International framework for connectivity enhancement

Viet Nam participates in several international frameworks for connectivity enhancement, notably the

Greater Mekong Subregion (GMS) Economic Cooperation Program, the Master Plan for ASEAN Connectivity (MPAC), and the Asia-Pacific Economic Cooperation (APEC) Framework on Connectivity.

In 1992, the six GMS countries,² with assistance from the Asian Development Bank (ADB) and building on their shared histories and cultures, launched the GMS Economic Cooperation Program. To realise its vision of a prosperous, integrated, and harmonious subregion, the GMS Program has adopted a three-pronged strategy (the three Cs): (i) increasing connectivity through sustainable development of physical infrastructure and the transformation of transport corridors into transnational economic corridors; (ii) improving competitiveness through efficient facilitation of cross-border movement of people and goods and the integration of markets, production processes, and value chains; and (iii) building a greater sense of community through projects and programmes that address shared social and environmental concerns (ADB, 2015).

MPAC serves to connect ASEAN through enhancing physical, institutional, and people-to-people connectivity. It plays a pivotal role in achieving a key goal of the ASEAN Vision 2020: ‘... transforming ASEAN into a stable, prosperous, and highly competitive region with equitable economic development, and reduced poverty and socio-economic disparities’. Within this framework, projects to enhance physical connectivity aim to ensure freer flows of goods, services, and people amongst ASEAN Member States, including Viet Nam. By design, physical connectivity under MPAC takes a project-driven approach. ASEAN leaders adopted MPAC in Hanoi in 2010. The overarching objective of MPAC is to ‘promote economic growth, narrow development gaps, ASEAN integration and Community building process, enhance competitiveness of ASEAN, promote deeper social and cultural understanding as well as greater people mobility and connect its Member States within the region and with the rest of the world’. After the establishment of ASEAN Community in 2015, ASEAN Member States endorsed MPAC 2025 (ASEAN Secretariat, 2015), with a vision ‘to achieve a seamlessly and comprehensively connected and integrated ASEAN that will promote competitiveness, inclusiveness, and a greater sense of Community’. The successful implementation of MPAC 2025 will contribute immensely to the realisation of the ASEAN Vision 2025.

Meanwhile, since its inception, APEC has worked to promote Asia-Pacific connectivity. Since 2009, APEC has advanced its agenda to improve supply-chain connectivity (e.g. for the APEC-wide target of

² The GMS countries comprise Cambodia, China (specifically Yunnan Province and Guangxi Zhuang Autonomous Region), Lao PDR, Myanmar, Thailand, and Viet Nam.

a 10% improvement in supply-chain performance by 2015, in terms of reduction of time, cost, and uncertainty of moving goods and services through the Asia-Pacific region, taking into consideration individual economies' circumstances). This is part of APEC's comprehensive approach to working 'at the border', 'behind the border', and 'across the border'. As part of the work to achieve the Bogor Goals by 2020 and the 2010 Yokohama Vision of 'Bogor and Beyond', APEC leaders declared again in 2013 the aspiration to reach a seamlessly and comprehensively connected and integrated Asia-Pacific by realising (i) 'physical connectivity' that improves supply-chain performance and connects and integrates logistics, transport, energy, and telecommunication infrastructure in the APEC region; (ii) 'institutional connectivity' that advances regulatory and procedural cooperation and coherence amongst our economies; and (iii) 'people-to-people connectivity' that enhances interaction, mobility, and joint endeavours. In 2014, APEC leaders endorsed the APEC Connectivity Blueprint, 2015–2025. The blueprint contains existing connectivity-related initiatives; encourages reviving those initiatives that require further progress; and proposes future initiatives for more efficient flows of goods, services, capital, and people to drive APEC progress. It is broad in scope and adaptable to the ever-changing conditions in the Asia-Pacific.

More recently, the Belt and Road Initiative (BRI), proposed and advocated by China, has attracted immense attention due to the sizeable implications (beyond economic opportunities) that it may produce internationally and regionally. As Le (2018) observes, 'Although China's official propaganda describes the BRI as a broad, comprehensive initiative that includes policy coordination, facilities connectivity, unimpeded trade, financial integration, and people-to-people connections, it's China's proposal to create massive networks of infrastructure across Asia, Africa and Europe, including roads, railways, harbours, airports, pipelines, and fibre optic, that is most appealing to regional countries, including Viet Nam'. However, apart from scattered welcoming remarks on the BRI, Viet Nam has remained sceptical when discussing further details, including potential projects to be financed by BRI loans.

3. Economic Performance of Related Provinces

The provinces along the VHE maintained high GDP growth rates during 2016–2017 (Table 5.2). Hanoi grew by 8.2% in 2016 and almost 8.5% in 2017. Other provinces largely recorded single-digit growth

in the same period, except Ha Tinh Province, which experienced negative growth in 2016. Regional GDP growth in these provinces generally outpaced overall GDP growth. However, in terms of scale, Hanoi dominates, with 15.8%–15.9% of overall GDP, while Ninh Binh, Thanh Hoa, and Nghe An provinces account for only 1.5%–2.6%.

Table 5.2: Gross Domestic Product Growth of Selected Provinces

Province	GRDP (D billion, comparable prices)		Growth (%)	
	2016	2017	2016	2017
Hanoi	478,964	519,568	8.20	8.48
Ninh Binh	45,150	48,739	10.12	7.95
Thanh Hoa	79,213	85,756	9.05	8.26
Nghe An	70,036	75,814	7.50	8.25
Ha Tinh*	n.a.	n.a.	-15.31	10.51
Viet Nam	3,054,470	3,262,548	6.21	6.81

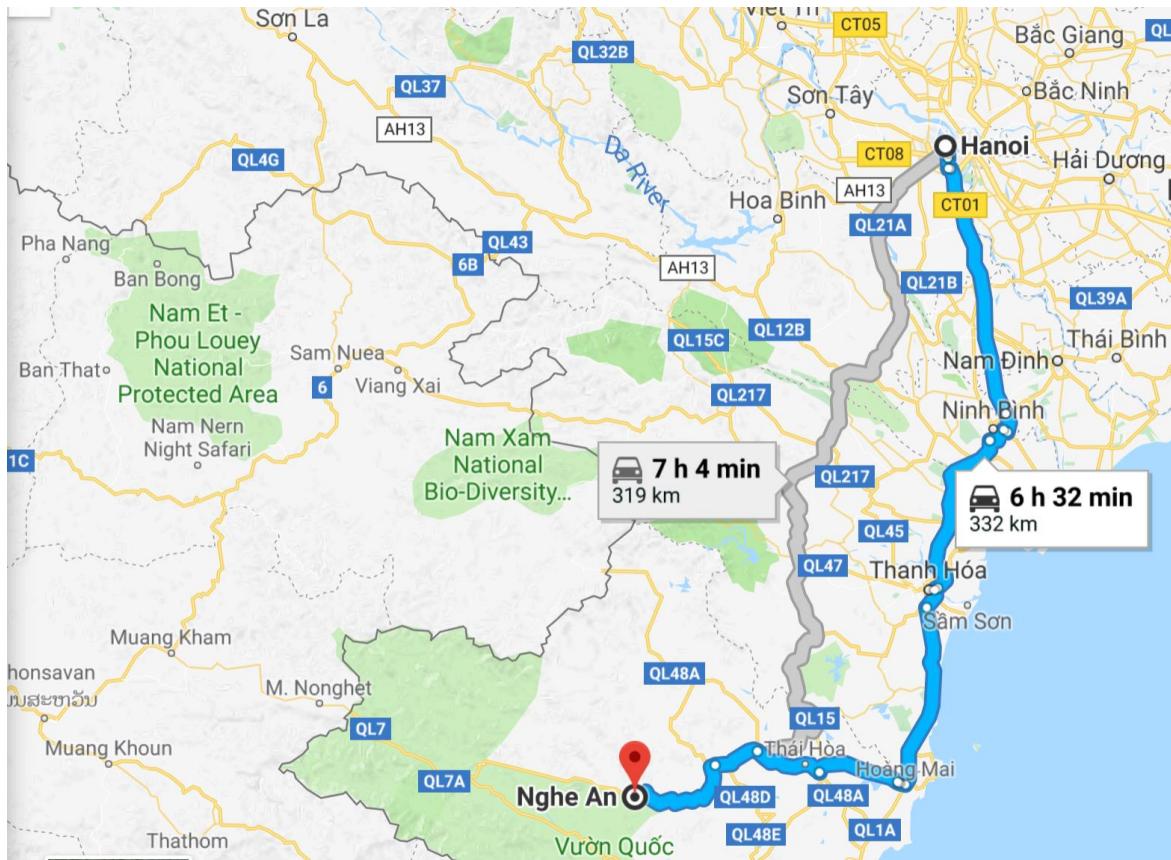
GRDP = gross regional domestic product, D = Vietnamese dong.

* Data on GRDP of Ha Tinh is not publicly available.

Source: Government of Viet Nam, General Statistics Office.

Currently, there are two main options for travelling by road from Hanoi to Nghe An: the Ho Chi Minh road, which takes about 7 hours, and National Highway No. 1, which is about a 6-hour drive. National Highway No. 1 has undergone upgrades and expansions along different sections (Figure 5.4). For instance, the stretch from Phap Van to Cau Gie has long been referred to as an expressway, although it does not meet expressway standards. As one of the major roads with the heaviest traffic in the country's north, by 2013, some parts of this section had deteriorated due to excessive traffic after 12 years of use. In 2014, the road was upgraded to a standard expressway with four lanes and a maximum speed of 100 km/hour. The second phase following the upgrading began in 2018. Upgrades to the Cau Gie–Ninh Binh section were completed in 2018. The Ministry of Transport proposed investment under the public–private partnership modality for the Ninh Binh–Thanh Hoa section of National Highway No. 1, which is to be upgraded to an expressway.

Figure 5.4: Road Connections from Hanoi to Nghe An



Source: Google Maps, modified by the author.

Roads are still the main mode of transport from Hanoi to Nghe An. Rail and air could be alternatives for the movement of passengers and goods between these two cities. However, flights are only available between Hanoi and Nghe An Province, and there are no operations in the provinces in between. Meanwhile, the railway system in general suffers from underdevelopment, poor governance, inadequate innovation, and a lack competitiveness compared to road.

The provinces along the VHE experienced rapid expansion of trade in 2017. Only Hanoi saw single-digit export growth in 2017, but its exports made up more than 5.4% of Viet Nam's total exports. Meanwhile, Hanoi accounted for more than 13.5% of Viet Nam's imports, with import growth of 13.2% in 2017. Trade expanded much rapidly in provinces other than Hanoi (Table 5.2), although each of these provinces only accounted for up to 0.8% of the country's total exports or imports. Whether these provinces can sustain trade growth in the coming years remains to be seen.

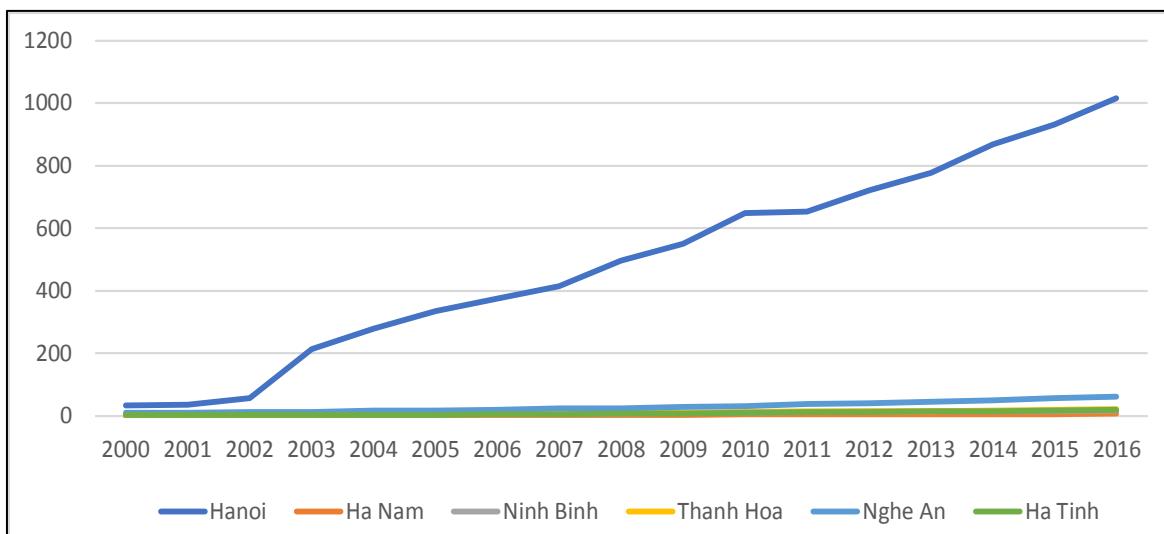
Table 5.3: Trade Figures of Selected Provinces

Province	Exports (\$ million)			Imports (% million)		
	2016	2017	Growth (%)	2016	2017	Growth (%)
Hanoi	10,681	11,706	9.6	25,459	28,825	13.2
Ha Nam	1,225	1,718	40.2	1,281	1,558	21.6
Ninh Binh	798	1,006	26.1	896	1,249	39.4
Thanh Hoa	1,493	1,750	17.2	948	1,338	41.1
Nghe An	538	692	28.6	580	766	32.1
Overall	176,617	215,119	21.8	174,739	213,007	21.9

Source: Government of Viet Nam, General Department of Customs.

Figure 5.5 shows the increase in passenger transport in VHE provinces during 2000–2016. Hanoi was the only one to record a notable and continuous increase in passenger transport volumes. However, the average annual growth of passenger transport in Hanoi dropped from 49.7% in 2001–2006 to 10.5% in 2007–2016. Consequently, the growth rate of passenger transport in Hanoi was the lowest amongst the six provinces in 2007–2016.

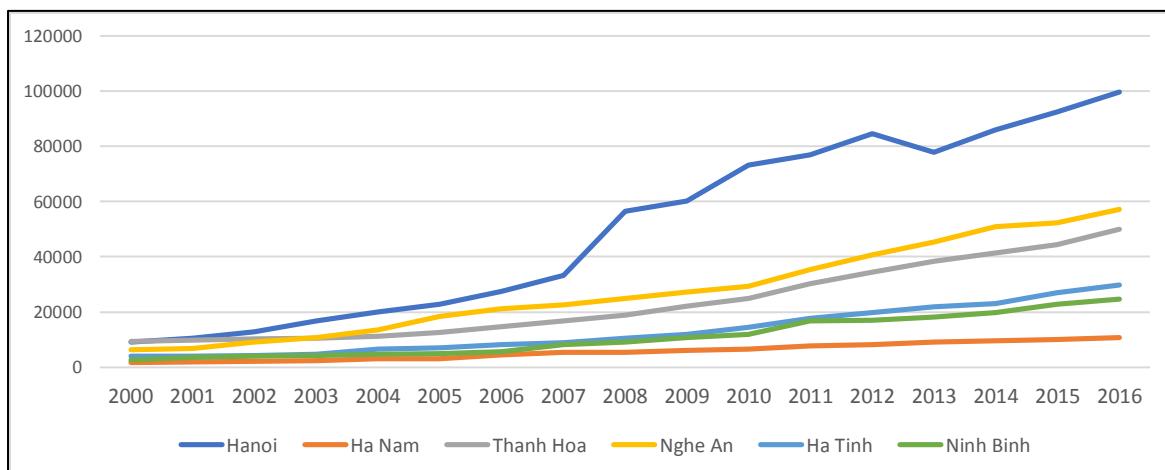
Figure 5.5: Transport of Passengers in Selected Provinces, 2000–2016 (million)



Source: Government of Viet Nam, General Statistics Office.

Similarly, Figure 5.6 depicts the expansion of freight transport in VHE provinces during 2000–2016. Again, Hanoi had the highest volume of freight transport. Hanoi had the second-highest average annual growth rate in 2001–2006 (20.2%, after Nghe An, with 22.3%) and in 2007–2016 (13.7%, after Ha Tinh, with 13.9%). Unlike passenger transport, the upward trends in freight transport appear to be more similar across VHE provinces.

Figure 5.6: Freight Transport in Selected Provinces, 2000–2016 (thousand tonnes)



Source: Government of Viet Nam, General Statistics Office.

With the exception of Nghe An Province, where tourism revenues increased by an average of only 6.9% per annum in 2010–2015, the provinces along the VHE enjoyed rapid growth in revenues from tourism services (Table 5.4). Tourism revenue growth in Hanoi was similar to the national average but accounted for more than one-quarter of total tourism revenues. The challenge, therefore, is to identify new drivers that can help increase the spillover effects of tourism from Hanoi to other provinces along existing roads, such as Ha Nam, Ninh Binh, Thanh Hoa, and Nghe An.

Table 5.4: Revenues from Tourism Services (D billion)

Province	2010	2012	2013	2014	2015	Average Growth 2010–2015 (% p.a)
Hanoi	4,006	3,007	6,764	7,483	7,832	14.4
Ha Nam	8	10	12	14	15	15.0
Ninh Binh	4	6	14	19	9	14.6
Thanh Hoa	22	43	50	60	73	27.7
Nghe An	38	52	48	49	53	6.9
Overall	15,539	18,853	24,821	27,799	30,444	14.4

Source: Government of Viet Nam, General Statistics Office.

The VHE provinces have attracted foreign direct investment (FDI) to varying degrees (Table 5.5). By the end of 2017, Hanoi had the largest volume of registered capital and number of registered projects. Thanh Hoa and Ha Tinh provinces had quite a large volume of registered capital but a relatively small number of larger FDI projects.

Table 5.5: Operative Foreign Direct Investment Projects in Selected Provinces, end of 2017

Province	Number of Projects	Total Registered Capital (\$ million)
Hanoi	4,500	27,638.0
Ha Nam	215	2,437.6
Ninh Binh	59	1,266.3
Thanh Hoa	102	13,819.0
Nghe An	79	1,820.9
Ha Tinh	62	11,613.2
Total	24,803	319,613.1

Source: Government of Viet Nam, General Statistics Office.

Sustained high rates of economic growth propelled a continuous reduction in the incidence of poverty in the provinces along the VHE during 2010–2016 (Table 5.6). By 2016, Nghe An was the only province with a household poverty incidence of more than 10%. At the other end of the spectrum, Hanoi's poverty incidence had dropped to 1.3% in 2016 from 5.3% in 2010. In line with this analysis, if additional development mechanisms (such as the VHE and related measures such as industrial cooperation) can link these provinces, it is likely that Ha Nam, Ninh Binh, Thanh Hoa, and Nghe An would see poverty incidences approaching the low rate of Ha Noi.

Table 5.6: Poverty Incidence, 2010–2016 (%)

Item	2010	2012	2013	2014	2015	2016
National	14.2	11.1	9.8	8.4	7	5.8
Hanoi	5.3	3.6	2.9	2.3	1.8	1.3
Ha Nam	12	9.1	7.9	6.6	5.5	4.4
Ninh Binh	12.2	9.3	8.1	6.6	5.5	4.3
Thanh Hoa	25.4	19.9	17.5	14.5	12	9.6
Nghe An	24.8	19.8	17.4	14.4	12.3	10.4

Source: Government of Viet Nam, General Statistics Office.

4. Potential Impacts of the Vientiane–Hanoi Expressway on Viet Nam's Development

Both theory and experience suggest that the VHE could improve capacity to facilitate the flow of goods and services across the five provinces it traverses (Hanoi, Ha Nam, Ninh Binh, Thanh Hoa, and Nghe An). This impact can be realised through widening of roads and/or shortening of travel times. Similar highways illustrate the potential improvements. For example, the Hanoi–Hai Phong highway (NH5) has shortened travel time from 4 hours to less than 2 hours, and it takes only 3 hours to drive between Hanoi and Lao Cai on the Hanoi–Lao Cai expressway compared to 7 hours before the expressway was constructed.

The shortened travel time makes various trade transactions viable that were not previously economically feasible, such as direct trade activities by firms in Nghe An, Thanh Hoa, Ninh Binh, and Ha Nam. Experience shows that the improved transport of passengers and freight in these provinces could partly be attributed to the upgrading of roads in these provinces, including the concerned segments of the national highway. Based on such experiences, the VHE could further boost transport of passengers and freight in those provinces

Experience from the NH5 shows that traffic volumes increased faster than planners expected (Tran and Nguyen, 2013). The economic growth of the surrounding area also far surpassed the expectations of the planners. Consequently, the amount of traffic rose so fast that another wider and more sophisticated highway became necessary. The construction of the new highway, running parallel to the NH5, began in early 2008 and was completed in 2015 (despite originally scheduled completion in 2013). The improved NH5 therefore became an important example of how to create and exploit new opportunities for regional growth and development.

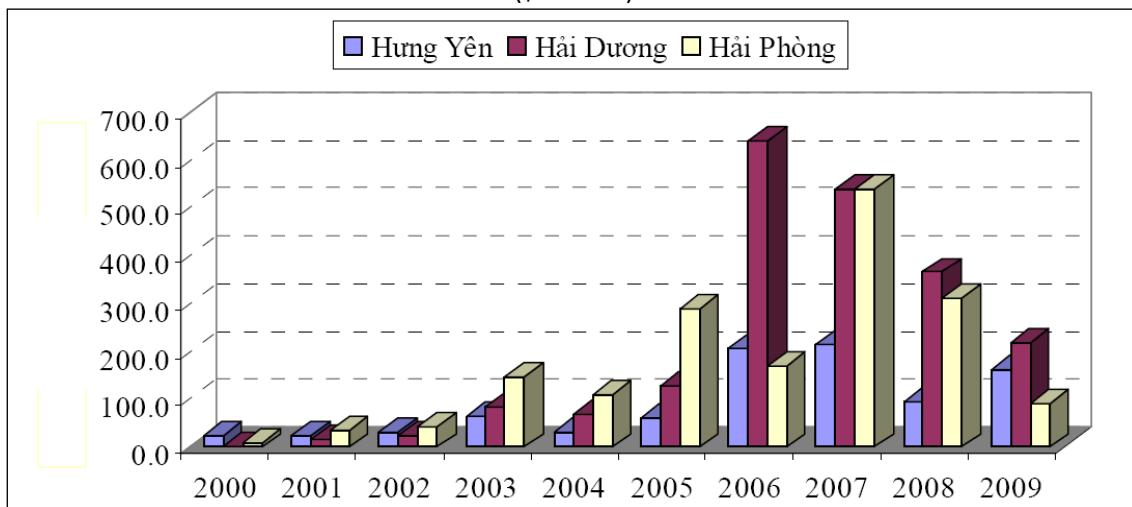
The upgrading of the NH5 led to a major drop in travel time between Hanoi and Haiphong, from 5 hours to 2 hours. Average travel speed increased from 24–30 km/hour to 50–60 km/hour (Japan International Cooperation Agency, 2007, cited in Tran and Nguyen, 2013). Thus, construction of the NH5 played a large part in the development of the region between Hanoi and Haiphong. In 2003, the Japan Bank for International Cooperation conducted an assessment of the project's impact on the development of the surrounding area.³ The assessment found that the project had generated positive advances in the region's economic and social activities by stimulating FDI inflows into Hung Yen, Hai Duong, and Hai Phong (Figure 5.7). The volume of goods transported through Hai Phong port jumped sharply, from more than 4.5 million tonnes in 1995 to 12.7 million tonnes in 2003, and 32.9 million tonnes in 2009. Accordingly, the NH5 helped strengthen Viet Nam's capacity to take advantage of opportunities triggered by international economic integration.

FDI in the provinces along the VHE may also increase. Experience in Viet Nam shows that improved road connections contribute to higher FDI inflows, and this in turn induces industrialisation in the provinces involved. In addition to reforms at the national level, the NH5 improvement project enhanced the business environment in the surrounding provinces of Hai Phong, Hung Yen, and Hai

³The committee was chaired by Tho Van Tran.

Duong. The number of local enterprises in Hai Phong rose from 1,089 in 2000 to 2,625 in 2004, and then to 4,913 in 2008. The corresponding figures were 224,552, and 1,355 in Hung Yen; and 507, 1,123, and 2,741 in Hai Duong. Furthermore, the reduced costs of doing business helped improve company performance, especially net turnover.

Figure 5.7: Foreign Direct Investment in the Provinces Surrounding the Hanoi–Hai Phong Highway (\$ million)



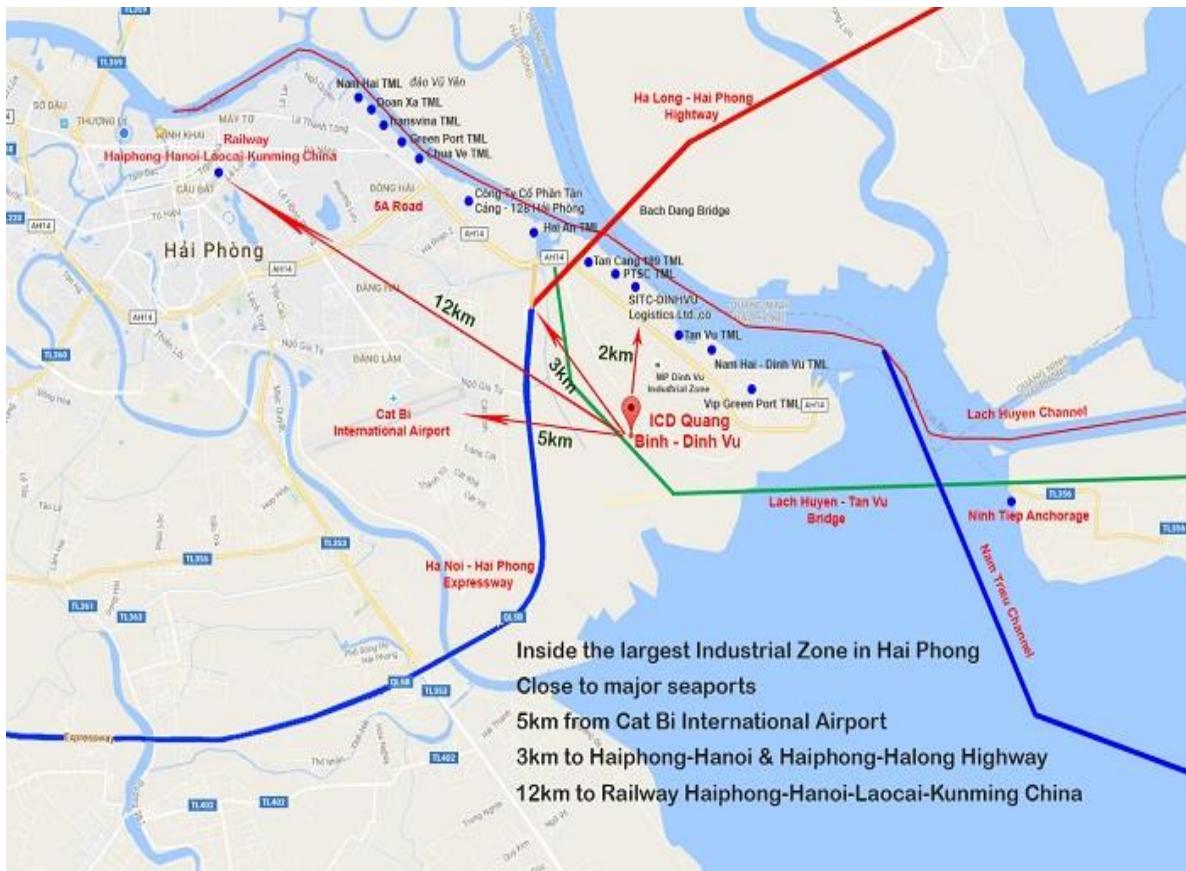
Source: Government of Viet Nam, General Statistics Office.

More broadly, the VHE can help the provinces of Ha Nam, Ninh Binh, Thanh Hoa, and Nghe An leverage connection to the existing expressway (i.e. the Hanoi–Hai Phong–Quang Ninh triangle). This in turn will better facilitate the flows of goods from these provinces to the major provinces and seaports in the northern economic triangle. It is noteworthy that Hai Phong port alone accounted for an estimated 92 million tonnes of merchandise flows in 2017 (of a country total of 280 million tonnes). Meanwhile, spare capacity still exists at the new port, Lach Huyen, in Hai Phong. This shows that the ports in Hai Phong could readily accommodate the increase in flows of goods from along the VHE to Hanoi and on to Hai Phong (Figure 5.8).

Local officials interviewed for their perspectives on the VHE were optimistic about the prospects for upgrading the VHE. When asked about impact projections on attracting FDI, they could not offer a rough figure. However, they appreciated the VHE's importance in enhancing connectivity of their provinces to Hanoi, the growth pole. The interviewees also indicated the good timing for the VHE, given the government has deepened efforts to reform the business environment and strengthen

competitiveness under the series of Resolution No. 19,⁴ including measures to reduce costs of doing business and logistics. In particular, Resolution No. 19, issued in 2018, requires the People's Committee in each province and city to propose and enact their own action plan to implement Resolution No. 19. In this context, the enhanced connectivity provided by the VHE would further attract investors to the provinces along the expressway.

Figure 5.8: Road Connectivity to Major Seaport in Hai Phong



Source: Quang Binh Import & Export Joint Stock Company (2018).

Improvements to roads and related infrastructure induce more rapid economic growth. Such a positive impact of the VHE should be expected, similar to the beneficial impacts of connectivity enhancement in other geographical regions in ASEAN under MPAC. Geographical simulation by the Economic Research Institute for ASEAN and East Asia shows that the first version of MPAC could increase economic output by at least 100% in 254 regions, with a maximum regional increase of 534%

⁴ Since 2014, the government of Viet Nam issued Resolution No. 19 each year, with updated targets and practical policy measures to improve various aspects of the business environment, such as payment of taxes, access to electricity, specialized inspection, and logistics performance.

(ERIA, 2010) (Table 5.7). Viet Nam ranks second in terms of economic benefits, showing that the added initiative of enhancing road connectivity can be critical. In turn, poverty reduction outcomes can be leveraged, and these impacts could be magnified given Viet Nam's impressive record of poverty reduction largely due to improved road connections to disadvantaged regions.

Table 5.7: Geographical Simulation of Impacts of the Masterplan for ASEAN Connectivity

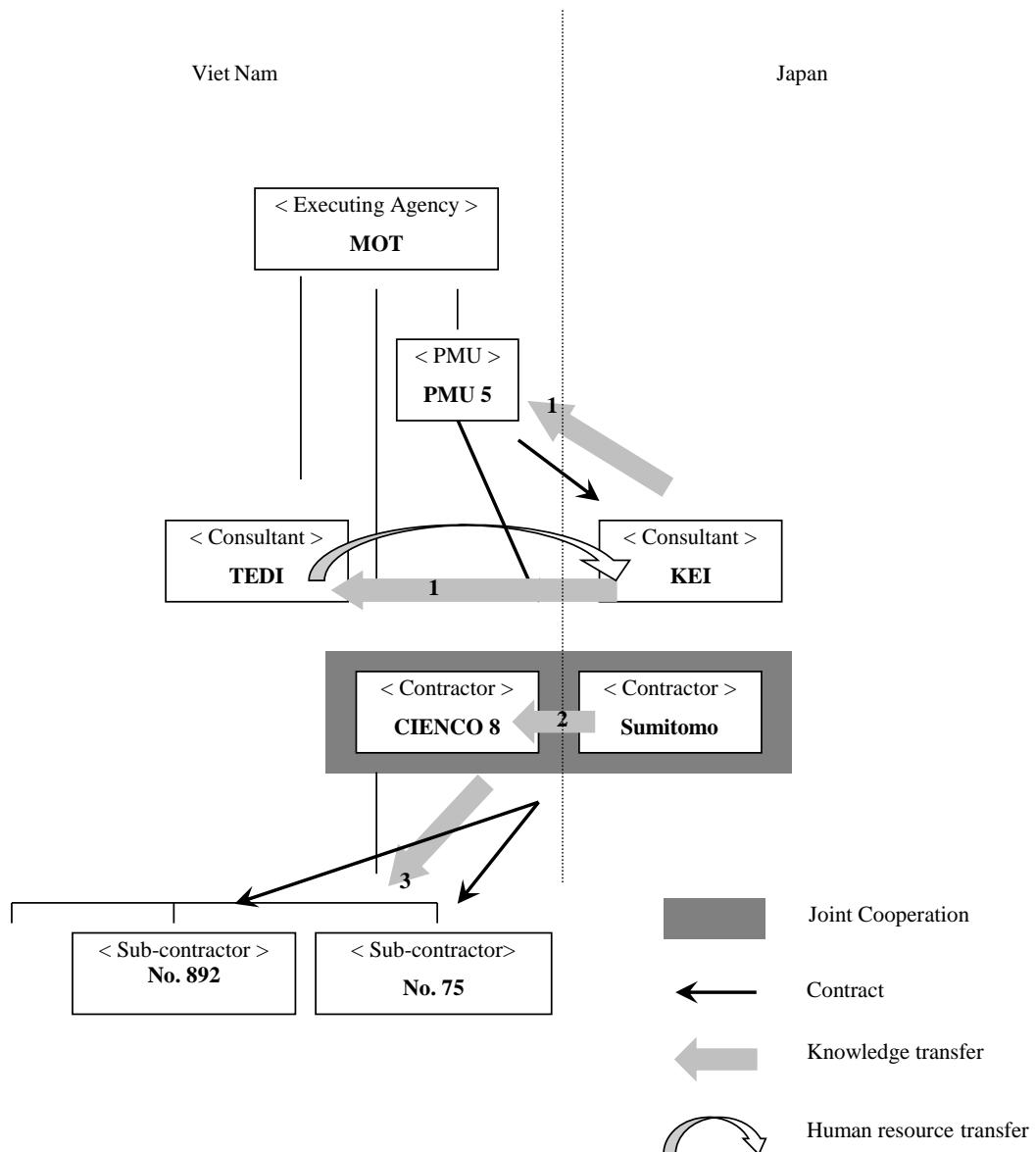
Ranking by Region			Ranking by Country	
Region	Country	Economic Effects	Country	Economic Effects
Kota Lhokseumawe	Indonesia	533.7%	Myanmar	145.8%
Asahan	Indonesia	485.8%	Viet Nam	114.6%
Mamuju Utara	Indonesia	480.8%	Lao PDR	99.3%
Kota Pematang Siantar	Indonesia	463.4%	Thailand	98.6%
Rokanhilir	Indonesia	432.8%	Cambodia	97.9%
Indragiri Hilir	Indonesia	419.2%	Indonesia	85.0%
Kota Binjai	Indonesia	411.4%	Philippines	73.4%
Kota Kediri	Indonesia	410.3%	Malaysia	64.4%
Kota Tanjungbalai	Indonesia	408.1%	India	45.6%
Soc Trang	Viet Nam	404.4%	Singapore	29.2%
Number of regions with:	100% or more	254	China	25.4%
	50%–100%	239	Bangladesh	23.0%
	0%–50%	446	Hong Kong	8.2%

ASEAN = Association of Southeast Asian Nations.

Source: Economic Research Institute for ASEAN and East Asia (2010).

It should be noted that during the implementation of the project, knowledge transfers to Vietnamese stakeholders can occur through various channels. They can be channelled from foreign partners to local authorities in Viet Nam. In particular, experiences of planning, designing, and implementing projects can be shared with local authorities in Viet Nam. They may also take place from foreign contractors to local contractors through joint ventures or joint operations, or from contractors to subcontractors. Tran and Nguyen (2013) provided a detailed discussion on this aspect of the NH5 project (Figure 5.9).

Figure 5.9: Knowledge Transfers in the Hanoi–Hai Phong Highway



Source: Tran and Nguyen (2013).

Nevertheless, the impacts may be affected by road safety considerations. Traffic accidents have increased rapidly after the completion of various highways in Viet Nam. For instance, 2 years after the NH5 opened, the number of recorded accidents doubled. The main reason cited was the high speed of traffic. The concern is that aggressive speed control, which is often cited as one of the main underlying reasons for logistical underperformance, could reduce the potential benefits from the VHE. However, officials interviewed in some concerned localities (Nghe An and Thanh Hoa) expressed doubt that speed control to prevent accidents would reduce the project's benefits.

As a final consideration, the VHE may adversely affect Viet Nam's debt position. It should be noted that Viet Nam's gross investment dropped from 38.2% in 2008 (upon attaining middle-income status) to 33.5% in 2018. In particular, despite sluggish expansion, development investment from the state budget accounted for 22% of gross investment and 7.2% of GDP during 2010–2016 on average. Viet Nam's savings rate fluctuated from a low of 23.5% of GDP in 2008 to a high of 30.0% of GDP in 2012, before contracting to 25.0 % of GDP in 2016. Gross investment, including public investment expanded significantly widening the gap with savings. In the absence of a long-term strategy for public investment, including foreign borrowings, this trend could increase the risk of domestic economic instability. Meanwhile, the room for external borrowing is decreasing as the National Assembly attempts to impose discipline by restructuring public debt and external loans.

5. Policy Recommendations

Building a new road is a necessary but not sufficient condition for rapid and sustainable socio-economic development in the provinces of Viet Nam. Effective implementation of the international economic integration process remains a national priority. In 2018, Viet Nam fulfilled many international economic integration commitments, and from January 2019, it began to implement the Comprehensive and Progressive Agreement for Trans-Pacific Partnership, while preparing for the ratification of the European Union–Viet Nam Free Trade Agreement. Accelerating the negotiation of important free trade agreements, such as the Regional Comprehensive Economic Partnership, can help leverage development opportunities for the country. However, Viet Nam must also enhance its domestic capacity to utilise the economic opportunities arising from economic integration. Enhancing road links across the different provinces in the country is important in this regard, particularly for disadvantaged provinces, where road initiatives can help foster the economic inclusion of businesses and social groups.

The following recommendations can be made in relation to the VHE. First, careful prefeasibility studies on the impacts of the expressway should be conducted for each province involved. Such studies should dedicate enough resources to identifying the economic opportunities and the social and environmental impacts on the concerned provinces. It should be noted that past figures for projects in Viet Nam should not be relied upon for estimating the investment outlay, because in 2018 the

country was still seeking to identify a standard costing for road projects.

Second, different funding and project scope scenarios should be carefully considered. One option, albeit a capital-intensive one, is to expand and upgrade the road to four lanes in all sections. Alternatively, selected sections could be designed with only two lanes in the first phase, with extension considered later.

Third, Viet Nam should explore the fiscal space to finance certain components of the project. While public debt as a percentage of GDP decreased in 2016–2018, the country still faces tight budget constraints given the enormous demand for public investment (including, for example, a high-speed train). The public–private partnership model, with the involvement of Vietnamese contractors, should be considered in detail.

Fourth, Viet Nam should consider designing a network of secondary road links to help connect the local districts in each province with the VHE. The concerned provinces and localities along the VHE can learn from the experiences of others located along major road projects such as the Hanoi–Hai Phong and Hanoi–Lao Cai expressways.

Fifth, Viet Nam should coordinate with other involved countries (especially Lao PDR and Thailand) to harmonise transport-related policies along the entire length of the regional road initiative. This will ensure maximum benefits to each participating country when the road is completed.

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