

Constructing Expressway Projects for the Infrastructure Needs for Vietnam's Economic Development

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ABSTRACT

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The purpose of this study is to analyze Constructing expressway projects for the infrastructure needs for Vietnam's economic development. Paper emphasizes the management, exploitation and maintenance of the project; Ensuring safe, smooth traffic and compliance with the law. Moreover, Investment on expressway or highway projects is considered as the most effective way to maintain profits as well as environmental values, security and social order.

Keywords : Expressway Projects, Infrastructure, Socio-Economic Benefits, Economic Development

I. INTRODUCTION

Investment on expressway or highway projects is considered as the most effective way to maintain profits as well as environmental values, security and social order. Prakash et al (2023) stated a set of commonalities between the three programmes, with indications towards potential mechanisms for facilitating economic growth in disparate regions

where timely implementation of efficient policies may be achieved. Moreover, we evidence that evaluating impacts through segmented areas of focus such as social, economic and policy may not adequately portray the real impacts of infrastructure investment in a comprehensive way. This research justifies the importance of understanding infrastructure projects as interconnected, complex systems that may deliver desired benefits in a non-

linear and highly emergent way. They conclude with a proposition that understanding the characteristics of the larger infrastructure system-of-systems, is crucial to unlocking added value and realising long-term benefits of highways infrastructure investment.

Also, Bristow and Nellthorp (2000) describe that social impacts also encompass the environmental and public welfare, and demonstrates how infrastructure directly improves social welfare. They illustrate that, for example, improving the quality of transportation infrastructure is linked with the reduction of road accidents and traffic disruptions which consequently saves travel time and costs. In this case costs are divided into direct costs: damages to vehicles, property, medical expenses etc.; and indirect costs: loss of production through the loss of skilled or unskilled workers – thus a cost to society as well as the economy.

Hence author choose this topic:

“Constructing expressway projects for the infrastructure needs for Vietnam's economic development”.



Fig 1 - Highways in Vietnam
(source: internet)

II. Previous studies

In addition to many individual studies on a certain transportation project, there are some notable studies as follows:

Additionally, several studies also highlight the importance of implementing policies that distribute economic gains in an equitable way, acknowledging the considerable regional disparities in terms of infrastructure provision, quality, and access and the consequent unequal regional development (Ishikura, 2020).

Pham Huu Duc in 2002 with the article "Road traffic with the process of urban formation and development" published in Construction Magazine, No. 8, 2002 (pp. 11-13) further reinforced the role of traffic in urban development.

The issue of urban traffic planning was mentioned by Luu Duc Hai in 2003 in the article "Urban traffic planning and management in the capital Hanoi" of Construction Magazine No. 8 (pp. 14 - 16).

III. Methodology

Authors use mainly qualitative analysis, inductive and synthesis methods Combined with historical and dialectical materialism methods.

Main findings and discussion

According to the Construction Investment Management Department (Ministry of Transport), the North-South Eastern Expressway construction projects in the 2017-2020 period, the section from Ninh Binh to Nghe An, have been opened to traffic and put into operation. includes 4 component projects, with a length of 171.85km, total investment of 27,353 billion VND, passing through 4 provinces (Nam Dinh 5.1km, Ninh Binh 24.4km, Thanh Hoa 98.8km, Nghe An 43,5 kilometres).

Specifically: Cao Bo - Mai Son section is 15.2km long, with a total investment of 1,607.4 billion VND invested by Ninh Binh Department of Transport; Mai Son - National Highway 45 section is 63.37km long, with a total investment of 12,918 billion VND

invested by Thang Long Project Management Board; The National Highway 45 - Nghi Son section is 43.28km long, with a total investment of 5,534.5 billion VND, invested by Project Management Board 2, and the Nghi Son - Dien Chau section is 50km long, with a total investment of 7,293.2 billion VND. The contract is invested by Project Management Board 6. The Cao Bo - Mai Son section will be put into operation in February 2022; The Mai Son - National Highway 45 section will be put into operation in April 2023 and the two National Highway 45 sections - Nghi Son, Nghi Son - Dien Chau will be put into operation from September 1, 2023.

The completion of the expressway section from Ninh Binh to Nghe An and putting it into operation has shortened the travel time from Hanoi to Dien Chau (Nghe An) to only about 3 to 3.5 hours, solving passenger transport needs. passengers and goods, minimizing accidents and traffic congestion, creating conditions to promote socio-economic development. (source: qdnd.vn)

Next, It is known that Trung Luong - My Thuan Expressway has a total length of 51.5km, roadbed width of 17m, road surface of 16m, including 4 lanes, opened to traffic on January 19, 2022. There are 53 bridges on the route, including 39 bridges on the main route, 14 overpasses and bridges on the connecting route. Currently, vehicles on the route are circulating at a speed of 80km/h.

The project has a total investment of more than 12,600 billion VND; Of which, State budget capital supports more than 2,100 billion VND, investor capital and credit capital more than 10,400 billion VND.

The My Thuan - Can Tho Expressway Project has a total length of nearly 23km, with a total investment of more than 4,800 billion VND. The route is designed with a speed of 100km/h for the complete

construction phase of 6 lanes. Phase 1 phased investment with 4 lanes, speed of 80km/h.

The investment project to build My Thuan 2 bridge and the road leading to both ends of the bridge is more than 6km long. In particular, My Thuan 2 bridge has a length of nearly 2km, a complete investment of 6 lanes, and a design speed of 80km/h. Total investment is more than 5,000 billion VND.

My Thuan 2 Bridge was started in March 2020, completed in 40 months, expected to be put into operation on December 24, 2023, helping to connect Trung Luong - My Thuan Expressway and My Thuan - Can Tho, shortening the distance between the city. HCM and Can Tho.

(source: dangcongson.vn)



Fig 2 - Highways benefits
(source: internet)

IV. CONCLUSION

The People's Committee of Tien Giang province assigned Trung Luong - My Thuan BOT Joint Stock Company to implement the traffic organization of the Trung Luong - My Thuan expressway according to the approved and adjusted traffic organization plan, ensuring compliance comply with legal regulations.

Trung Luong - My Thuan BOT Joint Stock Company is responsible for monitoring and evaluating the process of organizing traffic on the route, promptly detecting inadequacies compared to the actual exploitation process to propose and report to the Committee. The people of Tien Giang province consider and adjust according to regulations to ensure traffic safety for people and vehicles when participating in traffic on the highway.

This unit is also responsible to the competent state agency, Trung Luong - My Thuan Expressway Management Authority (Department of Transport of Tien Giang province) for the management, exploitation and maintenance of the project; Ensuring safe, smooth traffic and compliance with the law.

And Berawi (2017) mentioned that Most mega-project infrastructure such as highway construction requires an enormous amount of cost. This situation might be a problem to developing countries that have limited national budget plan. On the other hand, the capability to transfer the funding of infrastructure depends on the project attractiveness to the private sector. The evaluation to involve in the project should be supported by a significant value for money from the business perspective.

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VI. REFERENCES

- [1]. Berawi, M.A. (2017). Empowering Added Value in Highway Project: A Strategy to Improve the Feasibility. Retrieved from: https://www.researchgate.net/publication/321636663_Empowering_Added_Value_in_Highway_Project_A_Strategy_to_Improve_the_Feasibility
- [2]. Tinh, D. T., Thuy, N. T., & Ngoc Huy, D. T. (2021). Doing Business Research and Teaching Methodology for Undergraduate, Postgraduate and Doctoral Students-Case in Various Markets Including Vietnam. *Ilkogretim Online*, 20(1).
- [3]. Huy, D. T. N. (2015). The critical analysis of limited south asian corporate governance standards after financial crisis. *International Journal for Quality Research*, 9(4), 741.
- [4]. Huy, D. T. N., Le, T. H., Hang, N. T., Gwoździewicz, S., Trung, N. D., & Van Tuan, P. (2021). Further researches and discussion on machine learning meanings-and methods of classifying and recognizing users gender on internet. *Advances in Mechanics*, 9(3), 1190-1204.
- [5]. Huy, D. T. N., & Hang, N. T. (2021). Factors that affect Stock Price and Beta CAPM of Vietnam Banks and Enhancing Management Information System-Case of Asia Commercial Bank. *Revista Geintec-Gestao Inovacao E Tecnologias*, 11(2), 302-308.
- [6]. Huy, D. T. N., Van, P. N., & Ha, N. T. T. (2021). Education and computer skill enhancing for Vietnam laborers under industry 4.0 and evfta agreement. *Ilkogretim Online*, 20(4).
- [7]. Hien, D. T., Huy, D. T. N., & Hoa, N. T. (2021). Ho Chi Minh Viewpoints about Marxism Moral Human Resource for State Management Level in Vietnam. *Psychology and education*, 58(5), 2908-2914.
- [8]. Huy, D. T. N. (2021). Banking sustainability for economic growth and socio-economic

- development–case in Vietnam. *Turkish Journal of Computer and Mathematics Education (TURCOMAT)*, 12(2), 2544-2553.
- [9]. Dimitrov, V., & Jain, P. C. (2006). *The Value Relevance of Changes in Financial Leverage*, SSRN Working Paper.
- [10]. Eugene, F. F., & French, K. R. (2004). *The Capital Asset Pricing Model: Theory and Evidence*, *Journal of Economic Perspectives*.
- [11]. Gunaratha, V. (2013). *The Degree of Financial Leverage as a Determinant of Financial Risk: An Empirical Study of Colombo Stock Exchange in Sri Lanka*, 2nd International Conference on Management and Economics Paper.
- [12]. Hac, L. D., Huy, D. T. N., Thach, N. N., Chuyen, B. M., Nhung, P. T. H., Thang, T. D., & Anh, T. T. (2021). *Enhancing risk management culture for sustainable growth of Asia commercial bank -ACB in Vietnam under mixed effects of macro factors*, *Entrepreneurship and Sustainability Issues*, 8(3).
- [13]. Hirindu, K., & Kushani, P. (2017). *The Factors Effecting on Bank Profitability*, *International Journal of Scientific and Research Publications*, 7(2), 212-216.
- [14]. Hang, T. T. B., Nhung, D. T. H., Hung, N. M., Huy, D. T. N., & Dat, P. M. (2020). *Where Beta is going– case of Viet Nam hotel, airlines and tourism company groups after the low inflation period*, *Entrepreneurship and Sustainability Issues*, 7(3).
- [15]. Huy, D. T. N. (2015). *The Critical Analysis of Limited South Asian Corporate Governance Standards After Financial Crisis*, *International Journal for Quality Research*, 9(4), 741-764.
- [16]. Huy, D. T. N. (2012). *Estimating Beta of Viet Nam listed construction companies groups during the crisis*, *Journal of Integration and Development*, 15(1), 57-71.
- [17]. Hà, H. T. C., Lanh, L. T., Minh, L. T. H., & Anh, H. T. P. (2014). *Kiểm định các nhân tố vĩ mô tác động đến thị trường chứng khoán Việt Nam*. *Tạp chí Khoa học, Quyển*, 3(2), 70–78.
- [18]. Huy, D. T. N., Loan, B. T., & Anh, P. T. (2020). *Impact of selected factors on stock price: a case study of Vietcombank in Vietnam*, *Entrepreneurship and Sustainability Issues*, 7(4), 2715-2730. [https://doi.org/10.9770/jesi.2020.7.4\(10\)](https://doi.org/10.9770/jesi.2020.7.4(10))
- [19]. Huy, D. T. N., Dat, P. M., & Anh, P. T. (2020). *Building and econometric model of selected factors' impact on stock price: a case study*, *Journal of Security and Sustainability Issues*, 9(M), 77-93. [https://doi.org/10.9770/jssi.2020.9.M\(7\)](https://doi.org/10.9770/jssi.2020.9.M(7))
- [20]. Huy D. T. N., Nhan, V. K., Bich, N. T. N., Hong, N. P., Chung, N. T., & Huy, P. Q. (2021). *Impacts of Internal and External Macroeconomic Factors on Firm Stock Price in an Expansion Econometric model—A Case in Vietnam Real Estate Industry*, *Data Science for Financial Econometrics-Studies in Computational Intelligence*, vol.898, Springer. http://doi-org-443.webvpn.fjmu.edu.cn/10.1007/978-3-030-48853-6_14
- [21]. Huy, D. T. N., An, T. T. B., Anh, T. T. K., & Nhung, P. T. H. (2021). *Banking sustainability for economic growth and socio-economic development – case in Vietnam*, *Turkish Journal of Computer and Mathematics Education*, 12(2), 2544–2553
- [22]. Huy, D. T. N., An, T. T. B., Anh, T. T. K., & Nhung, P. T. H. (2021). *Banking sustainability for economic growth and socio-economic development – case in Vietnam*, *Turkish Journal of Computer and Mathematics Education*, 12(2), 2544–2553.
- [23]. Yong-Yan, F., Manafian, J., Zia, S. M., Huy, D. T. N., & Le, T. H. (2021). *Analytical treatment of the generalized Hirota-Satsuma-Ito equation arising in shallow water wave*. *Advances in Mathematical Physics*, 2021, 1-26.

- [24]. Friend, M., & Cook, L. (1999). Interactions: Collaboration skills for school professionals (3rd ed.). New York: Addison Wesley Longman.
- [25]. Van Thuc, H., Thao, D. T. T., Thach, N. N., Dung, V. T., Huy, D. T. N., & Thanh, N. T. P. (2020). Designing data transmission system with infrared rays. *Psychology and education*, 58(2), 3406-3411.
- [26]. Hang, N. T. (2021). Educating and training labor force under Covid 19: Impacts to meet market demand in Vietnam during globalization and integration era. *JETT*, 12(1), 179-184.
- [27]. Khwaja, A. I., & Mian, A. (2005). Unchecked intermediaries: Price manipulation in an emerging stock market. *Journal of Financial Economics*, 78(1), 203-241.
- [28]. Mousa, S. N., Safi, W. A., Hasoneh, A., & Mohammad, M. (2012). The relationship between inflation and stock prices: A case of Jordan. *International Journal of Applied Agricultural Research*, 10, 46-52.
- [29]. Hang, N. T., Huy, D. T. N., Ha, L. T., & Nhung, D. H. (2021). Better risk management of banks and sustainability-a case study in Vietnam. *Revista Geintec- gestao Inovacao E Tecnologias*, 11(2), 481-490.
- [30]. Nguyen, T. P. L., Tran, N. M., Doan, X. H., & Nguyen, V. H. (2019). The impact of knowledge sharing on innovative work behavior of Vietnam telecommunications enterprises employees. *Management Science Letters*, 10(2020), 53-62.
- [31]. ThiHoa, N., Hang, N. T., Giang, N. T., & Huy, D. T.N. (2021). Human resource for schools of politics and for international relation during globalization and EVFTA. *Elementary education online*, 20(4), 2448-2452.
- [32]. Hoa, N. T., Huy, D. T. N., & Van Trung, T. (2021). Implementation of Students's Scientific Research Policy at Universal Education Institutions in Vietnam in Today Situation and Solutions. Review

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