

Characteristics of Paper Industry in Vietnam and its Investment Orientations until 2030

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Abstract The aim of this article is to examine the characteristics of paper industry in Vietnam, types of capital investment, trends and the effectiveness of the utilization of capital investment in this industry. This contributes to assessing the current state of investment, giving some suggestions to investors and supporting Vietnam's paper industry to become a strong competitive industry in the domestic and foreign markets.

Methodology: This article is based on the quantitative analysis method using data published by the Vietnam Pulp and Paper Association (VPPA), the General Statistics Office of Vietnam and the author's calculations.

Main Findings: It is realized that although the paper industry has a lot of strengths such as low depreciation and labor costs, available regional workers, the investment in this industry still has many weaknesses that need to be overcome and require some orientations on investment objectives and plans.

Application of this study: This article provides an overview of the investment in Vietnam's paper industry and some orientations for domestic and foreign investors.

Novelty/Originality of this study: We study the characteristics and investment status of the Vietnamese paper industry which has not been studied by many authors before.

Keywords: orientation, investment, Vietnam's paper industry, projects, packaging paper.

JEL Classification: E22, L69, L73, E22

Introduction

The paper industry in Vietnam is developing dramatically since manufacturers have been applying advanced technologies and strictly complying with the requirements of environmentally friendly products. In addition, Vietnam is an export country, and the growing export has led to a sharp increase in the demand for packaging paper. This is an auxiliary product for other industries, especially for those with a significant proportion of export. To be precise, according to the paper industry news of the Vietnam Pulp and Paper Association (VPPA News), the average growth rate of the paper industry is about 10 - 12% per year, and the figure for packaging paper is

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about 15 - 17% per year (VPPA News No.22). Many large-scale investment projects are being operated with a capacity of about 400,000 - 500,000 tons per year; Some manufacturers are planning to invest in projects with a capacity of over 1,000,000 tons of packaging paper per year (VPPA News No.23). The paper industry contributes about 1.5% of GDP and its export turnover is over 1 billion USD (Vietnam Socio-Economic Report, 2018.)

In Vietnam, the demand and supply of paper has been increasing continuously, and demand exceeds supply in Vietnam. The average per capita paper consumption has increased from 3.2 kg in 1995 to 7 kg in 2002 (Subhes C. Bhattacharyya and Nguyen Thuy Hien, 2002), grew to 13 kg by 2010 and in 2018 the average per capita paper consumption has increased to 33,2 kg.

Characteristics of Vietnam's paper industry

The production capacity of Vietnam's paper industry is mainly distributed by the South and the North of Vietnam.

According to the aggregate data of the Vietnam Pulp and Paper Association (VPPA), as of 2018, the production capacity for packaging paper was 62% in the South and it was 36% in the North (General data of Vietnam packaging paper industry, 2018); the production capacity for printing and writing paper of the South accounted for 7% and the figure for the North accounted for 93% (General data of Vietnam printing and writing paper industry, 2018); the tissue production capacity of the South accounted for 42% and the figure for the North accounted for 56%. The production capacity of the Central region is low due to its climatic and geological characteristics (General data of Vietnam tissue industry, 2018)

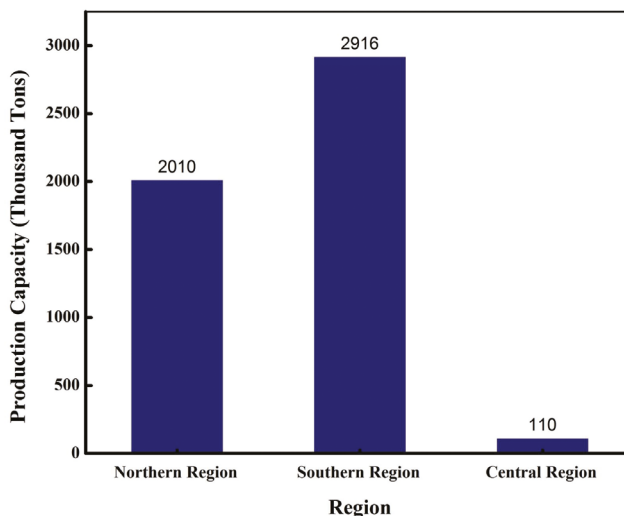


Figure 1. Production capacity structure by region in 2018 (thousand tons)

Source: Vietnam Pulp and Paper Association (VPPA)

Packaging paper is the main product in the structure of the paper industry

In terms of product structure based on production capacity, packaging paper accounts for 87%, printing paper and writing paper account for 6%, tissue paper accounts for 4%, and the rest is votive paper with 3% (Statistics of Vietnam paper industry, 2018).

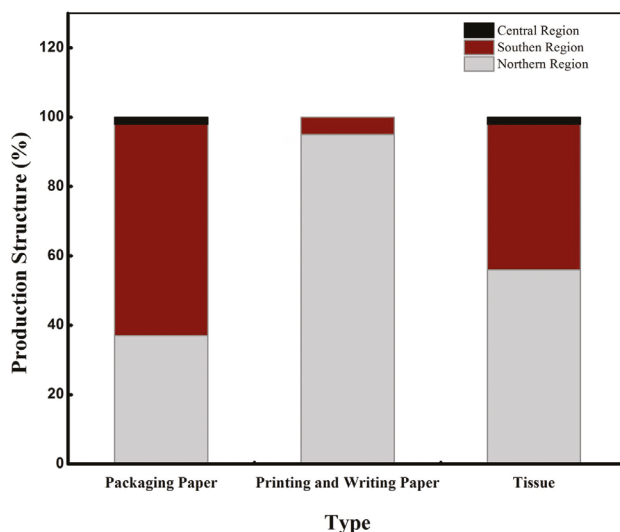


Figure 2. Production structure by region (percent)

Production structure of products by region in 2018

Since its economic reform known as “doi moi” in 1986, the Vietnamese economy have shown a remarkable performance as one of the fastest growing economies in the world with the average growth rate over 7 percent per annum. During its transition to a more market-based economy, rapid economic growth has taken place along side the expansion of FDI inflows and trade (Nguyen Ngoc Anh - 2008).

Vietnam has managed to attract a large inflow of inward foreign direct investment (FDI) during the last two decades, which together with trade liberalisation have contributed significantly to the economic growth of Vietnam (David Dollar - Aart Kraay – 2004).

Vietnam’s recent experience in attracting FDI and in achieving rapid economic growth has generated an increasing body of research literature. Earlier studies have just focused mostly on investigating the determinants of FDI in Vietnam (Nguyen and Nguyen – 2007), while more recent studies investigated the contribution of FDI to export (Henrik Schaumburg and Müller - 2003) and to economic growth (Phan Minh Ngoc and Eric Ramstetter - 2006). Several other authors have examined the contribution of FDI to poverty reduction (Nguyen - 2002), and FDI and job creation (Mirza Hafiz and Axele Giroud - 2004). This study focuses on projects in the Vietnamese paper industry that are funded by both FDI and domestic capital.

During the year 2018, FDI enterprises (enterprises with Foreign Direct Investment) accounted for 69%, nearly twice as much as the investment of Vietnamese enterprises

which accounted for only 31% (General Statistics Office of Vietnam).

The investment of FDI enterprises in the paper industry is more than twice as much as that of Vietnamese enterprises.

Table 1. Investment projects in the paper industry in the period of 2015-2018

Corporation	Corporation type	Location	Capacity	Paper type
Vina Kraft	FDI	Binh Duong	258.000	Packaging paper
Lee & Man	FDI	Hau Giang	420.000	Packaging paper
Chanh Duong	FDI	Binh Duong	500.000	Packaging paper
ChengLong	FDI	Binh Duong	300.000	Packaging paper
Muc Son	Vietnam	Thanh Hoa	50.000	Packaging paper
Miza	Vietnam	Ha Noi	43.000	Packaging paper
Phu Giang	Vietnam	Bac Ninh	40.000	Packaging paper
Kim Cuong	Vietnam	Hung Yen	70.000	Packaging paper
Minh Hung	Vietnam	Binh Duong	60.000	Packaging paper
Thuan An	Vietnam	Binh Duong	200.000	Packaging paper
Others	Vietnam		200.000	Packaging paper
Total capacity			2.141.000	

Source: General Statistics Office

Investment orientations for Vietnam's paper industry in the period of 2019-2026

Investment in packaging paper is predicted to continue to grow sharply, with production capacity expected to nearly triple compared to that of the period 2015-2018 by 2026 and FDI enterprises continue to dominate investment in comparison with Vietnamese ones (Ministry of Industry and Trade of Vietnam). The total invested production capacity is expected to be 6.24 million tons by 2026, of which 6.7 million tons are being applied for investment license (Data of VPPA). Investment of FDI enterprises accounted for 63.6%, nearly 2 times higher than that of Vietnamese enterprises, accounting for only 36.4% (Report on foreign investment agency).

Table 2. Investment projects on packaging paper in the period of 2019 - 2030

Corporation	Corporation type	Location	Capacity/ year	Paper type
Lee & Man	FDI	Hau Giang	1,000,000	Packaging paper
ChengLong	FDI	Binh Duong	600,000	Packaging paper
YSY	FDI	Ha Nam	70,000	Packaging paper

Marubeni	FDI	Vung Tau	800,000	Packaging paper
Cuu Long	FDI	Other	1,500,000	Packaging paper
An Viet Phat	Vietnam	Vung Tau	1,000,000	Packaging paper
Giao Long	Vietnam	Ben Tre	180,000	Packaging paper
Rang Dong	Vietnam	Khanh Hoa	70,000	Packaging paper
Miza	Vietnam	Thanh Hoa	100,000	Packaging paper
Toan Cau	Vietnam	Hai Duong	70,000	Packaging paper
Hoang Ha	Vietnam	Hai Phong	100,000	Packaging paper
Hung Ha	Vietnam	Ha Noi	100,000	Packaging paper
Van Diem	Vietnam	Ha Noi	150,000	Packaging paper
Tan Mai	Vietnam	Dong Nai	450,000	Packaging paper
Others	Vietnam		400,000	Packaging paper
Total capacity			6,240,000	

Findings

Investment of Vietnamese paper enterprises has strengths such as flexibility in investment, production and supply (especially for packaging paper), low depreciation and labor costs, availability of local labor which leads to the convenience in traveling and high commitment to the corporation, and close-knit relationships with customers which leads to profound understanding of customers (report of Vietnam paper industry - 2018).

According to the author Pekka Leppänen - 2012, possible reasons for the poor innovation record of pulp and paper industry are:

- Traditionally, pulp and paper mills had access to low-cost raw materials and energy.
- Production units are very expensive so the risk to fail, when applying a new technology, is huge.
- Transformation of the paper industry into a commodities producer, due to self-limitation to core business, and stopped horizontal or vertical integration.
- Paper is not a brand product to end users, except tissue grades
- Paper qualities are more or less similar, considering all suppliers, so that the only way to compete is cost cutting.
- Education of pulp and paper engineers is concentrated in few universities and schools, which results in promotion of the uniformity in problem perception and lack of individualism in the generation of solutions.

In the pulp and paper industry, the time frame of project development can vary from one to several years, project implementation time is normally from 18 to 30 months, and the production period of a mill is normally from 15 years to several decades.

However, there exist weaknesses as follows:

1. There is no strategy to develop this sector; legal documents for investment

orientation and management are incomplete; legal procedures for project investment are complicated and overlapping.

2. The investment project's preparation is not well-organized; the investment strategy is unclear and seasonal. The research of product types, location, scale and time of investment is not appropriate and does not take into account comparative advantages among localities, regions, and countries, so high investment efficiency cannot be achieved.
3. Investment is fragmented and small-scale; equipment technology is out of date; operating costs are high (Lan Anh – 2019); product quality is low and unstable; therefore, the competitiveness of this sector is negligible.
4. Many investors are small and medium-sized enterprises, accounting for 90% of the quantity and 60% (VPPA) of the production capacity of the whole industry, so the financial capacity is limited and small in scale.
5. The management personnel are weak and do not have investment experience as they are usually the person who switch from production to investment. Furthermore, the competence of the design consulting, manufacturing and equipment maintaining units is limited.
6. The linkage between enterprises in the industry is weak, so large and specialized production enterprises cannot be established. The ability to unite, coordinate and support each other is limited.
7. Investment in supporting industries of this industry such as the supply of materials, additives, chemicals, spare parts, etc. is weak and insufficient.
8. The planning of developing material areas is only superficial, unrealistic, and has not fully promoted the vacant land area; the investment cost for trees – the major material – is high, and the exploitation is still manual.

Orientation for investment

1. Objectives

Given the current investment situation of the paper industry in the world in general and the strengths and limitations of the Vietnam's paper industry as analyzed above, the author believes that there should be specific goals in order to make the paper industry of Vietnam become a strong industry which is able to compete on domestic and international markets.

Firstly, domestic demand for the usual paper should be met, and pulp, packaging paper, and tissue should be exported.

Secondly, investment should focus at least 3 key paper material regions in the North, Central and Central Highlands regions to meet the demand for pulp production for domestic consumption and export. The collection of the used paper should be encouraged, boosting the recovery rate of used paper in the country from 40% in 2018 to over 55% (Data on recovered paper – VPPA).

Thirdly, investment should be allocated to at least 3 key paper industrial zones in the North, Central, and South where small and medium-sized enterprises are located to

optimize investment costs, operating costs, and increase competitiveness.

Fourthly, 4-5 paper manufacturing enterprises with a scale of over 500,000 tons of paper per year and 2-3 large paper pulp manufacturing enterprises with a scale of over 300/000 thousand tons per year should be established.

Fifthly, from 2030 onwards, investment in projects on pulp, industrial packaging paper, printing paper, and writing paper, and tissue production with a scale of over 100,000 tons per year should be encouraged. New investment projects with a scale of 50,000 - 100,000 tons of products per year should only be allowed in specialized paper industrial zones.

Sixthly, enterprises should be restructured or merged, from 2030 onwards, small-scale chains should be stopped; for example, a chain with a capacity of under 20,000 tons per year for pulp, packaging paper, printing paper, and writing paper should be stopped and a chain with a capacity of under 5,000 tons per year for tissue paper should also be removed.

2. Orientation

2.1. Zoning

Priority should be given to projects in areas with favorable conditions in terms of raw materials, transport infrastructure, power and water supply, water discharge and other comparative advantages. Investment in projects should be restricted in areas where cultural heritage and tourism are being preserved and developed. The establishment of key industrial paper zones in 3 regions should be encouraged.

2.2. Technology and equipment

It is essential to use advanced technology with a high degree of automation and maximum savings of raw materials, fuel, and energy. Priority is given to projects that use waste and scrap from other industries, ensuring product quality and environmental protection norms as prescribed. Equipment should be carefully selected to ensure stable production, high quality, and reasonable prices.

2.3. Efficiency

The investment must ensure socio-economic efficiency and regional and international competitiveness. It is also necessary to create rational use of resources, protection of the ecological environment, cultural and historical relics, landscapes and assurance of national security and defense. Priority should be given to the development of investment projects to expand capacity and new projects of large scale and environmental protection.

Conclusion

The pulp and paper industry is one of the important industries in the world, having a great impact on the global economy and society. An indispensable trend that is becoming

more and more popular globally as well as in Vietnam is sustainable developing and Vietnam's paper industry is not an exception. Paper production of high responsibility brings many benefits to the environment, people, local economy and the country. The important role of the paper industry is reflected in the significant contribution to Vietnam's economic development. This industry creates jobs for tens of thousands of workers and resonates to develop other economic sectors such as afforestation and logging, and processing industries, etc. At the same time, the paper industry provides many products for diverse purposes: social culture, education, production, and research, etc. The paper industry in Vietnam is growing remarkably as enterprises have been applying advanced technologies, strictly following requirements on environmentally friendly products. In addition, Vietnam is an export country, so the growing export has resulted in a sharp increase in the demand for packaging paper. This is an auxiliary product for other industries, especially for industries with a high export ratio. However, there are still some challenges that the paper industry is facing, thus it needs proper, methodical and key investment orientations to develop stably and sustainably.

References

- Article "Limited investment in Vietnam's paper industry" - Industry and Trade Newspaper.
<https://congthuong.vn/nganh-giay-dau-tu-manh-mun-nho-le-123983.html>
- Cogeneration potential in pulp and paper industry of Vietnam - Subhes C. Bhattacharyya and Nguyen Thuy Hien - DOI: 10.1002/er.1063
- Data of the forum "Investment orientation for sustainable development of the Vietnamese paper industry" – 21/03/2019
- Data on recovered paper of Vietnam's paper industry – VPPA. <http://vppa.vn/vppa-lam-viec-voi-cong-ty-nhat-ban-ve-thu-gom-tai-che-giay-thu-hoi/>
- David Dollar Aart Kraay - Trade, Growth, and Poverty
<https://doi.org/10.1111/j.0013-0133.2004.00186.x>
- General data of Vietnam packaging paper industry - VPPA
- General data of Vietnam printing and writing paper industry. - VPPA
- General data of Vietnam tissue industry.- VPPA
- Henrik Schaumburg-Müller - Rise and Fall of Foreign Direct Investment in Vietnam and its Impact on Local Manufacturing Upgrading - The European Journal of Development Research volume 15, pages44–66 (2003)
<https://doi.org/10.1080/09578810312331287475>
- Mirza Hafiz and Axele Giroud (2004) Regional Integration and Benefits from Foreign Direct Investment in ASEAN Countries: The Case of Vietnam, Asian Development Economic Review, Vol. 21 (1), pp. 66-98.
- Nguyen Ngoc Anh and Nguyen Thang - Foreign Direct Investment in Vietnam: An Overview and Analysis the Determinants of Spatial Distribution Across Provinces
<https://dx.doi.org/10.2139/ssrn.999550>
- Nguyen Ngoc Anh, Nguyen Thang, Le Dang Trung , Pham Quang Ngoc, Nguyen Dinh Chuc, and Nguyen Duc Nhat - Foreign direct investment in vietnam: is there any evidence

- of technological spillover effects - - <http://dx.doi.org/10.2139/ssrn.1117202>
- Nguyen Thi Phuong Hoa (2002) Contribution of Foreign Direct Investment to Poverty reduction: The case of Vietnam
- Pekka Leppänen, Andrzej Kraslawski and Yury Avramenko - Innovation in Organization of Design Process in Pulp and Paper Industry Projects - <https://doi.org/10.1002/kpm.373>
- Phan Minh Ngoc and Eric Ramstetter (2006), Economic growth, Trade and Multinational Presence in Vietnam's province, mimeo, The International Center for the Study of East Asian Development, Kitakyushu University.
- Report on foreign investment agency– Ministry of Planning and Investment of Vietnam <https://dautunuocongocai.gov.vn/chuyenmuc/14/Tinh-hinh-dau-tu>
- Statistics of Vietnam paper industry – General Statistics Office of Vietnam. <https://www.gso.gov.vn/default.aspx?tabid=629>
- Statistics on FDI investment into Vietnam – Ministry of Industry and Trade of Vietnam. <https://www.moit.gov.vn/cac-du-an-dau-tu>
- Statistics on FDI investment into Vietnam – General Statistics Office of Vietnam <https://www.gso.gov.vn/default.aspx?tabid=716>.
- Summary report of Vietnam paper industry 2018 – VPPA
- The investment ratio of domestic paper enterprises in Vietnam. – VPPA
- Vietnam pulp and paper association News (VPPA News) No.22 –<http://vppa.vn/category/an-pham/ban-tin/page/5/>
- Vietnam pulp and paper association News (VPPA News) No.23 –<http://vppa.vn/category/an-pham/ban-tin/>
- Vietnam Socio-Economic Report 2018 - General Statistics Office of Vietnam