

PESTLE - AN APPROACH FOR FDI ENVIRONMENT ANALYSIS A CASE STUDY FOR VIETNAM AND SOME ASEAN COUNTRIES

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Abstract: *There is a widespread belief that foreign direct investment (FDI) generates positive productivity effects for receiving countries. To developing economic, FDI has been viewed as a power financial resources and therefore, attracting FDI has been considered as a main target of policymakers in those countries. However, there is a shortage of qualified and various quantitative data to access exactly how the FDI environment situation is and to compare the environment among developing countries as well. To provide a bird's eye view of the whole environment from many different angles that investors want to check and keep a track of while contemplating on a certain business, this paper applies PESTLE analysis (Political - Economic - Social - Technology - Legal - Environmental) to shape FDI environment in Vietnam by PESTLE framework. By reviewing an amount of macro indicators of Vietnam involved in PESTLE from 2005, combining with FDI data in country level, the result has shown that (i) every six points in PESTLE framework have been in relation with FDI inflow into Vietnam; and (ii) AEC commitments have been broadening the PESTLE hexagon of Vietnam to attract FDI, especially in terms of economic and legal angles.*

• Keywords: FDI, PESTLE, FDI environment.

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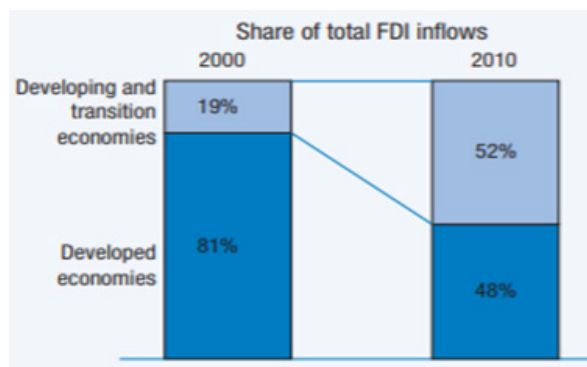
Tóm tắt: Trong thời gian vừa qua, đầu tư trực tiếp nước ngoài (FDI) luôn được đánh giá là một kênh tạo ra hiệu ứng năng suất tích cực cho các nước tiếp nhận đầu tư. Đối với các nền kinh tế đang phát triển, FDI còn được xem là nguồn tài chính quan trọng và do đó, thu hút FDI được coi là mục tiêu chính của các nhà hoạch định chính sách ở các nền kinh tế đang phát triển. Tuy nhiên, thực tế cho thấy, các dữ liệu định lượng để tiếp cận chính xác tình hình môi trường FDI, qua đó có thể so sánh môi trường giữa các nước đang phát triển còn rất hạn chế. Để cung cấp một cái nhìn toàn cảnh về toàn bộ môi trường từ nhiều góc độ khác nhau cho nhà đầu tư khi cân nhắc đầu tư vào một lĩnh vực kinh doanh nhất định, nghiên cứu này áp dụng phân tích PESTLE (Chính trị - Kinh tế - Xã hội - Công nghệ - Pháp lý - Môi trường) để khảo sát một số đặc điểm về môi trường FDI tại Việt Nam. Bằng cách xem xét một số chỉ tiêu vĩ mô của Việt Nam theo khung PESTLE từ năm 2005, kết hợp với dữ liệu FDI ở cấp quốc gia, kết quả cho thấy (i) cả sáu tiêu chí trong khung phân tích PESTLE đều có liên quan đến dòng vốn FDI vào Việt Nam; và (ii) Các cam kết AEC đã và đang mở rộng hình lục giác PESTLE của Việt Nam để thu hút FDI, đặc biệt là về góc độ kinh tế và pháp lý.

• Từ khóa: FDI, PESTLE, môi trường thu hút FDI.

1. Introduction

Foreign direct investment is often seen as an economic blessing for developing nations. Foreign direct investment can be described as money that a company invests in buildings, factories, machines or other infrastructure outside of the company's home country.

Figure 1. More FDI into developing and transition economies in 2010 than that in 2000



Source: International Financial Corporation - IFC, 2011

There are promising trends in global foreign direct investment (FDI) flows for developing and transition economies. Each year more and more FDI is flowing not only from developed

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into developing economies but also from one developing or transition economy to another. Indeed, developing and transition economies' share of global FDI inflows rose from roughly 19 percent in 2000 to 52 percent in 2010 -for the first time exceeding half the total (Figure 1), and half the top 20 FDI recipients in 2010 were developing or transition economies (International Financial Corporation - IFC, 2011).

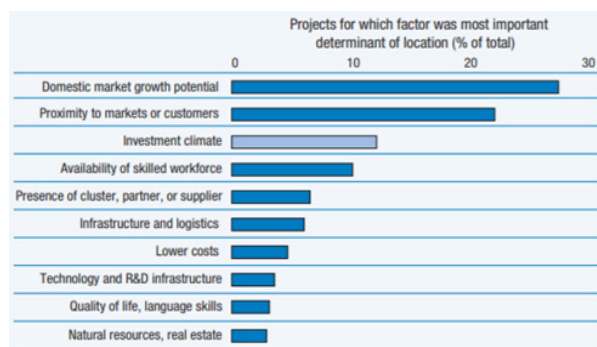
However, there is a shortage of qualified and various quantitative data to access exactly how the FDI environment situation is and to compare the environment among developing countries as well. Therefore, PESTLE analysis for FDI environment has been designed for very first purpose of FDI investors: Survey and analysis business environment in a specific economy before any FDI decisions.

2. PESTLE framework for FDI environment in developing country

Many researchers have identified motivations driving companies to undertake different types of FDI (USAID, 2005), including:

- *Natural-resource-seeking FDI* - to gain access to a natural resource not available in the company's home market.
- *Market-seeking FDI* - to gain access to new customers, clients, and export markets.
- *Efficiency-seeking FDI* - to reduce production costs by gaining access to new technologies or competitively priced inputs and labor.
- *Strategic-asset-seeking FDI* - to go after strategic assets in a local economy, such as brands, new technologies, or distribution channels.

Figure 2. Market size and investment climate matter for the location of FDI



However, the determinants identified as significant vary depending on the countries, sectors, years, and types of investment studied. Those above drivers do not highlight the market features and investment climate in the host economy - which may be one of the most importance factor to foreign companies in the context of globalization (Figure 2).

Market size: It cannot deniable that market size matter for attracting FDI. The world's largest economies attract the most FDI. Together, the world's 10 largest economies accounted for 47 percent of all FDI inflows in 2010. The United States, the world's largest economy, remained the top FDI destination, receiving US\$228 billion. Following is China, the most populous, which received more than US\$106 billion (UNTACD, 2011). *Source:* (International Financial Corporation - IFC, 2011)

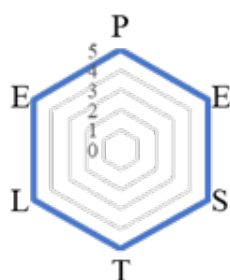
Market potential: Market potentials concern about potential profit of FDI investors. For developing and transition economies, market growth potential is more important than market size. The economic growth expectations based on population and income growth prospects mean that many emerging economies offer foreign investors high potential returns on investment- and there has been an FDI boom in the world's leading emerging markets (International Financial Corporation - IFC, 2011). Research by the McKinsey Global Institute (2010) suggests that Africa has more high-return investment opportunities than any other developing region. A survey by Ernst & Young (2011) forecasted FDI inflows for Africa of US\$150 billion in 2015.

Investment climate: The investment climate clearly matters for the location decisions of foreign investors (Mukim, 2010). Investment climate is a key factor in guarantee the success of FDI projects and is considered as a key tool in promoting inbound FDI plants of authorities. Although lowering effective tax rates can help boost FDI, the effect is eight times as strong for countries with a good investment climate (James, 2009). Most important, the quality of the investment climate may better allow for the beneficial spillovers from FDI-providing

the welfare gains through technology transfer to local suppliers that many economies seek (Blalock, 2008).

To cover almost factors which may matter decision of foreign investors, PESTLE framework seems useful for analyst to overcome econometric identification challenges in developing and emerging economies. PESTLE framework for FDI environment has included six factors: Political - Economic - Social - Technology - Legal - Environmental with 5mark levels, including: 0. Very bad; 1. Bad; 2. Low-middle; 3. Middle; 4. Acceptable and 5. Perfect (Chart 1). PESTLE framework is a useful tool for FDI investors to compare FDI environment between developing and emerging economies before any FDI decisions.

Chart 1. PESTLE framework



Source: Author's analysis

PEST model was first published by Michael Porter and used to analyze macro factors in business environment of an enterprise. Because business environment is also a crucial factor that matters FDI decisions of investors, PEST is applied to analyze business climate for FDI perspective. Additionally, the two additional factors, including L - legal and E - environment, are added into the model and made the PEST become PESTLE.

P - The Political aspect of PESTLE Analysis focuses on political stability. The stable politic ensures a safe business climate for any economic activities and protect FDI potential profit. A stable political scene is one where the ruling government is favored by the population and does not experience strong indicators of social unrest. Political stability and economic development are deeply interconnected. The relationship between FDI, economic growth and stability refers to the

manner, in which the political stability of a nation can lead to its economic growth and then FDI.

E - The Economic portion of the analysis targets the key factors of market size and market potential. Through this factor, FDI investors examine the economic issues that are bound to have an impact on the company. This would include factors like inflation, interest rates, economic growth, the unemployment rate and policies, and the business cycle followed in the country.

S - The Social factors may be included demographics and age distribution, cultural attitudes, and workplace and lifestyle trends. With the social factor, an FDI business can analyze the socio-economic environment of host potential market via elements like customer demographics, cultural limitations, lifestyle attitude, and education. With these, a business can understand how consumer needs are shaped and what brings them to the market for a purchase.

T - The Technological component considers the specific role and development of technologies within the sector and organization, as well as the wider uses, trends and changes in technology. Innovation index may also be a point of interest in this area. T would be an important factor to determine type and quality of FDI flow into a country.

L - Legal system addressed in PESTLE analysis refers to content in investment policy in a country, including tax guidelines, trade regulations, safety regulations, and employment laws and other policies involved in facilitating business environment. It is obvious that investor cannot perform their FDI activities without permission of authorities in host country. In the context of economic global integration, legal system would be the most important factor that integrating to a common legal system and directly motivates FDI flow.

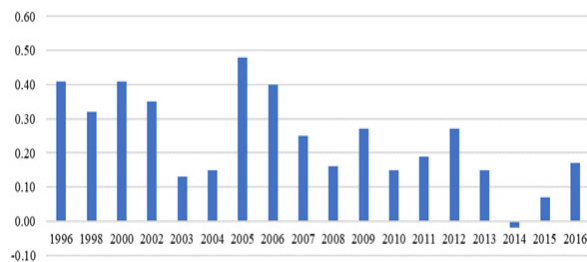
E - Environmental factors have recently been analyzed as a determinant of FDI in receiving countries. In manufacturing sectors, investors must follow environmental regulation in host countries, while those regulations have become stricter and stricter. Therefore, there is a

relationship between environment and FDI. The impact of environmental regulations on FDI may address as the choice of plant location.

3. PESTLE framework for FDI environment - the case of Vietnam in AEC context

To attract FDI in AEC effectively, it is necessary to set out strengths and weaknesses of Vietnam in compare with another AEC members. PESTLE analysis is a method to do so.

Chart 2. Vietnam Political Stability Index in 1996-2016



(-2.5 weak; 2.5 strong) Source: https://www.theglobaleconomy.com/Vietnam/wb_political_stability/

Political - P: Vietnam is a one-party state ruled by the Communist Party of Vietnam which provides strategic direction and decides all major policy issues. Vietnam is one of the more politically stable countries in South East Asia¹. The World Bank provides data for Vietnam from 1996 to 2016. The average value for Vietnam during that period was 0.25 points with a minimum of -0.02 points in 2014 and a maximum of 0.48 points in 2005 (Chart 2).

In 2016, Vietnam ranked 5th in Political stable index in AEC (Table 1).

Table 1. Political Stability Index in AEC 2016

AEC member	Index*	PESTLE mark**	AEC member	Index*	PESTLE mark**
Singapore	1.53	5	Malaysia	0.1	3
Brunei	1.26	5	Indonesia	-0.38	2
Laos	0.5	4	Thailand	-0.93	2
Cambodia	0.18	3	Philippines	-1.3	1
Vietnam	0.17	3			

(*) -2.5 weak; 2.5 strong; (**) Author's mark: >1:5; 0.5-1:4; 0-0.5:3; -0.5-0:2; <-0.5:1

Source: https://www.theglobaleconomy.com/Vietnam/wb_political_stability/

Economic - E: In recent years economic growth averaged 6.2%. Vietnam's economy grew at 6.8% in 2017. GDP per capita has increased by 350% since 1991 (2nd only to China) and Vietnam now has the fastest-growing middle-class in South East Asia². In this paper, economic factor refers to economic freedom index by the reason of economic global integration in AEC context.

Vietnam's economic freedom score is 53.1, making its economy the 141st freest in the 2018 Index. Its overall score has increased by 0.7 point, with improvements in fiscal health, government integrity, and judicial effectiveness offsetting lower scores for the trade freedom, property rights, and labor freedom indicators. Vietnam is ranked 35th among 43 countries in Asia-Pacific region, and its overall score is below the regional and world averages³. In AEC, Vietnam's index is in a lowest top of 2018 economic freedom index (Table 2).

Table 2. 2018 index of economic freedom in AEC

AEC member	Index*	PESTLE mark**	AEC member	Index*	PESTLE mark**
Singapore	88.8	5	Indonesia	64.2	3
Malaysia	74.5	4	Cambodia	58.7	2
Thailand	67.1	3	Laos	53.6	2
Philippines	65	3	Vietnam	53.1	2
Brunei	64.2	3			

(*) Out of 100; (**) author's mark: >80:5; 70-80:4; 60-70:3; 50-60:2; <50:1

Source: https://www.theglobaleconomy.com/Vietnam/wb_political_stability/

Social - S: The Social factors may be included variety of analysis, such as demographics and age distribution, cultural attitudes, and workplace and lifestyle trends... In this paper, author focus on labor force as a main factor represented for S in PESTLE because, most AEC member are considered as developing and emerging economies with abundant labor advantage. In AEC, Vietnam is highly advantageous in labor force with more than 57 million employment in 2017 (Table 3).

² <https://www.gov.uk/government/publications/overseas-business-risk-vietnam/overseas-business-risk-vietnam>

³ <https://www.heritage.org/index/country/vietnam>

Table 3. Employment in AEC member in 2017 (Mill. People)

AEC member	Number of employments	PESTLE mark*	AEC member	Number of employments	PESTLE mark*
Indonesia	127.11	5	Cambodia	9.31	1
Vietnam	57.5	4	Laos	3.6	1
Philippines	44.64	4	Singapore	3.31	1
Thailand	39.14	3	Brunei	0.22	1
Malaysia	15.44	2			

(*) Author's mark: >60:5; 40-60:4; 20-40:3; 10-20:2; <10:1

Source: https://www.theglobaleconomy.com/rankings/labor_force/

Technology - T: To capture the differences in technology, global innovation index is used. It is an annual ranking of countries by their capacity for, and success in, innovation. The innovation index analyses the energy innovation landscape of the next decade and identifies possible breakthroughs in fields such as energy production, storage, distribution, and consumption. It also looks at how breakthrough innovation occurs at the grassroots level and describes how small-scale renewable systems are on the rise. Therefore, innovation index refers to the technology level in long term. In 2017, Vietnam reached 38.3 point in Global Innovation Index and ranked the 3rd position in group of 8 ranked member of AEC (Table 4).

Table 4. 2017 Global Innovation Index in AEC

AEC member	Index*	PESTLE mark**	AEC member	Index*	PESTLE mark**
Singapore	58.7	5	Brunei	32.9	3
Malaysia	42.7	4	Philippines	32.5	3
Vietnam	38.3	3	Indonesia	30.1	3
Thailand	37.6	3	Cambodia	27	2

(*) Out of 100; (**) Author's mark: >50:5; 40-50:4; 30-40:3; 20-30:2; <20:1

Source: https://www.theglobaleconomy.com/rankings/GII_Index

Legal system - L: Over the past 30 years of foreign direct investment (FDI) attraction, due to the global shifts in demand and supply, FDI policies have been constantly changing, leading to fluctuations in the capital inflows to Vietnam. Additionally, other legal systems including environment law, enterprise law, tax law... progressed significantly to motivate FDI flow. Under AEC context, Vietnamese authorities have forced to apply those legal system to achieved

target of economic growth. However, regulatory quality index - an indicator captures perceptions of ability of government to formulate and implement sound policies and regulations that permit and promote private sector development, of Vietnam ranked 123/193 in 2017⁴. That refers to a disadvantage of Vietnam in compare with other AEC members (Table 5).

Table 5. 2017 Regulatory quality index

AEC member	Index*	PESTLE mark**	AEC member	Index*	PESTLE mark**
Singapore	2.18	5	Indonesia	-0.12	2
Malaysia	0.71	3	Vietnam	-0.45	2
Brunei	0.59	3	Cambodia	-0.47	2
Thailand	0.17	3	Laos	-0.73	1
Philippines	0	3			

(*) -2.5 weak; 2.5 strong; (**) Author's mark: >2:5; 1-2:4; 0-1:3; -0.5-0:2; <-0.5:1

Source: https://www.theglobaleconomy.com/rankings/wb_regulatory_quality/

Environment - E: Environmental regulation may affect on FDI decision. the stricter the regulations in host countries in Asia the lower the FDI both intensively and extensively to those countries (Heshmati, 2017). Environmental Performance Index provides a gauge at a national scale of how close countries are to established environmental policy goals⁵ and refers in some aspect how the stricter authorities in host country require to FDI investors. In 2018, Vietnam got 46.96 mark in this indicator and ranked 132/180 countries.

Table 6. 2018 Environment Performance Index of AEC members

AEC member	Index*	PESTLE mark**	AEC member	Index*	PESTLE mark**
Singapore	64.23	5	Vietnam	46.96	2
Brunei	63.57	5	Indonesia	46.92	2
Malaysia	59.22	4	Myanmar	45.32	2
Philippines	57.65	4	Cambodia	43.23	1
Thailand	49.88	2	Laos	42.94	1
Timor Leste	49.54	2			

(*) Out of 100; (**) Author's mark: >60:5; 55-60:4; 50-55:3; 45-50:2; <45:1

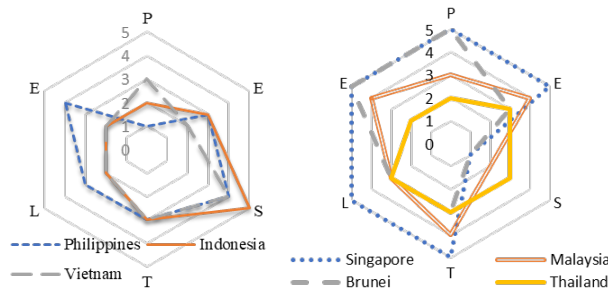
Source: <https://epi.envirocenter.yale.edu/epi-countries>

⁴ https://www.theglobaleconomy.com/rankings/wb_regulatory_quality/

⁵ <https://epi.envirocenter.yale.edu/>

Through indicators in PESTLE analysis, it can be recognized the PESTLE framework in FDI environment in Vietnam (and compare with other AEC members) (Chart 4).

Chart 4. PESTLE framework in AEC



Source: Author

It can be recognized that Vietnam has a same PESTLE hexagon as Indonesia and Philippines with labor advantages. There is a considerable opposition between Vietnam’s PESTLE hexagon and that hexagon of ASEAN 6.

In terms of PESTLE, FDI environment in Vietnam is more convenient than that of Cambodia, and is less convenient that of Singapore, Malaysia, Brunei and Philippines. The direct competitors of Vietnam in attracting FDI include Thai Lan. Stable politic and social characteristics are advantages of Vietnam, but economic condition is being disadvantage of Vietnam to compare with Thailand (Table 7).

Table 7. PESTLE hexagon in FDI environment in AEC members

	Singapore	Malaysia	Brunei	Thailand	Philippines	Indonesia	Vietnam	Cambodia
P	5	3	5	2	1	2	3	3
E	5	4	3	3	3	3	2	2
S	1	2	1	3	4	5	4	1
T	5	4	3	3	3	3	3	2
L	5	3	3	3	3	2	2	2
E	5	4	5	2	4	2	2	1
Average	4.33	3.33	3.33	2.67	3.00	2.83	2.67	1.83

4. Conclusion

With strong commitments and efforts to improve the investment environment of both local and national administration, it is expected

that the FDI flows into Vietnam will continue to rise effectively in the coming time. In the context of the country’s growing international economic integration, importantly including the formation of the ASEAN Economic Community, many foreign investors are promoting their investment in Vietnam because of its internal advantages. However, PESTLE analysis has pointed out that, among AEC members, FDI environment of Vietnam has been more attractive than only that of Cambodia. Except for stable politic and abundant labor, other factors in PESTLE hexagon of Vietnam are ranked lower than that of other AEC members. Therefore, to grasp this huge opportunity to obtain FDI from AEC for sustainable development, Vietnamese Government should activate effective solutions to stimulate national comparativeness for international investment. PESTLE analysis could be a good way, in author’ perspective, for authorities to set up solution frameworks to dealing with every aspect of FDI environment, and to attract FDI effectively in AEC context.

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