CHAPTER I INTRODUCTION

1.1 Background

High HDI - Human Development Index, value is crucial for a country. The high value shows a country's capability in building its health sector and preventing its citizens from various health and survival issues (Černák, 2017; Khazaei *et al.*, 2016). It is also an indicator of a country's ability to improve its human resource's quality and their general life quality (Rasool, 2017; Sunarya, 2017). Moreover, HDI helps to enhance a country's economic performance (Sinaga, Saudi, & Roespinoedji, 2018). HDI value is also important in perceiving the development quality and determining the policies taken by the government (Jednak, Kragulj, & Bulajic, 2018; Sookias, Passmore, & Atkinson, 2018).

An important issue in HDI-related literature is identifying factors affecting a country's HDI (Sookias *et al.*, 2018), especially factors affecting the components of HDI since some of its components have different characteristics such as GDP, educational level, and life expectancy. Literatures state that HDI or at least some of its components is determined by geographical factors such as natural transportation means and isolation, environmental variation like the climate in tropical countries, and sociocultural factors such as social norms, governmental management as well as society's cultural belief (Sookias *et al.*, 2018).

Besides a country's internal factors, HDI is also influenced by other factors derived from society's international interaction. Previous studies (Ahmad *et al.*, 2019; Ahmad, Draz, & Yang, 2018; Ausloos, Eskandary, Kaur, & Dhesi, 2019; Iamsiraroj & Ulubasoglu, 2015; Jude & Levieuge, 2014; Nwaogu & Ryan, 2015; Pegkas, 2015) have investigated the effect of FDI - Foreign Direct Investment, towards economic and HDI growths and found an important role of this variable in economic development. On the other hand, Egri & Tanczos (2018), Bucur & Stangaciu (2015), and Asongu & Nwachukwu (2016) and Bunnag (2019) found a significant effect of income convergence on HDI. Income convergence is different than income or GNP per capita since income convergence derived from interaction of two or more components, namely income of home country and income of its pair country/countries. The difference is about absolutes and relatives form of income.

This research examines how bilateral FDI and income convergence, and GDP, affects the HDI in lower HDI countries. The overall aim of this research is to examine the effect of bilateral FDI and income convergence on HDI in lower HDI countries in ASEAN.

Only a few studies explore the impact of FDI and GDP (including its convergence) on HDI in ASEAN countries. Whereas in line with the development of the ASEAN Economic Community, gaps between nations can be reduced in various ways, including economic intervention. Among the few studies is research conducted by Ahmad *et al.* (2019) that investigated the effect of FDI inflow to real GDP and HDI.

ASEAN is regional cooperation consisting of 10 states. On 28 January 1992, ASEAN committed to making a free trade zone where the flow of goods among the state members is more open. It allows investment and production, trade, and currency exchange to take place between a high HDI country with a lower HDI country in ASEAN (ASEAN, 1992). ASEAN members are asked to remove FDI obstacles

to make cooperation between borders and non-borders smoother that will support trade liberty. Today, after almost 30 years, there has not been any research examining the effect of FDI on bilateral HDI in ASEAN countries. On the other hand, another HDI-related issue has emerged, especially on food safety, climate change, and reduced biodiversity (Overland *et al.*, 2017; World Bank, 2020). If FDI can help to resolve this issue, some mutual agreements might be proposed.

This research is different from the previous ones because we employ HDI convergence as the bound variable. HDI convergence is the gap between two countries involved in investment, in which one is the source country while the other is the home country. A low convergence indicates that both countries are congruous in HDI increase, meaning that both countries have similar HDI increase. HDI convergence is measured by reducing the home country's increased HDI by source country's HDI increase. A positive value designates a larger HDI increase in the home country compared to the source country. This is highly expected because the home country in this research refers to the country with lower HDI compared to the source country. As an example, Singapore is a country with nearly maximum 100 of HDI, and thus, HDI increase here will be very low. Singapore is known as the main investor for other countries in ASEAN. Therefore, HDI increase in countries where Singapore invests will be positive. This is a better indicator than absolute HDI that considers neither the previous years' HDI nor investing country's HDI.

Low and medium HDI countries will benefit from this research because they will have a clear direction for opening foreign investment. It is also easier for high HDI countries for investing in low and medium HDI countries to gain overseas profit as the destination countries will make sure that their environment will conducive for foreign investment.

1.2 Research Focus

This research focuses on the internal HDI and FDI of ASEAN countries. High HDI countries are the FDI sources while medium HDI countries are the FDI targets. ASEAN has no country with low HDI. The focus has eight sub-focuses which are:

- The influence of the previous year's HDI convergence on the current year's HDI convergence.
- The influence of the host countries' GDP on the current year's HDI convergence.
- The influence of the source countries' GDP on the current year's HDI convergence.
- The influence of the source countries' bilateral FDI on the target on the current year's HDI convergence.
- The influence of source countries' FDI to other countries in the world on the current year's HDI convergence.
- 6) The influence of the host countries' FDI to other countries in the world on the current year's HDI convergence.
- The influence of GDP convergence on HDI convergence in the current year.
- 8) The influence of the host countries' FDI percentage from the source countries on the source countries' total FDI on the current year's HDI convergence.

1.3 Research Problems

The writer argues that at least one of the FDI parameters and GDP parameters will affect HDI convergence in the FDI host country. The FDI parameters include bilateral FDI, source country FDI, host country FDI, and the percentage of host country FDI from the source country on the source country's total FDI. Meanwhile, the GDP parameters comprise host country GDP, source country GDP, and GDP convergence. The literature on the roles of FDI and GDP in the host country are highly available (Ahinful, 2017; Berhane, 2017; Chikwede, 2016; Deb, 2015; Mustafa, Rizov, & Kernohan, 2017; Nwaogu & Ryan, 2015; Pegkas, 2015; Sinaga *et al.*, 2018; Thanh, 2016).

HDI is considered as the most important indicator of a country's welfare (Colen, Maertens, & Swinnen, 2008; Makki & Somwaru, 2004). Thus, it is crucial to identify the variables influencing HDI and to measure the HDI generated by these variables especially in relation to the external factor like FDI. HDI convergence is the right concept to describe the effect of the external factors on the HDI because it measures the HDI of the investment host country and that of the source country. It is presumed that the investing country will bring the investment host country to a similar HDI condition. It is valid chiefly in countries joined together in one regional cooperation like ASEAN. In this cooperation, countries are committed to help each other and reach common welfare. It is unfortunate that not many studies are available on the HDI convergence, specifically the ones in the regional context.

This gap of research interests the writer to further explore the determinants of HDI convergence in ASEAN. Previous studies confirming the role of FDI and GDP on the HDI might provide the determinants likely affecting the HDI convergence.

The followings questions related to FDI and GDP in HDI convergence will be answered by this research:

 How does the previous year's HDI convergence affect the current year's HDI convergence?

- 2) How does the host countries' GDP affect the current year's HDI convergence?
- 3) How does the source countries' GDP affect the current year's HDI?
- 4) How does the source countries' bilateral FDI to the target affect the current year's HDI?
- 5) How does the source countries' FDI to other countries in the world affect the current year's HDI?
- 6) How does the host countries' FDI to other countries in the world affect the current year's convergence?
- 7) How does GDP convergence affect the current year's HDI convergence?
- 8) How does the percentage of host countries' FDI affect the source country current year's total FDI?

1.4 State of the Art

This research uses some references of previous studies involving HDI convergence variables as can be seen in Table 1.1. Ten studies were reviewed (Bunnag, 2019; Konya & Guisan, 2008; Maruotti & Vichi, 2016; Mayer, 2012; Mazumdar, 2002; Noorbakhsh, 2007; Ortega, Casquero, & Sanjuan, 2016; Safwadi, 2020; Sutcliffe, 2004; Syukriyah, 2016). Those researches were summarized and two gaps in research were found. First, HDI convergence was multilaterally measured in many countries or provinces at once. No research has measured it bilaterally. Multilateral measurement ignores the program of the investing countries to the host countries since it regards all countries equal without certain responsibility of each country. Second, there have never been researches employing FDI and GDP as independent variables to estimate the HDI convergence. Most studies are descriptive. They outlined convergences in the researched countries. One research employs a similar variable namely special autonomy fund (Safwadi, 2020). Special autonomy funds can be regarded as one form of FDI in the national context. In it, the central government collects funds from high-HDI provinces and distributes them to the low-HDI province in order to bring HDI convergence. Those findings lead this research to have two novelties. First, it uses bilateral HDI variables instead of the multilateral, which allows regional policies effect to be accounted for, although implicitly, in the analysis. Second, this research employs FDI and GDP as the predictors of bilateral HDI convergence, which examine HDI changes of both countries/ interactional perspectives instead of the local and international aspects.

Table	1.1	Previous	Researches
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No	Titles	Variables	Results
1	Income and HD convergence in	I Independent: change in the growth of per capita	Convergence of HDI is influenced by all the
	the Mekong	income, productivity,	independent variables
	Economies:	trade, dummy 1998,	except trade.
	Regional	dummy 2008	
	Development	Dependent: convergence	
	Revisited	of HDI	
2	The impact of	Independent: previous	HDI convergence is
	the special	year HDI, special	influenced by previous
	autonomy fund	autonomy fund,	year HDI, percentage
	on the	percentage of poor people,	, of poor people, and
	convergence of	regional population	regional population
	the human	density, and percentage of density	
	development	regional working	
	index in Aceh	population	
		Dependent: HDI	
		convergence	

No	Titles	Variables	Results
3	Time-varying clustering of multivariate longitudinal observations	HDI convergence	Descriptive study. Showing clustering in HDI over time
4	The analysis of absolute convergency of human development inter provinces in Indonesia	Independent: initial HDI Dependent: absolute HDI convergence	Descriptive study. Measuring the speed of absolute convergence, which is 0.807 percent annually
5	A note on cross- country divergence in standard of living	Living standard convergence	In almost for all the cases, divergence has been observed
6	World inequality and globalization	HDI convergence	Divergence is more logical than empirical
7	What does the human development index tell us about convergence?	HDI convergence	Convergence observed on all groups of countries, where low HDI countries converge more than high HDI countries
8	Divergences and convergences in human development	Income, life expectancy, literacy, and gross enrolment ratio	Development is not a smooth process but a series of superposed transitions with increasing divergence and then converging
9	International convergence or	HDI convergence	Polarization in the HDI among

No	Titles	Variables	Results
	higher inequality in human development? Evidence from 1975 to 2002		developing countries but a slight reduction in world inequality
10	Corruption and convergence in human development: evidence from 69 countries during 1990- 2012	Independents: low-, medium-, and high- corruption cluster of countries Dependent: HDI convergence	Corruption influences HDI convergence negatively mainly through decreasing growth in income and health achievements

This writing is organized in the following way. Chapter 2 presents the literature on bilateral FDI, income convergence, and HDI convergence. Chapter 3 describes the data and methods used in the research. Chapter 4 provides empirical evidence through econometric analysis on FDI bilateral and income convergence to HDI in Southeast Asia. Chapter 5 is the conclusion.