The role of the state during the economic growth process of Indonesia

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Abstract

The South East Asian countries especially the Four Tiger States and Japan experienced a great boom in economic growth through industrialization and became high- income countries. Further Asian States such as Thailand and Malaysia followed and made the step to the upper-middle income range, while Indonesia´s economic growth is stagnating in the lower- middle income ranks.

The aim of this thesis is to analyze, why Indonesia´s economic growth is slowing down after decades of high growth rates and how it can be managed to continue its economic growth path and avoid the middle- income trap. Therefore, a single case study is conducted, seeking to explain why Indonesia is in danger to get stuck in the middle- income trap

A deductive research approach frames this thesis using foremost quantitative data of the World Bank and secondary sources including academic papers, books and articles in specialized journals. To analyze the role of the state in the industrialization process, a profound look is taken at industrial policy strategy, investment in human capital and especially at the underlying characteristics of an embedded autonomy.

To find the weaknesses in the industrialization process of Indonesia, type and effectiveness of implemented industrial policies, which are considered as important instruments triggering economic growth is analyzed. Further, the paper examines the development of human capital as the engine of economic growth.

The findings of this study suggest, that three factors are decisive to impede Indonesia to exploit its full potential for creating economic growth. First, the pervasive level of corruption, which is weakening the entire state system and is difficult to control. Second, the overlapping and in-transparent bureaucratic structures, which leads to slow administration processes and loss of information, and third the missing investment in human capital development through a lack of investment in education, especially in tertiary education.

Finally, the analysis shows that the theoretically important role of embedded autonomy in the economic growth process is not supported by the development of respective quantitative indicators.

***Key words**: Indonesia, economic growth, industrialization, embedded autonomy, middle income trap*

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Abbreviations

ADB	Asian Development Bank
ASEAN	Association of South East Asian Nations
Bpb	Federal Agency for Civic Education
COC	Control of Corruption
GDP	Gross Domestic Product
GE	Government Effectiveness
GNI	Gross National Income
HDI	Human Development Index
HHI	Herfindahl- Hirschman Index
IMF	International Monetary Fund
ISCED	International Standard Classification of Education
MIT	Middle- Income Trap
MITI	Ministry for international Trade and Industry
MP3EI	Master Plan for Acceleration and Expansion of Indonesia´s Economic Development
NIC	Newly Industrialized Countries
OEC	Observatory of Economic Complexity
OECD	Organization for Economic Co-operation and Development
RCA	Revealed Comparative Advantage
RPJPN	Long-tern Development Plan
RQ	Regular Quality
SEA	South East Asia
UNCTAD	United Nation Conference on Trade and Development
UNDP	United Nations Development Program
UNICEF	United Nations International Children Emergency Fund
WB	World Bank
WDI	World Development Indicators
WEF	The World Economic Fund
WGI	Worldwide Governance Indicators

1 Introduction

Many South East Asian countries underwent a rapid industrialization in the last six decades. Amongst them are Japan and the so- called Tiger States[1] Hong Kong, Singapore, South Korea and Taiwan. Other Asian countries followed the path, e.g. Indonesia, Malaysia or Thailand. Through the industrialization process the countries developed to lower middle-income, upper middle- income or high- income countries. After achieving the lower or upper middle - income range economic growth seems to stagnate for some countries, while others develop into high - income economies (ADB, 2011).

Keeping up with the requirements of a globalized world is challenging since the demands of international markets require steady adjustments. In order to develop further and provide ongoing economic growth, countries need expanding and flexible industrial sectors and strong internal structures and demand to generate long- term economic growth. At the same time, these lower and upper middle– income countries challenge their natural resources by trade based on raw materials, need to make sure to generate steadily sustainable economic growth.

Indonesia is a so called newly industrialized country (NIC) and ranks as low middle-income country since 1996 when it was first classified in this income range by the World Bank.[2] The financial crisis of South East Asia in 1998 hit Indonesia stronger than any other country in the region. In the following eight years gross national income (GNI) felt below the middle-income threshold. However, Indonesia again produced high economic growth and achieved the middle- income status only eight years later in 2006. Even so Indonesia´s international role got stronger and it belongs to the 20 strongest industrialized and emerging economies in the world (G20)[3], economic growth is stagnating and since 2004, Indonesia has not moved from its lower middle - income status (World Bank, 2017).

In political and economic literature, the interrelations between economic growth and industrialization has been studied intensively. Theoretical studies focus on the development of countries drawing on different theories, explaining which measures are needed for producing economic growth. This paper draws on that approach and pays attention especially to the

[1] Tiger States: four Asian countries, which managed to transform themselves within three decades into the most competitive produces and exporters in the world, because of their ability to assimilate, use and enhance new information capacity to foresee the potential of new technologies (Castell. 1997: 260)

[2]Income classifications by the World Bank adjust on a regular basis. In 2017 the different classifications are categorized regarding Growth National Income and are defined as followed: low- income countries ≤ $1,005; lower- middle income countries $1,006≤ x ≤ $3,955; Upper middle- income countries $3,956 ≤ x ≤ $12,235; High-income countries ≥ $ 12,23

[3]The G20 countries are: Australia, Canada, Saudi Arabia, Unites States, India, Russia, South Africa, Turkey, Agentina, Brazil, Mexico, France, Germany, Italy, United Kingdom, China, Indonesia, Japan, South Korea

structure of the state and how a state is able to push economic growth and industrialization forward.

The theory of embedded autonomy founded by Peter Evans (1995) focuses on the structure of the state, type and intensity of state interventions to promote industrialization as well as the importance of state- private sector and society relation. Hence, he offers a supplementary approach to the theory of developmental state by Johnson Chalmers (1982). The theory of developmental state describes industrialization as a process managed by the state promoting the transformation from a primary sector economy based on agriculture and natural resources to a secondary and third sector economy based on manufacturing and services (Chalmers, 1982).

To trace back the economic growth and industrialization process of Indonesia, I take a look at the changes in production and if the country managed the shift from an agriculture based economy to a manufacturing and service sector based economy. To do so, I first examine implemented industrial policies and their effect on the diversification of production and second check the development of human capital. Industrial policies and human capital are important measure to push economic growth and hence development forward. Industrialization and industrial policies might be very effective in the shorth and medium term, but in the long run knowledge and education play a more significant role to generate sustainable economic growth (Son, 2010)

Based on these theoretical considerations the thesis combines the characteristics of developmental theory approach and embedded autonomy and analyzes its application to the case of Indonesia to address the research question: *Why is Indonesia in danger to get stuck in the middle – income trap*? The hypothesis is that *the state is executing embedded autonomy in a way that hinders the industrialization process and hence economic growth*.

The contribution of the thesis is threefold: First, I acknowledge specifically the role of human capital development because of the industrialization process. Second, I apply these theoretical considerations in a case study to the development of Indonesia. Third, within the case study, I use different indicators to prove the relation between embedded autonomy and industrialization.

The new perspective provided by this thesis is to examine the mentioned push factors of economic growth, to find out the shortcoming of the Indonesian growth model i.e. the reason

for stagnating economic growth. With the combination of chosen theories and measurements, I can provide an economic as well as a political science perspective.

The thesis is structured as follows: chapter 2 defines basic concepts for a better understanding of the research question and hypothesis. Chapter 3 describes the methodology and of the paper. Chapter 4 develops the three theories and hence provides the framework for the case study of Indonesia in chapter 5. The case study is divided in four chapters. First, I will give an overview on the process of economic growth and development in Indonesia using gross national income (GNI) and gross national product (GDP). Second, I will examine characteristics of a developmental state are satisfies by analyzing which industrial policies, elucidated in the theory chapter, Indonesia managed to implement, and which role human capital played. Third, I take a deeper look if the state implemented these industrial policies through a form of embedded autonomy. Chapter 6 discussed and Chapter 7 concludes.

2 Concepts

The following chapter, the concept of measuring development and the concept of the middle- income trap are explained, in order to clear terminology used in the research question and in the hypothesis. Further, it shall clear the use of various indicators for reproducing the process of economic growth.

2.1 Measuring Development

The indicator for the development of a country in terms of economic growth is commonly measured with the Atlas method of the World Bank using gross national income as indicator. The GNI measures the sum of value added by all national producers in the country and abroad, any product taxes (less subsidies) not included in the valuation of output and net receipts of primary income (compensation of employees and property income) from abroad (World Bank, 2017c). Based on this measure the World Bank ranks countries into four different categories: low, lower middle, upper middle and high- income countries. To analyze the long-term transformation of a country, it is necessary to look at data with a long- time horizon.

Therefore, the Asian Development Bank (ADB), which conducted an in-depth analysis of the middle-income trap, refers to Maddison's data base which provides data reaching back to 1950, using gross domestic product (GDP) as an indicator for development (Felipe, 2012:4). GDP measures the sum of gross value added by all resident producers within the country borders, any products taxes subtracting any subsidies not included in the value of the products (World Bank, 2017b). GDP will be used as main indicator for economic growth, since it aligns with the

concept of the middle- income trap. The differences between the two measures are a different perspective on value added in an economy and the time frame for which data is available. GNI is based on the location while GDP is based on the ownership. So GNI and GDP are the opposite sides of the same coin (World Bank 2017b; World Bank 2017c).

In order to adjust to the threshold of the WB the ADB defined GDP thresholds to categorize countries. Table 1 shows the four categories and respective GNI and GDP thresholds as well as examples for each category in 2015.

Table 1: Country Ranking GDP/ GNI

Category	GNI (WB)	GDP (ADB)	Examples
Low- income	≤ $1,005	≤ $2,000	Afghanistan, Eritrea
Lower middle-income	$1,006≤ x ≤ $3,955	$2,000 ≤ x ≤ $7,250	Indonesia, Lao, Philippines
Upper middle-income	$3,956 ≤ x ≤ $12,235	$7,250 ≤ x ≤ $11,750	Malaysia, China, Thailand
High- income country	≥ $12,236	≥ $11,750	Japan, Rep. Korea, Singapore

Notes: Thresholds of GNI defined by the World Bank and threshold of GDP defined by the ADB as well as associated examples.

Source: Data from World Bank; own graphic

The development of a country can also be analyzed through the Human Development Index (HDI) focusing on the well-being of the population instead of income only. The HDI is based on the capability approach of Amartya Sen. It considers the opportunities of choices an individual has. The more opportunities a human has, the better is the development in a country (Sen, 1999). The approach was developed to include the needs of the people and distance from the one- sided approach focusing only on economic growth as development measure. The HDI is operationalized by measuring by three dimensions entailing a combination of a life expectancy index, an education index and GNI. The countries are classified into four categories: low human development, middle human development, high human development and very high human development. Countries are valued between 0 and 1 with 0 being lowest development (UNDP, 2015). The values for threshold of the different levels of development are listed below.

The first Human Development Report and measurement of the HDI was published 1990. (UNDP, 2016).

Table 2: Country Ranking HDI

Category	HDI (UNDP)	Examples
Low human development	< 0,550	Eritrea, Afghanistan
Medium human development	0,551 – 0,699	Philippines, Indonesia, Lao
High human development	0,700- 0,799	Malaysia, China, Thailand
Very high human development	0,800 <	Japan, Rep. Korea, Singapore

Notes: Thresholds of the Human Development Index defined by UNDP with associated examples.

Source: World Bank; own graphic

The advantages of GNI as a measure of development are the straight forward comparability across countries and the broad availability data over time and also early years. In addition, the HDI will be used to inform about the state of human capital in Indonesia. Both indicators are needed to answer the research question, why Indonesia is endangered to fall in the middle- income trap.

2.2 Middle- Income Trap

The concept of middle- income trap (MIT) defines a situation in which countries are stuck in the middle-income range of GDP per capita without observing economic growth for several years. It is a concept, which offers the possibility to differentiate between slow transitioning from rapid transitioning countries (Felipe et al. 2014). If a lower middle-income country does not steadily produce a GDP growth rate of at least 4.7% per year, it is likely to fall into the MIT. According to Felipe (2012) an upper middle- income country is stuck in the MIT when it does not observe a GDP growth rate of 3,5% per year. The challenge many upper and lower middle-income countries face is, that it is difficult to compete with low-income countries producing with low labor cost as well as with high- income countries using advanced technologies (Kharas & Kohli, 2011: 284). This may cause slowing economic growth trends which results in a so called MIT.

However, being in the MIT, does not mean that economic growth is forever stagnating. Industrial policies aiming a stronger domestic economy, expansion of manufacturing and the

diversification of production and export are push factors of economic growth. The diversification of economic production of a country as well as the expansion of the service sector, as national and international fastest growing sector, are strategies for avoiding the MIT (Kharas & Kohli, 2011:285). This is because economic diversification and a focus on service delivery increase the competitiveness of countries on the world market, supporting export and import of commodities and capital which eventually translates into national economic growth. Further are the minimum of corruption and a well- educated workforce important (Ohno, 2010). Investment in human capital, hence education results in more skilled workers in different economic fields, which is necessary to cover the needs of a diversified economy.

In the following chapter the theoretical framework of this thesis will be described. A strong focus is on the interdependencies between the structure of a countries' economy and economic growth a country observes. In order to do so I will consult different theories focusing on the role of institutions and the implications the different assumptions on the institutional set up have to generate economic growth.

3 Methodology

The aim of this section is to show the scientific research approach on which the conclusions are based. In order, to analyze the research question, this chapter addresses the conceptual background of this master thesis, explains the choice of theories and defines important concepts. The limitations of the approach are laid out in more detail as well.

3.1 Problem Formulation

The problem formulation and hypothesis, which will structure the thesis are:

Why is Indonesia in danger to get stuck in the middle- income trap?

The state is executing embedded autonomy in a way that hinders the industrialization process and hence economic growth.

Due to the research question, this thesis strives for understanding the reasons for the stagnation of economic growth in Indonesia. The hypothesis serves to structure the thesis and restricts the analysis, to focus on the role of the state and state dynamics. Answering the research question and confirm or reject the thesis, will not only show if embedded autonomy is in Indonesia the reason for the stagnation of economic growth, but also will point out if there is a connection between the process of economic growth and industrialization.

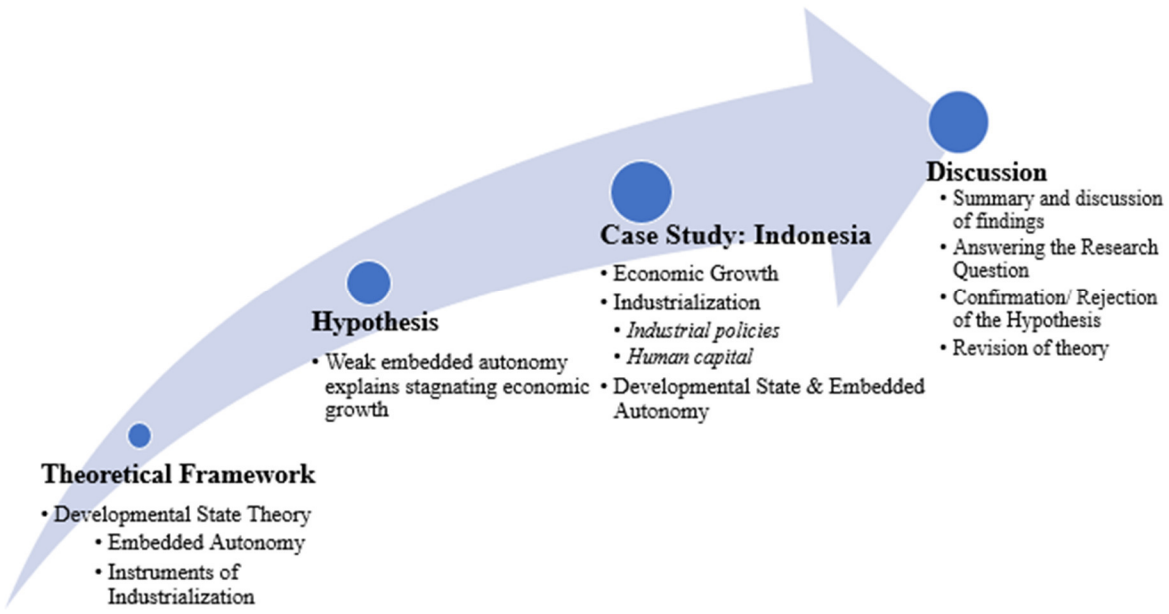
Following, I will investigate to explain the method encompassing theoretical framework, details of the conducted case study and the method of data collection as well as the limitations of the paper.

3.2 Method

The method used, is a deductive research approach. That means, that a hypothesis is developed based on the theoretical framework, which is applied to a specific case study (Bryman, 2016:24). That way, the approach explores a known theory and tests, on behalf of the hypothesis, if the theory is valid in examined case (Snieder & Larner, 2009:16).

The figure below shows the research approach of this thesis in detail and will be explained I more detail below.

Figure 1: Deductive research approach



Notes: Deductive research approach of this thesis. Starting with the creation of the theoretical framework, on which the hypothesis is based. That leads to the method of the analysis, which is a case study in this paper. Ending in a discussion, in which the research question is answered, and the hypothesis is rejected or confirmed. In the figure, the detail of each part can be discerned.

Source: own graphic

3.2.1.1 Theoretical Framework

The theoretical framework of the thesis is based on the developmental state theory, helping me to identify key factors that may explain why Indonesia´s economic growth is slowing down after several decades of rapid industrialization. Supplementary to the development state theory is the approach of embedded autonomy, which helps to analyze the state in depth. In two subchapters I will further give a more detailed description about two instruments, used by the developmental state to produce high economic growth. First, industrial policy focusing on measures for expanding the manufacturing sector. This encompasses i.e. import substitution policies, construction of comparative advantages and product diversification. Second, human capital focusing on education. Therefore, it is possible to retrace the economic development in the country on behalf of chosen criteria as well as to verify structures of embedded autonomy. The aim is, to clear the relation between economic growth and the grade embedded autonomy is exercised. The theoretical framework builds on primary and secondary literature sources. Chalmers (1982; 1999) and Önis (1991) and Evans represent the main sources which were used.

Case Study

In a third step, a case study of Indonesia is conducted. This case study implies an examination of one special case which can be defined as "(…) an empirical inquiry that investigates a contemporary phenomenon in depth and within its real- life context, especially when the boundaries between phenomenon and context are not clearly evident" (Yin, 2009:18). Since I specifically analyze the case of Indonesia, the case study can be categorized as an explanatory single-case-study which is characterized by the explanation of a cause-effect relation (Yin, 2003:4). The cause-effect relationship in this paper is the industrialization of Indonesia through structures of embedded autonomy in state actions. To achieve that, I will analyze the time-period from1968 until 2015. This time frame was chosen on the one hand because it can be assumed actions of earlier years are still influential factors of economic growth nowadays. On the other hand, because of the data availability which mostly ends in 2015.

3.2.1.2 Data Collection

The case study builds on primary and secondary literature in this field of research encompassing: academic papers, articles in specialized journals and books. Furthermore, the conclusions are based on data collection of the main indicators identified in the theoretical framework (Bryman, 2016). To provide an overview on the development of economic growth,

I draw on data provided by the World Bank in its World Development Indicators (WDI)[4] data base. I will focus on indicators which are related to the economic status of the country such as GDP, GNI and the sectoral share of agriculture, industry and services to GDP (World Bank, 2017).

To get more detailed information about economic growth, triggered by an industrialization process, I will analyze the type of industrial policies and created comparative advantages as well as product diversification as well as human capital. Therefore, I draw on the revealed comparative advantage indicator to consider which comparative advantages emerged over time and on the Herfindahl- Hirschman production Index (HHI) considering achieved product diversification. To examine human capital in a country I use the Human Development Index, since it provides significant information about the education status in a country. Furthermore, since embedded autonomy focuses on the structure of state interventions and the relation to the private sector and society, I use data of the Worldwide Governance Indicators (WGI)[5] data base of the World Bank. The control of corruption index (COC), index of regulatory quality (RQ) and index of government effectiveness (GE). All indicators will be listed and explained in more detail below:

Table 3: Indicators

Economic Development	
Gross National Income (GNI)	GNI measures the sum of value added by all national producers in the country and abroad, any product taxes (less subsidies) not included in the valuation of output and net receipts of primary income (compensation of employees and property income) from abroad (World Bank, 2017c)
GDP (Gross Domestic Product)	GDP measures the sum of gross value added by all resident producers within the country borders, any products taxes subtracting any subsidies not included in the value of the products (World Bank 2017b)
Instruments of Industrialization	
RCA (Revealed Comparative Advantage)	The revealed comparative advantage (RCA) index is a measure of a country's relative advantage or disadvantage in a specific industry as evidenced by trade flows. An index above the unit indicates that a country's share of exports in that sector exceeds the global export share of the same sector (World Bank,2013)

[4] The World Development Indicators are "the primary World Bank collection of development indicators, compiled from officially-recognized international sources. It presents the most current and accurate global development data available, and includes national, regional and global estimates." Source: http://data.worldbank.org/data-catalog/world-development-indicators

[5] The Worldwide Governance Indicators are "aggregate and individual governance indicators for 215 countries and territories over the period 1996–2015 [...]." (World Bank, 2017c)

HHI (Hirschman Herfindahl index)	Hirschman Herfindahl index is a measure of the dispersion of trade value across an exporter's partners. A country with trade (export or import) that is concentrated in a very few markets will have an index value close to 1. Similarly, a country with a perfectly diversified trade portfolio will have an index close to zero (World Bank, 2017f)
HDI (Human Development Index)	Human Development Index, concentrates on the well- being of an individual. The calculation is based on three dimensions including health, education and income and is a recommended measurement in terms of human capital. In this paper the focus will lie on the education index (UNDP, 2015)
Education Index	Education index includes expected years of schooling and mean years of schooling and represents one dimension of the HDI (UNDP, 2015).
Embedded Autonomy	
COC (Control of Corruption)	Control of corruption captures perceptions of the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as "capture" of the state by elites and private interests (World Bank, 2017c).
GE (Government Effectiveness)	Government effectiveness captures perceptions of the quality of public services, the quality of civil service and the of its independence from political pressure, the quality of policy formulation and implementation, and the credibility of the government commitment to such policies (World Bank, 2017c).
RQ (Regulatory Quality	Regulatory Quality captures perception of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development (World Bank 2017c).

Notes: All indicators used in the different parts of the analysis

Source: own graphic

3.3 Limitations

The choice of the research approach has some limitations that need to be acknowledged to analyze and discuss the results. First, a single case study approach allows a detailed analysis of one specific country, but its conclusions are hard to generalize to other country cases. This means a limited external validity of the results. However, the analysis focuses on the main factors of the industrialization process and may be applied to other countries in Asia.

Focusing on the role of the state in the industrialization process may be too narrow since the interplay of many actors (public, private, and civil on a national and international level) may drive the industrialization of countries. Nevertheless, the government of a nation state is still one of the main actors guiding the development of a country economically, socially and ecologically.

The research approach based on a primary and secondary literature has the advantage to give a perspective on the research question and in my case state actions to promote industrialization. However, this has the disadvantage that the analysis stays on an aggregate level and may not be able to cover specific relations between the theories.

In addition, my data analysis is based on existing data. Although, the best proxies to address the aspects identified in the theory are chosen, the indicators may only cover parts of the phenomena. In order to analyze individual institutional relations that may also influence industrialization and state relations one would need to conduct personal interviews with a variety of actors. This would have been beyond the scope of this thesis.

3.4 Literature Review

This chapter gives an overview of research and available literature within the chosen field of study. Further, I will elaborate on the contribution of new knowledge by this thesis.

The theory of developmental state, is a well- researched topic. The interest of different scholars was inspired by the late and rapid industrialization process, of some of the East Asian countries like Japan and Singapore. The main work was coined by Chalmers Johnson in 1982 and his book MITI and the Japanese miracle. In this book he defines the theory of developmental state and examines the Japanese industrialization regarding to it. The work of Chalmers was followed by several studies dealing with the developmental state from different ankles as well as a number of reviews of those. Two very important books were written by Robert Wade and Alice Amsden. Robert Wade points out in his book *governing the market* the importance of state interventions into the market focusing on the industrialization of Taiwan (Wade, 1990). Also, Alice Amsden contributed with her work *Asia´s next giant*, due to detailed case study of Korea giving new insights about certain industries as well as some lessons learned regarding high economic growth (Amsden, 1989). The different books and papers are supplementary and offering new angles and additional characteristics of a developmental state.

The book embedded autonomy of Peter Evans represents the main idea used for this paper, it builds upon the developmental state theory, highlighting the role of the state in particular the state bureaucracy. Contrary to Chalmers work, is the theory of embedded autonomy only scarce researched further in other studies. Evans examined embedded autonomy in different countries, while he concentrates on the IT sector. In process of this thesis only one further paper was found namely *the Asian currency crisis the role of industrial policy and imbalanced embedded autonomy* by Adrian J. Shin.

The contributions to already established literature are as followed. Embedded autonomy represents the concept, which is assumingly the influential factor for the pace of industrialization and hence for the development of economic growth. To examine this, embedded autonomy is not restricted to solely one industrial sector like Evans work, but looks

at the whole production in a country and the change of its structures over time. In context of embedded autonomy representative indicators are defined, supporting the analysis of the relation between embedded autonomy and economic growth. Because of chosen methodology to include indicators instead of solely relying on literature and representing economic growth with two chosen instruments, industrial policies and human capital, this thesis offers new perspectives in terms the influence of embedded autonomy in the industrialization process.

4 Theoretical Framework

As described in the methodology section, the theoretical framework is the foundation for the problem formulation as well as for the development of the hypothesis and serves to identify indicators for the country case study. The different approaches used as theoretical framework supplement each other. They serve as framework for government and state-bureaucracy as well as the relations to the private sector and society. To produce economic growth both should act regarding to the principles of the theory of embedded autonomy. Like the state can create effective policies aiming the industrialization of a country. Within the industrialization process also the machines and technologies used are processing. Therefore, skilled workers are needed with a specific education offering knowledge and innovation. To present these interactions and find the reason for the slow- down in the economic growth rate, I chose the theory of developmental state which is supplemented by embedded autonomy. Industrial policies and human capital are the instruments of a developmental state to trigger economic growth. Hence, they can give significant information of the achievements and failures of a country and will also be explained in detail.

4.1 Developmental State

The theory of embedded autonomy represents the focal point of this paper. It builds upon the theory of developmental state. Therefore, the theory of developmental state is described first before I explain the concept of embedded autonomy in more detail.

The theory of developmental state is a well discussed concept developed by John Chalmers in 1989, which deals with the role of the state in the context of the rapid process of industrialization of East Asian countries such as Japan, Singapore and Hongkong (Leftwitch, 1995). In this context industrialization means the transformation from a developing country, where the economy is based and dependent on primary sector production such as agriculture and natural resources, to an economy based on manufacturing and an expanding service sector (Kasahara, 2013:3). Since the productivity is higher in manufacturing than in agriculture, also

the revenues and consequently investment in physical and human capital is higher. Physical capital is understood as factors of production e.g. machines and buildings (Cambridge Dictionary, 2017a). Human capital measures the economic value of provided knowledge, skills and labor of the workforce and can be increased through education and training (Cambridge Dictionary, 2017).

The developmental state must be understood as a concept framing the industrialization process of countries. The industrialization process differs between countries, because of their different backgrounds to start with. In the context of South East Asia, the four tiger states (Hongkong, Singapore, Taiwan, South Korea) as well as the newly industrialized countries (NICs) (Malaysia, Thailand, Indonesia, Philippines, China) all have different political, economic and geographic conditions (World Bank, 1993:42). That makes it difficult to define universally applicable criteria. However, in the theory of developmental state some general criterial are incorporated.

First, the highest priority and overall goal of a developmental state is to foster economic growth by improving, expanding and diversifying its production processes (Evans, 1995). Second, a certain amount of market-oriented state interventions is necessary to achieve this goal (Önis, 1991:10). Both can be observed in the South East Asian countries, which all managed rapid economic growth because of the right mixture of market orientation and interventionist measures by the state (Woo- Cummings, 1999:1). History shows also other successful examples in Europe, which prospered because of a certain amount of interventionism. Economic powers like Great Britain and Germany were economically successful, because of protectionist policies to support national production. Free trade with other countries was then introduced, when the countries´ production sector was able to compete with other economies and when the countries´ market was stable enough to regulate itself. (Wade, 1990).

Furthermore, Chalmers (1982) defines in a review of his own more specific criteria of a developmental state. First a small but elite state bureaucracy is essential.[6] The state bureaucracy is responsible for identifying the industries which should be developed further and to identify strategies how they can be developed fast. Second, an institution is established that is responsible for industrialization policies and guides the process. One example is the Ministry of International Trade and Industry (MITI) in Japan that was established in 1949 and played a major role in the industrialization process of Japan. It was responsible for restructuring

[6] This is defined as a group of people who are experienced and have higher education from elite universities

productivity and for international trade agreements. Third, the interventions of the state are market oriented. That means that state interventions area aiming to improve the interactions in the market through e.g. the revision of the level of taxes or other incentives for investments. (Chalmers, 1999:39). Fourth, the political system leaves space for the bureaucracy to intervene in the market. That means "that the legislative and judicial branches of government must be restricted to a 'safety valve' function" (Chalmers, 1999:38). In a developmental state, industrial policy is the main instrument in the industrialization process (Kasahara, 2013:3). The bureaucracy has close links with the private sector, what makes it possible to formulate industrial policies. The state bureaucracy itself has the biggest influence in the formulation of industrial policies. Like Önis expresses: "politicians reign while the bureaucrats rule" (Chalmers, 1999:45; Önis, 1991:11). That means that the state transfers its political power to the bureaucrats, who have the better information and can act in a more effective way and formulate better adjusted industrial policies. Thus, according to Chalmers, two important factors shape the globalization of a country: the embeddedness of the state and the design of industrial policies.

4.1.1 Embedded Autonomy

Embedded autonomy supports the specification on the role of the state[7] within the industrialization and developmental process. According to Evans embedded autonomy is conditional for a developmental state and hence decisive for a successful industrialization and economic growth. Reverse does it mean, that all characteristics of a developmental state are given, when embedded autonomy is conducted.

In this paper, I consider embedded autonomy as the fundamental system to shape the framework for the state, which includes government and state bureaucracy to generate economic growth. Peter Evans (1995) refers with his concept of embedded autonomy to the criteria of the interventionist role of the state and the relation of the state and the state bureaucracy to the private sector and society.

The concept of embedded autonomy can be divided into two parts. First, *embedded* represents the relationship between state and state bureaucracy towards the private sector and society. The relation or rather collaboration is ideally very close. This means that the state receives the information it needs to act on new industrial sectors, considering the private sector´s investment possibilities, and react on the needs of the society (Evans, 1995:7). Since

[7] State includes government as well as state bureaucracy throughout the paper, as long nothing else is mentioned

the country aims at economic growth through the expansion of the industry, the private sector – with its potential of expansion - is offering the most attractive collaboration (Evans, 1995:234). Thus, it is possible for the state to define industrial policies, which insure to benefit the whole country. If this relationship is not existence, effective long- term investments in the private sector are mostly impossible (Evans, 1995:47).

Second, *autonomy* represents the amount of power a state has to intervene in the market as well as to which degree the state succeeds in protecting the market from corruption and rent-seeking. In terms of autonomy, Evans focuses on the state bureaucracy instead of the state itself. Autonomy in Evans sense, does not just mean "[…] not having its goals shaped by societal forces", but also "implies the ability to formulate collective goals instead of allowing officeholders to pursue their individual interest" (Evans, 1995:45). Therefore, it is important, that the state empowers the bureaucracy to intervene in the market such as the empowerment of a pilot institution. That means, that the government decentralizes its power, and hands it over to the state bureaucracy. The government itself takes the role as observer and guarantees security of the processes (Form, 1997:187).

The bureaucracy in an embedded autonomy is similar to the Weberian bureaucracy[8], which means that the recruitment process is highly selective. All bureaucrats can provide long-term experiences, which guarantees the effectiveness of the countries bureaucracy (Evans, 1995:12). These leads to a very coherent staff with a similar mind set and commitment in decision processes. What distinguishes Evan´s model from the Weberian bureaucracy is the embeddedness of the bureaucracy. Evans highlights that a certain amount of embeddedness of the bureaucracy within the societal ties is required for a functioning developmental state.

Following this argumentation, the most important criteria of embedded autonomy is the combination of embedded and autonomy. This is the most important aspect, because if a state practices solely its autonomy, the state would be incapable to include the interest of the private sector and the general society into its decisions. Since this means that embeddedness is missing, the state lacks in knowledge about the needs of the society and cannot adjust the support of industrial sectors to generate growth. The role of the state in an embedded autonomy ideally understands economic outcomes, the need of its economy and uncovers niches where new industries should be developed. Therefore, the embeddedness with market-players must be close and informative. Another theoretical scenario could be that the state does not want to act

[8] Significant characteristics of a Weberian bureaucracy are: insulation from external interference, a merit based-system of recruiting experts, an ample security and reward system (Form, 1997: 187)

in the interest of the civil society and its population, but only in its own interest. That would hinder the country to prosper and develop, since it will not adjust to the capacities available in the country, and the demands of the national and international world market. Even more, a selfish state will not invest revenues of the industrialization process to increase the welfare of the country, but will use it only for the governments benefit hindering economic growth. Evans calls this a predatory state rather than a developmental state (Evans, 1995:13).

Newly industrialized countries (NIC) usually are defined as lying in between a developmental and a predatory state, showing a non-ideal embedded autonomy. The structure of the intermediate cases, "do not categorically preclude effective involvement, but they do also not predict it either" (Evans, 1995:13). This means that even if high economic growth and development is achieved, predatory characteristics are still visible, e.g. corruption which is an extreme form of rent-seeking frequently observed in the context of developing and emerging countries. To identify the cases between an embedded autonomy and a predatory state, Evans suggests a combination of four major roles for the state to become an embedded autonomy (Form 1997:188) *Custodian* providing protection against rent- seeking, formulation of policies and regulation of infant industries. *Midwife*, creates incentives for the private sector to invest in new industrial branches by subsidizing, tax breaks and other devices. The *husband*, provides training for the recruited entrepreneurs and *demiurge*, it becomes directly involved in productive activities that complement private investment, only to denationalize later when industries are established (Evans, 1995:13).

To sum up, the government in an embedded autonomy takes the role of an observer guaranteeing the security of the system. The state bureaucracy gets enough power to create industrial policies to trigger high economic growth. To do so the state bureaucracy maintains a good relationship to the private sector to identify market gaps worth investing into. Further, by creating a pilot organization the state bureaucracy is able to implement market oriented policies and generate long- term growth. Two instruments of a developmental state for producing long term growth and which can only be in a sustainable way, when conducting embedded autonomy, are industrial policies and the investment in human capital. Both approaches will be explained below.

Following, two instruments will be introduced in chapter 4.1.2, which are necessary to push economic growth forward. In chapter 4.1.2.1, the type and its effects of industrial policies is explained, which are used by other East Asian countries to achieve rapid industrialization. Chapter 4.1.2.2. deals with the importance of human capital, which is necessary for diversifying

the economy of a country and hence is important to implement industrial policies in an effective way (Evans, 2000; Rodrik, 2013). Both instruments can only be conducted efficiently from the state, if embedded autonomy is implemented.

4.1.2 Instruments of the Industrialization Process

4.1.2.1 Industrial Policies

"Industrial policy, the core of the developmental state´s policy actions, is to nurture a competitive and dynamic manufacturing sector, or industrialization in short" (Kasahara, 2013:3). Thus, industrial policies are a fundamental strategy for targeting economic restructuring and transformation to a developmental state (Önis, 1991:113). Further are industrial policies the instrument for a country to avoid MIT and produce so much economic growth that it achieves high- income country status. Industrial policies are an instrument which was used in several other East Asian industrialization processes like Japan and South Korea. The goal of industrial policies is, to achieve a shift from an agricultural and raw material export economy, to a manufacturing economy.

Herewith, one common instrument and first step in the industrialization process of the East Asia developmental states were import substitution policies (Rodrik, 2007:99). Import substitution polices are used to decrease the import of manufactured goods, which are competing with the domestic production. States expand their own domestic production and reallocate savings to the acquisition of modern and new foreign technologies (Chalmers, 1989). They do not necessarily lead to a larger volume of imports, but rather to a shift from consumer goods to capital goods such as new machines. This transformation eventually triggers exports, the development of the capital market and leads to economic growth (World Bank, 1993).

The second step was, to change into an export oriented strategy. The change from import substitution oriented economy to an export oriented economy happened in the East Asian countries much earlier compared to other developing countries (World Bank, 1993:22). The market became more open to international competition and gained more access to the market of other countries. Export oriented policies shall result equal to import substitution policies in the improvement of technologies and a better use of available capacities (Mukherjee, 2012:69).

In terms of this paper both strategies shall aim, referring to the developmental state theory, of industrial policies which generate a shift from a raw material and agriculture economy to a manufacturing and service sector economy. Therefore, it is necessary to construct new comparative advantages. Comparative advantage means that a country produces the goods with the lowest opportunity costs, which emerge through cheap production costs. However,

only focusing production on the "natural" or given comparative advantage may not be enough for becoming a developmental state. Constructing new comparative advantages mean, that through import substitution policies, domestic sectors are not restricted anymore and can expand and grow. The revenues can be used to invest in new capital, like machines, to construct new industrial sectors with low production costs (Rodrik, 2004:7; Evans, 1995:7). Consequently, countries are able to diversify their production and hence increase their exports. This is necessary in developing countries, to overcome its export instability, of being dependent on only few natural resources and the demand of other countries (Hesse, 2008; Hausmann et al., 2005).

4.1.2.2 Human Capital

The second instrument I want to introduce is human capital. As mentioned above, is not only physical capital responsible for economic growth, but also human capital. It is the instrument which connects the developmental state theory, mostly based on capital accumulation to the 21st century, what was also recognized by Evans (2008). Especially in very diversified industries, which aim to embrace the service sector, human capital plays a very important role and need to be considered examining economic growth of a country.

The process of industrialization does not end with a well- developed manufacturing sector. Economies are influenced by fast progressing technologies, digitalization and the expansion of their production. However, to achieve a richer variety of products, skilled workers are needed to manage the new technologies and machines, which are necessary to establish new industrial sectors. Even before starting the production, a country needs analysts to identify new sectors, specialists for conducting feasibility studies, engineers and project managers for the implementation of the new sector (Son, 2010). Following without human capital it is not possible to improve labor productivity, facilitates technological innovations and make growth more sustainable and transforms raw materials as well as capital into goods and services (ibid.).

Economic growth can only be sustained by investment in human capital, respectively in education. Without an educated population specialized in production fields, even the most modernized economy will not flourish (Rodrik, 2013:43). Education produces knowledge and knowledge is the key to a modern society. Especially the variety of education makes it possible for individuals to specialize but also share their knowledge (Hausmann et al. 2005).

Fundamental goods like human and physical capital as well as resources and labor combined with the quality of the institution[9] are likely seen to define the diversification of products, a country can produce (Hausmann et al., 2005). In the concept of developmental states in Asia, one key factor was the ambitious and continuous investment in the public sector, especially in education to ensure equal opportunities. It was common that investment in human capital led to higher wages and to improvements concerning capital, education and healthcare (Rodrik, 2013).

5 Economic Growth in Indonesia

In this chapter, I will analyze the process of industrialization and the measures that were undertaken to foster economic growth in Indonesia. Thereby, I will concentrate on industrial polices and human capital. With respect to embedded autonomy, I will examine why Indonesia is in danger to get stuck in MIT. The analysis concentrates on the years from 1968 until 2015. Before and after the financial crisis (1997/1998) Indonesia showed high economic growth rates, but was not yet able to transform into a high- income country. According to a study of the Asian Development Bank (ADB) Indonesia even is in danger to fall in the MIT in upcoming years (ADB, 2011).

The analysis starts with a general overview over economic and political developments in Indonesia and the process of industrialization. I will examine the development applying the indicators listed in the methodology section (GDP, RCA, HHI). Afterwards, this work will take a profound look at the developmental state and embedded autonomy structures in Indonesia. To do so, I will also apply three indices of World Governance Indicators encompassing the control of corruption indicator (COC), government effectiveness indicator and the regulator quality indicator (RQ).

5.1 Economic and Political Overview

Sukarno, the first president after the independence of Indonesia, left his successor with the difficult heritage of an unstable presidential democracy. The industry was export-oriented, highly dependent on natural resources and only played a weak role in international politics (Tijaja & Faisal, 2014:6). During his rule, Sukarno directed most expenses into rearmament of the military. Not much effort was taken regarding human and economic development (Yazid, 2014:2; Rock, 1999:692). In 1966, the end of Sukarno´s presidency, the economy was

[9] Institutions, are formal and informal rules or constraints which are designing incentives for political, economic and social interactions (North,1991:97) e.g. industrial policies, development strategies etc.

devastated, and the GDP was on a lower level than it was during colonial times (Booth, 1999:112). The GDP amounted only 7,076 billion US $ and Indonesia counted as one of the poorest countries in the world, with no expectations of improvement (World Bank, 2017a; Frederik et al. 2011).

In 1966, Suharto took over government. Suharto harshly violated basic human rights and is responsible for a vast number of unlawful killings of civilians. Even before his term in office in 1965/1966, a massacre causing the death of estimated 400,000 to 1,000,000 students and political opponents, took place under his command. Furthermore, one of his first actions in office was the crushing elimination of every possible political opposition and by this, transforming Indonesia into an autocracy (Yazid, 2014:5). Under Suharto, the state "was a complex hierarchy of authoritarian institutions designed to curtail political participation and enable Suharto and the military to control society" (Liddle, 1999:40).

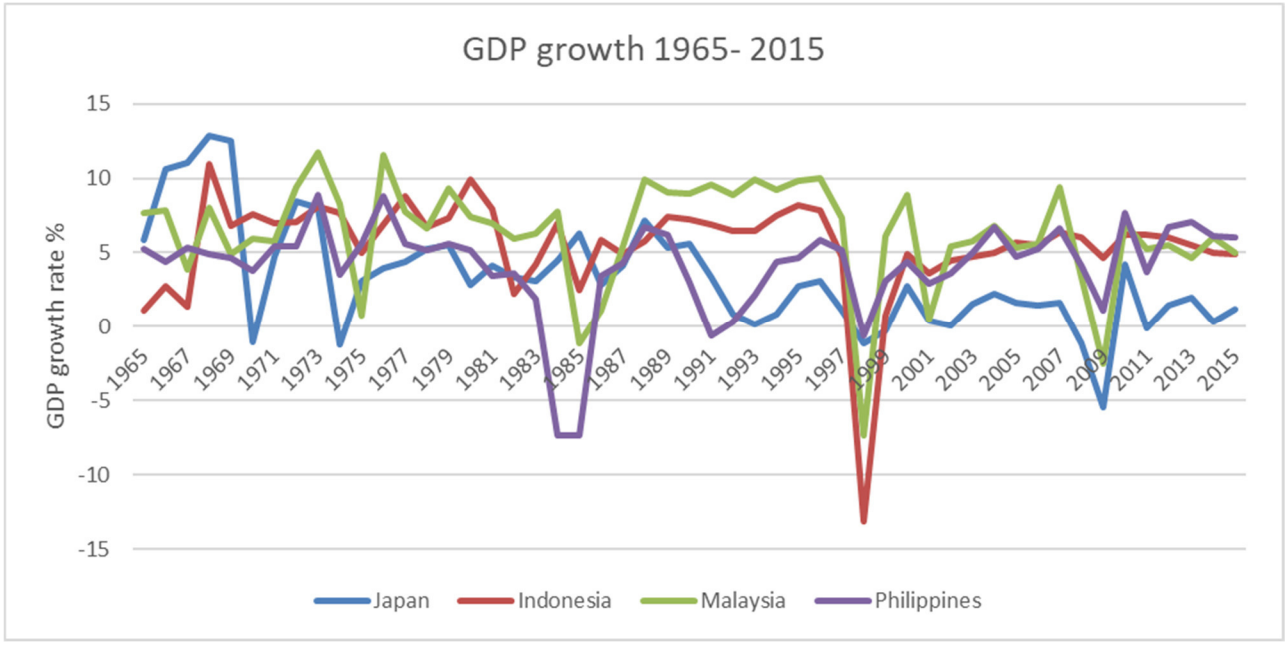
Nonetheless, Indonesia experienced a period of rapid industrialization. Suharto´s economic goal consisted of improving economic development and improving the living standard of the population through welfare policies (Yazid, 2014:5). Regarding the GDP, this strategy was fruitful. Between 1968 and 1997 the GDP per capita multiplied thirty times from 7 billion US $ up to 216 billion US $ (World Bank, 2017a). The GDP growth rate reached uts highest scores Indonesia ever had (Pangetsu et al, 2015). The rapid economic growth was accompanied by a noticeable decline in poverty, reduction of income inequality, self-sufficiency in rice, a strong decline in population growth and an equally impressive improvement of basic education and literacy (Rock,1999:691).

Some of the economic success can be traced back to the oil boom starting in 1973, when international oil prices quadrupled, and GDP growth rates achieved almost 8% (Hill, 1996:151). The high economic growth rates increased the welfare of the country considerably. On the one hand, revenues of the oil boom were used for investing in the industry, on the other hand they have been used for improving the infrastructure, especially concerning rural areas as well as in education and health system (Schwarz, 1997:124). After 1981, the oil prices started to drop and so did the economic growth in Indonesia. It can be credited to the work of Suharto and its technocrats that growth rates could recover fast and find its old performance. It was recognized that the focus of economic development needed to be shifted to other industries than the fuel and oil industry. By means of two development plans, the state aimed to stabilize the economy and to create new industrial sectors.

Due to the oil boom and the focus on economic improvement, Indonesia was officially

categorized as a lower middle-income country in 1996 (World Bank, 2017a, Donges et al., 1974). However, the success did not last long as the graph shows below. In 1997 the Asian financial crisis occurred, ad Indonesia as hit by it stronger than any other East Asian country and the GDP growth rate doped to -13% (Hill, 2007:158). Weak financial, legal and political institutions, made Indonesia vulnerable to symptoms of the crises and complicated the economic recovery process (Hofman et al, 2004). Even the East- Asian neighbor, the Philippines, which always showed a weaker economic growth then Indonesia, were not hit as hard. In Figure 2 Philippines are represented by the purple line. Compared to Japan (blue line) Indonesia´s GDP growth rate provided most of the time higher scores. Nonetheless, Japan achieved high- income level and was also more resistant to the effects of the financial crisis. Only Malaysia (green line), shows a similar decline in terms of GDP growth rates and is already in categorized to be in the MIT (Felipe & Kumar,2014:17).

Figure 2: GDP growth SEA



Note: process of the GDP growth rate (% annual) during the examined period 1965- 2015) Japan, Philippines, Malaysia and Indonesia.

Source: Database World Development Indicators, own graphic

Simultaneously with the financial crisis, Suharto's term in office ended after 32 years. He resigned and was replaced by his vice president Bacharuddin Jusuf Habibie, who started the reformation process, known as Reformasi, of the political system in Indonesia (Liddle, 1999:39). Nonetheless, as vice president of Suharto, the population did not accept him and were afraid he could proceed with an authoritarian regime. After weeks of demonstrations, he stepped back, and Abdurahham Wahid took over office. In process of Reformasi, the political system

changed from authoritarian system to a democratic one and only few years later, in 2004, the first free and fair election took place (Adams et. al. 2009:2). Susilo Bambang Yudhoyono became president and reigned until 2014. From 2014 until today Joko Widodo is the president of Indonesia. Even though democratic structures became more and more established, the military still enjoyed much power and corruption was an inherent characteristic of the political system in Indonesia (Frederik et al. 2011).

In economic terms GDP never again achieved average growth rates of 7% like in times of Suharto especially during oil boom, but Indonesia recovered fast and was ranked as a lower middle-income country again in 2004 (World Bank, 2017). However, from 2010 to 2015 a decline in the GDP growth rate of 1,3% can be recognized (World Bank, 2017b). Within the last few decades, Indonesia worked its way up to becoming the fourth biggest economy in East Asia, following Japan and the four tiger states (Elias & Noone, 2011). In 2013 Indonesia was recognized as the largest economic in South East Asia and became an important trade partner internationally (Tijaja & Faisal, 2015). Not only in the Asian region, but also for Europe, as member of the Association of South East Asian Nation (ASEAN) and of G20 is the role of Indonesia in international context very important.

Nonetheless all the success, the ADB in a study 2011, states that Indonesia is in danger to get stuck in the MIT in upcoming years, due to stagnating economy. To avoid that, Indonesia would need massive growth rates around 12% during the next seven years (Felipe, 2012:24). The stagnation of an economy can have several reasons, like explained in 2.2. To find out, why Indonesia´s economic growth is slowing down, the following chapters will take a profound look on industrial polices and human capital of Indonesia. In 5.3. I will then analyze if Indonesia meets the criteria of being a developmental state including embedded autonomy.

5.2 Developmental State Indonesia

As we saw in the chapter before, Indonesia managed to achieve high economic growth rates and managed to develop to a middle- income country and a recognized trade partner in international terms. Nonetheless, economic development was not as high compared to other East Asian countries like Japan and Singapore, which achieved the high- income status, due to a rapid industrialization and can be categorized as developmental states (Chalmers, 1989; World Bank 1993). Because of that, I will compare Indonesia to the characteristics of a developmental state and investigate to find out how Indonesia´s industrial sector developed and what impact implemented industrial policies and product diversification had.

One characteristic of a developmental state is that within the industrialization process, the state manages to generate a shift from an agriculture economy to a manufacture and service sector based economy. To achieve this, industrial policies are necessary, aiming product diversification, which can be triggered through the construction of comparative advantages.

5.2.1.1 Industrial Policies

In chapter 4.3.1., I introduced the industrial policy strategy which was commonly applied in SEA to cause rapid industrialization, showing a switch between import substitution policies to a more export oriented policy and to diversify, expand and improve its production process (Woo- Cumming, 1999:1). To do so, a country needs to create new comparative advantages, what leads to product and consequently to an export diversification.

Four years after his inauguration in 1969, Suharto in cooperation with its technocrats established a five- year plan for economic growth targeting industrialization. Agriculture remained the main factor to achieve economic stabilization and rehabilitation (ibid). The state did not make much effort to change that. Consequently, the production range was dominated by non- durable and agricultural consumer goods. The investment focused on commodities, which were supportive for this sector like fertilizer and agricultural machinery. During the first five- year plan and throughout the oil boom from 1973 until the 1980s, import substitution policies were used as strategy, but mostly adjusted to the needs of state- owned companies and hence favored cement, fertilizer, steel and iron and especially the state- owned oil refining company Pertamina (Ishida, 2003:14). Oil was with 70% the biggest contributor in GDP (Tijaja & Faisal, 2014: 8). The only import substitution policies which were implemented in the private sector focused on yarn spun and transport equipment and small and medium sized, non- state-owned companies had a hard time surviving (Hofman et al. 2004:4; Ishida, 2003:19). The revenues of the oil industry were high, but instead of discovering new market niches and expand the industry through subsidizing to diversify the production, the oil industry remained the most supported sector.

In the second five- year plan, implemented in 1974, an acceleration of the non- oil industry was aimed to cause a rise in real wages, an improvement of the living standards and a reduction of the relative share of agriculture in the GDP (ibid.). The reform package also encompassed measures for reducing corruption, devaluation of currency, removal of non-trade barriers and its replacement by tariffs and financial reforms. Additionally, tourism and internal trade were promoted (Hill, 1996:153). With this plan, the state established a good fundament for further industrialization, for time when oil prices decreased.

In 1983 parallel to the decrease of oil prices, successful reform packages were launched for further stimulation of the non-oil industries, containing for example: facilitation of rapid growth of international trade, support of private investment that can guide to investment into industries, rehabilitation and expansion of infrastructure to increase national as well as international trade. Import substitution decreased from 43% to 3% and were only implemented in certain sectors to favor influential lobby groups (Hill,2007:150, Tijaja & Faisal 2014:8). The policies shifted the focus on promoting export. This strategy aligned with the strategy other developmental states chose for rapid industrialization. Due to investments in other industrial branches e.g. automobile, the sector was able to replace the losses of decreasing oil prices. Not only as the major source of export earning, but also as the major engine of growth (Wie, 2012:73). Companies responded to that and started to restructure their businesses and invest in export goods (Rock, 1999: 694). It had the effect, that manufacturing exports quadrupled and rose around 14 billion US $. Nonetheless, 50 large national companies contributed only 16% of the total manufacturing exports and hence didn´t exploit all capacity available.

In 1997 the financial crisis occurred. In course of the crisis, the state applied for an emergency fund at the international monetary fund (IMF). It was subordinated to the condition to reduce public spending and open their markets (Kasahara, 2013: 15). Those policies for opening the market, the decline in exchange rates and the people searching for security in the agricultural sector, lead to a new rise in the agricultural production (Hill, 2007; Surahydia et a. 2012). A setback for the manufacturing sector.

After the financial crisis, Indonesia transformed into a market based economic system and a globalized open economy (Nasution, 2016:1) The state became very active in terms of designing industrial policies which focused again on the main goal of high growth rates highlighting the industrial sector, support the private sector and promote investment. Therefore, several plans targeting economic development, have been introduced after the financial crisis. A long- term development plan (RPJPN), covering the years 2005- 2025 and targeting industry as the engine of growth, while the agricultural sector was placed as supportive role as well as the service sector. Within the RPJPN the important role of infrastructure like new technologies as well as the need of investment in human capital was recognized.

The RPJPN is operationalized by medium- term development plans, each covering five years from 2004- 2009, from 2010 to 2014 and from 2015 to 2019. Additional to that, a National Industrial Policy Plan is established, as well as the Master Plan for Acceleration and Expansion of Indonesia´s Economic Development (MP3EI) (Tijaja & Faisal. 2014::11). The National

Industrial policy plan, targets a strong industrialization until 2025, but is rather not formulated yet regarding to details how to achieve those. The MP3EI calls for a GDP of 4,0- 4,5 million US $ until 2025. It was designed under the administration of president Yudhoyono and launched in 2011. The MP3EI plan points out the importance of sustainability within the industrialization process and both plans align to the long- term development plan of Indonesia (ibid.).

Contrary, to the strategy of the developmental state, to get more export oriented over time, the industrial objective of mentioned plans is an increase in import substitution, through non- trade barriers to protect domestic markets of goods and services. Additional, shall the import of machinery decline, and instead domestic produced machines shall be used (ibid.:21).

If explained industrial policies and strategy- plans, guided to the aimed shift from to an economy based on manufacture and service will be examined below.

Shift of Production

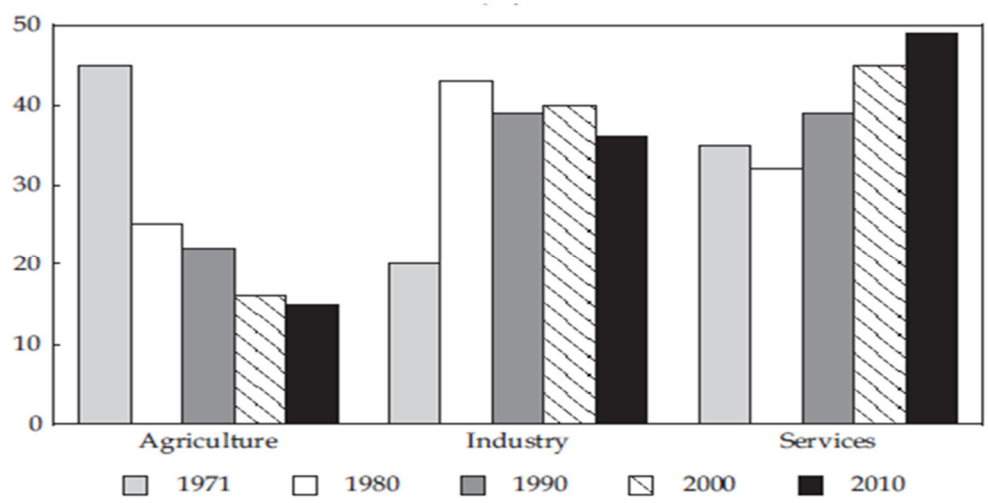
Because of the change of policies and the establishment of several development plans, also the production structure on Indonesia transformed. In the beginning of the Suharto regime the comparative advantage laid in the agriculture and food processing sector. 47% of the GDP was generated by agricultural production and one third of the workforce was employed in the food processing sector (Donges et al, 1974:5). In the beginning, the industrial structure had nothing in common with that of a developmental state. However, Indonesia´s agricultural sector achieved success. The rice sector prospered, and rice production grew by 4.2 % annually from 1968 to 1978 and by 6.7 % from 1978 to 1984. (Ishida, 2003: 13 Pinto, 1987: 432). Contrary to the agricultural sector, manufacturing was low. The import in manufactured goods stood high between 1970 and 1996 and scored always around 70% to 90% (Ishida, 2003:11). On the one hand, it is a profitable strategy, since natural resources such as timber, oil, gas and mineral reserves are Indonesia´s comparative advantage. On the other hand, referring to the developmental state theory, agricultural commodities and raw materials are not useful to generate rapid sustainable economic growth. The productivity in proportion to needed labor force is very low compared to manufacturing goods. Further, putting the focus on already established industry branches without investing in new sectors and new technologies, does not diversify the production in the end, what should be the goal of industrial policies.

After the implementation of the second five- year plan, Indonesia reduced the share of agriculture in GDP and expanded the manufacture and service sector, like it can be seen in Figure 3. The service sector made the biggest development. The increase of services was so

high that it is nowadays the most contributing sector. Also, the share of manufacturing in GDP rose from 8% to 20%. A contrary development made the agricultural sector and the share in GDP decreases from 51% to 16% (Rock, 1999: 691). That development was supposed to enable Indonesia to keep up with the global change as well as keep economic growth high.

However, the agricultural sector still plays an important role for the Indonesian labor market. It employs 40% of the population. Contrary, the manufacturing sector employs the smallest part of the population (Surahydia et al, 2012:201). Compared for example to Japan, the pioneer of rapid industrialization, the share of agriculture in Indonesia GDP is still very high. Japan recorded a value added of agriculture not higher than 5% since 1970 and even decreased it to 1% in 2015. Contrary played the service sector always the main role and covers today 70% of GDP, while the industrial sector also decreased around 10% from (World Bank, 2017d).

Figure 3: Sector Contribution GDP



Notes: The figure shows the development of share in GDP of agriculture, industry and services from 1971- 2010 of Indonesia

Source: Suryahadi et al., 2012: 211

Today the role of the extractive sector in Indonesia is rising again while the manufacturing sector is dropping. Indonesia´s export have long been dominated by primary commodities such as mineral fuels, animal and vegetable oils, fats and waxes and Indonesia is still the largest exporter of coal and crude palm oil in recent years (Tijaja & Faisal, 2014:8). A complete shift will be difficult to achieve, since Indonesia shows a high degree of resource richness and good conditions for agriculture. The share of agriculture in the GDP still accounts 13% and natural resources are a big source of income. Half of Indonesians population are living in rural areas and in 2009 agricultural served 40% of employment (Elias & Noone, 2011:36).

Comparative Advantage & Product Diversification

As we saw Indonesia shifted its industry from agriculture to manufacturing and service. Typical for a developmental state to do so, is to construct new comparative advantages and hence diversify the production. Because of that Indonesia would have acted equivalent to a developmental state. Table 2 below shows certain products groups of Indonesia which have comparative advantage or developed one over time.

The table shows, that Indonesia managed to construct several comparative advantages over time. Textiles and clothing, plastic and rubber, paper and paper manufacture and footwear achieved to have a comparative advantage until 1996. Minerals and wood always had a comparative advantage, but the value of RCA decreased in last years. The highest comparative advantage Indonesia provides is in the vegetable sector. Even so the value of fuels was decreasing, Indonesia did not lose any comparative advantages, but only gained new ones. Within these product groups Indonesia managed to double the number of single products with RCA from 45 to 112 (Equivias & Heriqbaldi, 2013:149).

Even so Indonesia gained some comparative advantages in the manufacturing sector (Footwear, Textiles) the traditional industries, means labor intensive and resource based ones is supporting as well to a big part (Equivias & Heriqbaldi, 2013:152). Coal briquettes, petroleum oil and crude palm oil provide as well high RCA values (OEC, 2015).

Table 4: Selection of Comparative Advantage

	1989	1996	2000	2014
Footwear	0,36	4,93	3,48	3,93
Fuels	4,69	3,18	2,46	1,78
Mach and Elec	0,02	0,29	0,47	0,42
Minerals	1,93	3,31	3,76	1,44
Plastic or Rubber	0,59	1,43	1,05	1,25
Transportation	0,01	0,07	0,06	0,34
Vegetable	1,04	1,65	1,86	4,04
Wood	2,84	3,17	3,64	2,46
Textiles and Clothing	0,55	1,92	2,13	2,01

Notes: Selected product groups showing the change in the RCA value from 1989 to 2014. Values >1 have comparative advantage, while values <1 do not have comparative advantage.

Source: WITS, own graphic.

The aim of constructing new comparative advantages is to diversify the economy and hence the exports. That leads to less dependency on certain goods as well less dependency on

trade partners. Due to the Hirschman Herfindahl Concentration Index (HHI)[10], Indonesia improved immensely in terms of market concentration in products. In 1989 Indonesia the HHI counted 0,59. Especially between 1989 and 1997 the HHI concentration index show an immense decline down to 0,09 and hence production made a big step in terms of diversification. After the financial crisis the production index only improved slowly. In 2015 the HHI counted only 0,06 anymore and hence shows a high diversification of the market. In terms of the HHI Indonesia is equal to Singapore and even lower than Japan with 0,09 (World Bank, 2017e).

Sum up

In times of Suharto, state acted interventionist and inward looking. Even so the economic opened after the oil boom, the development of the industries was mostly limited to the already established comparative advantages (Tijaja & Faisal. 2014:8). Under Suhartos regime, state owned companies were much more supported than the private sector. Thus, the private sector only contributed a small part to the GDP. After the financial crisis and aligning to the policies demanded by the IMF, Indonesia´s economy opened up. However, the country has still the objective of an import substitution policy, that shall be realized through several implemented strategy plans. Compared to rapid industrializing countries Indonesia did not managed to implement a coherent strategy of industrial policies and a clear shift from inward to outward oriented (Hill, 1996:156). Today like in Suharto times. Nonetheless, the strategies resulted in new comparative advantages as well as in a high diversification of the market, referring to the RCA and the HHI. On the one hand, referring to those values, it can be claimed that Indonesia achieved the goal of a developmental status. On the other hand, Indonesia did not become an export oriented economy and is still relying on natural resources and agriculture makes it less valid for a developmental state.

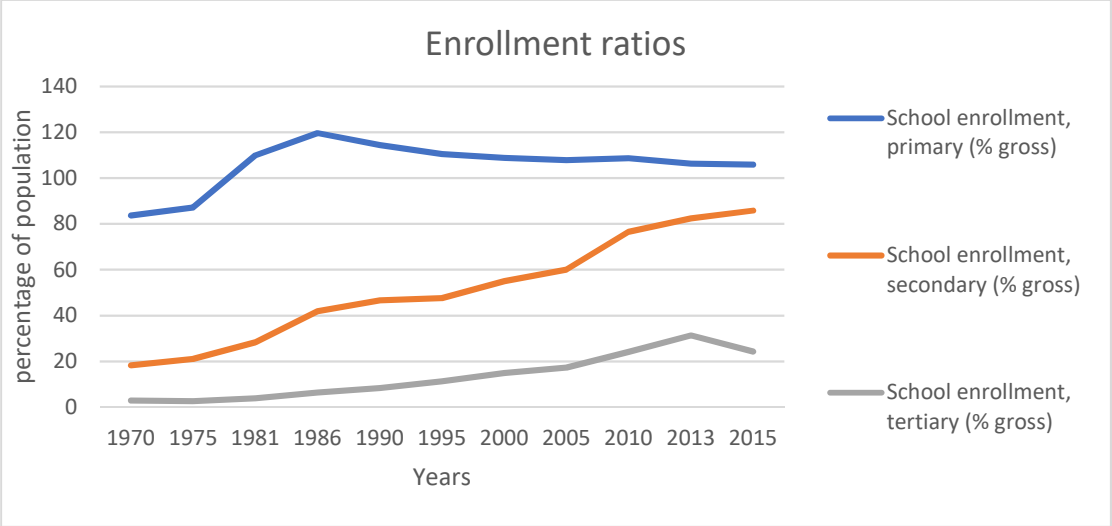
5.2.1.2 Human Capital

The second instrument of a developmental state producing economic growth is the investment in human capital. Following to chapter 4.3.2, human capital is fundamental for a successful industrialization and hence can be a decisive factor in the development process of a country. Human capital offers the opportunity to understand the development in Indonesia from a human development perspective and can be best shown on behalf of the process of the Human Development Index (UNDP, 2017; OECD, 2009). Human capital is necessary to satisfy the growing demand of new technologies and a more capital- intensive production. Through an

[10] HHI categorizes the countries from 1 (lowest diversification) to 0 (highest diversification) regarding their market concentration

adjusted education system, which trains high skilled workforce considering new industrial sectors, better use of new technologies and consequently higher productivity is guaranteed. The investment in human capital was emphasized in all development plans before and after the financial crisis (Adam, 2015:103). From mid- 1970 onwards, education experienced more attention than ever before, and primary education enrollments were rising immensely from around 87% in 1970 to 105% in 2015 (World Bank, 2017).

Figure 4: Enrollment ratios Indonesia



Notes: Enrollment ratios of Indonesia, proportionally to the population in different sectors: primary, secondary and tertiary..

Source: World Bank, own table

The strong rise of primary education happened simultaneously to the oil boom and the increasing investment in the education structure such as building new schools and employing more teachers. Hence also people older than the general age for primary education, took the opportunity to absolve primary education (van Leuween, 2007:86). Due to the higher enrollments in primary educations, a bigger group of people emerged capable for visiting the secondary and then tertiary education and increased their enrollment ratios. The tertiary sector is the educational branch, which prepares the workforce directly for different jobs. Vocational trainings as well as retraining and further training are conducted and it is very important for adjusting the education to the processing and expanding industrial sector. Tertiary education encompasses universities, technical training and vocational training. It is the stage of education, where the skills are specified on different fields In Indonesia, a rise in tertiary education enrollment ratio is recognizable. However, it lagged behind compared to other East Asian countries e.g. South Korea and Thailand (World Bank, 1993). One reason could be that, even so the investment was high it was often misallocated to a certain degree. Instead of expanding

the network of tertiary education, the budget was mostly used to increase the salaries of the teachers or it disappeared because of corruption. Additionally, neither education policies nor the teaching schedule were adjusted to the demands of the industrial employment market (van Leuween, 2007: 92). Still human development of Indonesia is above the average HDI- value 0,631 of middle- income countries so is the education index (UNDP, 2016). But again, compared to highly industrialized countries and upper- middle income countries it developed slowly.

Sum up

Indonesia can record an improvement in terms of human capital and enrollment ratios in the tertiary sector, which is the most important sector for industrialization. However, compared to other industrialized countries the tertiary education sector is small and little developed. The state always emphasized education in it growth strategies, but the budget was not invested precisely. If all employees in Indonesia equal 100%, the share of high skilled workers is only 9,1% within the age group of 25-54 years in 2015.Contrary, medium skilled employment covers almost everything with 83,7% (WEF, 2015). Though Indonesia recognizes the importance of the education sector it cannot yet satisfy the demands of the market. Following, human capital can be seen as obstacle for Indonesia to become a high- income country and as a reason to get stuck in the lower middle- income range.

5.2.2 Embedded Autonomy in Indonesia

Besides the implementation of industrial policies as well as sufficient investment and support of human capital, it is also important, how the state is acting and under which circumstances the state makes decisions. The achievements of industrial policies, as well as of human capital are positive, even so they are not as high as in other East- Asian countries and align only partly to the strategies of a developmental state. Since embedded autonomy is conditional for a developmental state, it can be assumed that embedded autonomy is also conducted to high grade in Indonesia. Whether or not this is the case, will be examined in following chapter. For analyzing embedded autonomy, we apply three of the World Governance Indicators.[11] Autonomy is covered by the COC and GE and embeddedness will be examined by the RQ. All governance indicators valuate a country between -2,5 and 2,5 and ranks it between 0 and 100 comparing all countries in the world (World Bank, 2017d)

[11] All WGIs are measured in the same. The indicators can achieve values from -2,5 to 2,5. According to that they are ranked between 0 (the lowest) and 100 (the highest) in percentile. Compared are all countries in the world.

5.2.2.1 Autonomy

Corruption

As we saw in chapter 4.2.1. one indicator of autonomy is the grade of corruption. Autonomy, as part of an ideal embedded autonomy would intervene in the market to prevent corruption and rent- seeking actions. One measurement to prove the grade of autonomy is the Control of Corruption Index (COC). The COC builds on the Corruption Perception Index (CPI), which measures the misuse of public power for private interests including bribery, kickbacks in public procurement, embezzlement of public fund and examines the anti- corruption effort. Low ranked countries show untrustworthy functioning public institutions like e.g the police. (Transparency International, 2017). The COC extends the criteria of the CPI and includes further, how influential the state elites and private interests are by exercising political power (Rohwer, 2009:45).

Before the financial crisis, several generals close to Suharto as well as the state- owned industries were prone to corrupt structures and bribery. The oil company Pertamina, the forest company Perhutani as well as several agencies of the food logistic board showed financial irregularities (Wie, 2012: 80) However, Suharto was fearing to antagonize his allies by taking steps against corruption and hence did not apply any counteractive measures (ibid.). The control of policies which are created to favor private interests, measured by COC index was very low. With – 0,86 Indonesia is ranked in the lower field and takes only the 22,04 place, out of 100[12] (World Bank, 2017c).

In terms of corruption Indonesia improved steadily over the years, but until today corruption structures are visible in the state. Yuodhyono as well as his successor Widodo, proclaimed to fight against ongoing corruption structures. The state strengthened a number of anti-corruption institutions and consequently high-level corruption investigations and prosecutions have become increasingly common. The state also began to implement important reforms in key systems for public financial management, public procurement, business regulation, auditing as well as monitoring and evaluation. In 2003, a new state agency was established with the only task to tackle corruption. But all actions were unsuccessful (Indonesian Investment, 2017). With decentralization of power, also the corruption itself became more decentralized, what makes it harder to trace back corruption structures (Hill, 2007:154). The COC Index improved by 0,40 and climbed up to rank 39,42 in 2015. Still COC

[12] WGIs are ranking countries between 0 (weak) and 100(strong) in percentiles.

value of -0,46, point out clear structures of corruption and policies which area implemented in favor of individual interest of state elites.

Regarding the score of the COC, the state does not have the control to prevent the market from corruption or is simply not willing to ban it. Corruption itself is a significant characteristic for a weak autonomy of the state and additional a factor for slowing down the economic growth process. Due to disappearing revenues which could have been invested into economic and human development or instead of considering the best option for economic growth acting due to private interests (OECD, 2013).

Bureaucracy

A second significant factor for functioning autonomy, is the quality of the state bureaucracy and market interventions by them. The quality of the bureaucracy can be valuated because of two factors. First the quality of their work is expected to be high, when it involves high- skilled bureaucrats selected by a meritocratic[13] application processes. It can be expected that the higher the quality and effectiveness of implemented polices and conducted services, the higher are the requirements on education and skills for an employment and hence for a high grade of autonomy (Shin, 2010:37)

Second, when the power is decentralized and distributed to a high number of institutions, it is more difficult to pressure them by the government. The government effectiveness indicator (GE), can be used to get an insight about listed factors (ibid.). It examines the structures of public services, of civil services, quality of policy formulation and implementation and consequently reflects the skills of the bureaucrats. Further does the GE indicator consider the credibility of the governments´ commitment to such policies and its independence from political pressure (World Bank, 2017d) A high degree of GE can be reached by decentralization and an equal distribution of power, which is also significant for an embedded autonomy.

The GE shows, that Indonesia improved its capability of public and civil services and the quality policy formulation and implementation from 1996 to 2015 by more than 50% from -0,71 to 0,01 and hence climbed up the ranking from place 23,50 to 45,67 (World Bank, 2017d). That means, that Indonesia improved its bureaucracy quality and reduced the political pressure on bureaucratic institutions.

Under Suharto, bureaucracy was very dynamic in economic terms. The bureaucracy was small elite driven. Decisions were made by a strong and autonomous presidency, a managed

[13] Meritocratic means that only the performance is accountable for an employment and not special ties

assembly, parliament and a three- party system (Liddle, 1999:52). The advisors of Suharto encompassed trained technocrats consisting of a selected group of economists from the University of Indonesia, a personal advisor and some high members of the military (Jackson & Pye. 1978; Hofman et al. 2004:3). Further were issues for industrialization mostly managed by the Ministry of Industry and Trade, that means that one main institution was established comparable to the MITI in Japan. Thus, the bureaucracy in Suharto times, showed similarities to the characteristics of a bureaucracy in a developmental state. Nevertheless, political power was distributed only to a few economic institutions, which mostly were related to them. The government did not take the role of an observer, rather did the president increased his power even more by e.g. outlawing the opposition and political opponents (Jackson & Pye, 1978). Most of the technocrats retired during Suharto´s time of regime. Suharto did not trust their successor, why decisions over governmental expenditure were made under his full control of Suharto. The accountancy of the state budget got more sluggish and off budget expenditures towards companies owned by acquaintances and foremost towards his children rose (Wie, 2012: 82). The power got even more centralized than before, and speaks against an embedded autonomy.

During the reformation process, power was decentralized and distributed to several levels. 500 provincial, district and city governments are now responsible for service delivery, public investment, and economic development (ibid.). Different ministries took over the responsibility for different sectors. A negative consequence of the decentralization was, that the bureaucracy also got more fragmented. Responsibilities were overlapping and the division of the roles between local and regional level is not clear. For example: the ministry of trade, ministry of agriculture and the ministry of industry are three involved in the industrialization process as well as in the process for formulating industrial policies. That guides to a deceleration in the decision process (Adams et al., 2006:7). The decision process has to consider now opinions of conflicting political parties. That prolongs the decision process and makes it less effective (Nasution, 2016:2). This is also visible at the different implemented development strategies aiming towards the same overall goal, which is industrialization but with different ankles. Similarly, the bureaucracy of the education sector as well not yet ideally structured and corresponds not to the criteria being a small and elite bureaucracy. Too many ministries are involved in the promotion process of human capital (Adam, 2015:96).

Further, the quality of the bureaucracy is hard to guarantee. For example, on the local level, vacancies were filled with friends and family, instead of conducting a meritocratic application process, which guarantees the quality of the administrative apparatus.

Both, before as well as after the financial crisis, autonomy was not conducted ideally. The indicator did not show top values. Autonomy both in terms of bureaucracy as well as in terms of corruption, is improving steadily and seem to process further. This can also be seen by the value of GE. Nonetheless, with the decentralization process also new problems evolved like a more complex coordination of tasks, tracing of corruption became more difficult and the quality of the bureaucracy is hard to guarantee.

5.2.2.2 Embeddedness

To analyze the embeddedness in a country, the relation between the state and private sector is important. To examine this, I will use the regulatory quality indicator (RQ). It focuses on the government´s ability to formulate and implement sound policies and regulations that permit and promote private sector development. Conditional for a high RQ value is the availability of information's of the private sector. These information's give insights about demands and needs of the market as well as investment possibilities in new industrial branches. This requires a close relation between the state and the private sector. Hence the RQ indicator can give meaningful information about the grade of embeddedness in a country. (Shin, 2010:37).

Concerning Indonesia, RQ is the only examined indicator which showed no improvement but deteriorated over the whole timed period. Indonesia felt from the 52,72 rank with the value -0,05 to the 46,63 place with the value -0,22. Looking only at the time period after the financial crisis, so did the ability of implementing policies and regulations increase, referring to the value in 2003 counting -0,80 (World Bank, 2017d).

During the Suharto period, the government invested in heavy industries such as steel and advanced technologies. But also pushed the industry of natural resources further. A great strategy of the government, was to recognize, intervene and change the policies when they no longer worked, like for example in the oil boom (Frederik at al. 1993). However, the decisions were not adjusted to the demands and needs of the private sector and only made due to the private interests of the bureaucrats and allies. There was not much market research and hence necessary information of the private sector concerning market possibilities for the expansion of industry were missing. Following the embeddedness in Suharto times was not very high, since the state also did not take effort to adjust to the private sector (Tijaja & Faisal, 2014:7)

Also, today the state is struggling with the implementation and achievements of industrial strategies. Nonetheless, the development strategies aim to support, strengthen and expand the private sector.

Embedded Autonomy

One factor that Evans states is, that embeddedness and autonomy must function the same way and supplement each other, since they also determine each other. The results in the chapter show, that autonomy referring to the indicators, improved over time, while the embeddedness got worse. Also, autonomy is not showing ideal values. This lets me conclude that the state and state bureaucracy does not work under the criteria of an embedded autonomy.

Evans realizes, that NICs a rarely conduct embedded autonomy in an ideal way and hence cannot be categorized as a developmental state. Therefore, he describes four intermediate case: demiurge, custodian, husbandry and midwifery. A combination of them can be understood of an ideal embedded autonomy. For prove that Indonesia is not providing a mixture of all of them, it is enough to look at the custodian type, representing states, which are providing protection against corruption and rent- seeking. The COC as well as literature research proved both still existing corruption structure. Which shows again, that an embedded autonomy does not exist.

Taking again Japan as example successful industrialization so are the values of COC, GE and RQ much better than those of Indonesia. Japan is in all three categories ranked on places around 90 (COC= 90,87; GE= 95,67; RQ= 90,38) (World Bank, 2017d). Referring to that, embedded autonomy might be an influential factor for the process of economic growth and hence a reason why Indonesia is in danger to get stuck in the MIT.

6 Discussion

In this chapter I will discuss the findings of the analysis in order to answer the research question *Why is Indonesia endangered to fall into the middle- income trap?* and to prove or disprove the hypotheses stating that *the state is executing embedded autonomy in a way that hinders the industrialization process and hence economic growth.*

6.1 Discussion of the Results

According to several studies by the ADB about the MIT, there are several ways to avoid getting stuck at the middle- income range and pushing economic growth forward for example strong industrial policies and an increasing investment in human and physical capital. The aim of an

industrial policy strategy is, to create a shift from an agricultural to a manufacture and service economy and to create new comparative advantages with the aim to diversify production. This strategy was also applied from so called developmental states e.g. Japan. Hence, the strategy of a developmental state mirrors at the same time the strategy to avoid the middle- income trap. Because of that, this paper examined Indonesia regarding to the characteristics of a developmental state, to find out what the obstacles of higher growth rates in Indonesia are. Since embedded autonomy is conditional for becoming a developmental state, I laid focus on that theory through the hypothesis to frame the analysis. It must be understood, that this thesis does not give a full oversight on all influential sectors of economic growth and does not provide insights necessarily transferable to other case studies.

Indonesia shifted its production from an agricultural economy to an economy based on manufacturing and service. Indonesia created several new comparative advantages (Table 4) and following diversified its production. Because of that the share of agriculture in GDP decreased and that of manufacture especially in service rose. The provided insights by the HHI concentration index into the diversification process showed, that the diversification of Indonesia got even better compared to the high- income country Japan and equal to Singapore. The overall aim of a developmental state is to achieve economic growth through expanding, improving and diversifying its production. That is what Indonesia did. Following it can be stated, that referring to the industrialization process Indonesia achieved developmental state status. But there is one critical fact, which is diminishing this statement. The share of agriculture, even so it decreased is high compared to other industrial powers. Also, the trade with raw materials is still high and contrary to a developmental state.

To adjust the developmental state theory to today´s age of fast processing technologies, digitalization and increasing importance of the service sector, I added human capital for conducting economic growth in Indonesia. During the whole examined period, independent of the government, human capital was a major focus of politics and policies in Indonesia. Already in times of Suharto the enrollment ratio in all three sectors (primary, secondary, tertiary) increased and so did human development and including education index. The education index rose steadily, while enrolment ratios especially in the tertiary sector decreased lately. The analyzed data did not show a negative development despite a decrease in 2013- 2015 in tertiary sector. Nonetheless, the tertiary sector is still weak and shows difficulties compared to high-income countries and needs to be developed further. Tertiary education must be adjusted regarding industrial sectors, which are in need of trained and skilled workers. Further should

the state invest in maintaining and also expanding the infrastructure of education in terms of schools itself but also streets and transport opportunities to go there.

After the examination of industrial policies, it can be said that Indonesia, referring to the theory of developmental state, is not yet on the way to achieve high- income level. Even so the structure of the industry as well as human capital increased, it did not achieve the level it needs to generate high economic growth rates. Following it can be concluded that industrial strategy as well as human capital are influential to get stuck in the MIT.

The reason, why industrial policies are not as effective and human capital is still in need for investment and process was examined by the theory of embedded autonomy and was the measure for answering the hypothesis.

Embedded autonomy was separated in its two parts embeddedness and autonomy. Referring to the used indicators it can be stated, that autonomy showed improvements over time. Nonetheless, are corruption structures still visible and the Indonesian bureaucracy shows several weaknesses. In the beginning it consisted of the government and a small elite group of technocrats, but the power was centralized. After the financial crisis the power got decentralized, but the structure of the bureaucracy as well as the distribution of tasks and responsibilities became unclear. In terms of embeddedness the quality of implemented polices got even worse over time and did not effectively consider the needs of the private sector. Also examining the four types custodian, demiurge, midwifery and husbandry disproved the establishment of an embedded autonomy, since an embedded autonomy can only be achieved by a combination of all four. Hence, it can be concluded that an embedded autonomy in Indonesia is not executed and Indonesia also in that terms, cannot be seen as a developmental state.

Putting both components in relation should shed light for rejecting or confirming the hypothesis. Human capital probably could have reached higher status, if investment would not have been misallocated and if the administration of the education sector would have been better structured. Not to forget the corruption structures which are still visible throughout all levels of politic and bureaucracy. In case of an ideal embedded autonomy the investment would have been better used by adjusting the investment to the needs of the market. Further with a strong link between bureaucracy and private sector, the state would have the information which specialists are needed and could promote those. Last, corruption and rent- seeking, which both occur in Indonesia, are not established in a developmental state, that means that all budget would be used only for rising the quality and structure of the education sector.

In terms of industrial polices the relation is similar. Industrial policies in times of Suharto were only implemented regarding private interests of the bureaucrats. During and after the financial crisis industrial policies were aligned to the IMF reform package instead of aligning it to the needs of the industrial sector. The indicator of regulatory quality does not show positive scores, and was even worse compared to Suharto times. Especially in terms of implementation of policies the state is weak. Through embedded autonomy, bureaucracy would act economic growth oriented and would implement only industrial policies which are triggering high growth rates. If Indonesia could avoid the MIT cannot be proved, but it would at least produce higher economic growth rates then today.

Following, looking at all three components of the analysis (industrial policies, human capital and embedded autonomy), embedded autonomy defines the effectiveness of industrial policies and guide the investment in different sectors e.g. education and industry. Consequently, the grade to which embedded autonomy is conducted is influential for the economic growth in a country and hence for a country to get stuck in the MIT or not.

Reflecting the problem formulation and the hypothesis, a connection between the process of industrialization and embedded autonomy is assumed. It is stated that Indonesia exercising embedded autonomy in a way which hinders economic growth, is the reason why Indonesia will get stuck in the MIT. But taking a deep look at the indicators used, does not show this clear relation.

Comparing the indicators which examined the instruments of industrialization Human capital (HDI, education index) and industrial policy (RCA, HHI) with the WGIs representing embedded autonomy (COC, RQ, GE) show a similar development. Human capital showed a steady improvement with a little deviation in decline of tertiary sector since 2013. The number of commodities having RCA improved and the HHI increased a lot, catching up with Japan and Singapore and if values of embedded autonomy would be accumulated, then also embedded autonomy would be increasing steadily. However, it seems, looking at the relation between embedded autonomy and product diversification alone, the connection is not clear. Even so Indonesia overdid Japan in terms of product diversification, it cannot be claimed that embedded autonomy is conducted, like I stated before. The HHI made its biggest development during the regime of Suharto and after the financial crisis improved very slow. Hence, the biggest product diversification happened under a very corrupt authoritarian presidency. Contrary, in a decentralized democratic system, where industrial policies were implemented considering market dynamics, the diversification almost stayed the same. It can be stated that the

diversification of the production is more difficult the more diversified it gets. On the other hand, this does not explain, why the diversification improved so rapidly in times of Suharto. Thus, embedded autonomy is not influencing product diversification.

Another irregularity can be observed between the relation of GDP and embedded autonomy. Embedded autonomy is essential for the establishment of a developmental state and for rapid economic growth rates. Following the development of embedded autonomy and GDP should be similar. But GDP is decreasing since 2010 while embedded autonomy is increasing like the table shows below. Despite a small decrease in GE the indicators improved. This indicator comparison shows a rather weak relation between GDP and embedded autonomy.

Table 5 comparison GDP and embedded autonomy

	GDP	COC	GE	RQ
2010	6,23%	-0,75	-0,21	-0,42
2015	5,02%	-0,46	-0,24	-0,22

Source: World Bank 2017d, own graphic

Referring to the theory of embedded autonomy and the theory of developmental state it seems logical, that embedded autonomy has a positive effect on economic growth. Less corruption, high quality bureaucracy, distributed power and enough information from the private sector obviously trigger economic growth. However, used indicators showed the opposite and let conclude that embedded autonomy is not the only reason for Indonesia´s economic development and is hence not responsible for the stagnation of its growth rates. Due to that I would reject the hypothesis. Even so the state is conducting embedded autonomy to a low grade, it cannot be the reason for the stagnation of economic growth.

In brief, corruption, weak bureaucracy structure and too little investment in the human capital sector are the reason for Indonesia to get stuck in the MIT. The answer to the hypothesis is twofold. On the one hand Indonesia, from a literature ankle, is conducting embedded autonomy on very low level what hinders its economic growth. On the other hand, the indicators of embedded autonomy only show no visible relation to HHI and GDP. That means that embedded autonomy in Indonesia cannot be identified as an influential factor of economic growth and can hence not be exercised in a hindering way.

6.2 Future Research

Referring to the indicators, I would recommend research to define an indicator, which first deals with embedded autonomy as a whole and second which makes embedded autonomy

more comparable to GDP and HHI. This would help to get more exact conclusions and maybe clear the different results.

Methodology wise, to find out more about the embeddedness, interviews with experts of certain industrial sectors are needed. The relation between state and private sector is hard to value only referring to data and secondary literature.

7 Conclusion

This project investigated following question: *Why is Indonesia in danger to get stuck in the middle- income trap?* The thesis attempted to answer this question from an economic and political perspective, focusing on the role of the state during the industrialization process. This leads to the hypothesis that *the state is executing embedded autonomy in a way that hinders the industrialization process and hence economic growth*.

To answer the question considering the hypothesis, I applied the developmental state theory with the focus on the supplementary theory embedded autonomy. The theoretical framework showed some limitations. Nonetheless the chosen framework offered the best option to examine the role and type of the state in the industrialization process. Looking at certain instruments of the industrialization process (industrial policies, human capital) to produce economic growth proved that Indonesia can provide high economic growth, but cannot compete with East Asian countries, which managed to become high income countries such as Japan and Singapore. Also concerning the role of the state, it can be observed that setbacks in the economic growth process can be traced back to a weak embedded autonomy in the country.

Since economic growth needs time to prosper and historical structures often are influential on the development of economic growth today, I started the analysis in 1965, when Suharto governed. In his term of office, the first high GDP growth rates were achieved, and it could have been possible that economic growth from that time still had influence on today. During the Suharto regime, Indonesia experienced high economic growth rates, increasing investment rates in education and a decreasing poverty rate. However, the success did not last long. Due to industrial policies focusing on personal interest instead of sustainable long- term growth and a political apparatus, the financial crisis hit Indonesia harder than any other Asian country and represented a big throwback in terms of economic growth. Afterwards Indonesia´s political system ran through a reformation process. The system got democratized and decentralized

However, indicators examined in terms of embedded autonomy, did not show top values during the whole period of time, from 1965- 2015. Corruption and weak bureaucracy structures are significant for a weak autonomy. Also, a low regulatory quality concludes on a weak embeddedness of the state. The overall finding was, that embedded autonomy is an influential factor regarding to established literature. However, in the case of Indonesia referring to used indicators, embedded autonomy does not show the same development compared to product diversification and economic growth and is hence not the reason why Indonesia is in danger to get stuck in the MIT.

To avoid further stagnation in terms of economic growth and avoid the middle- income trap, it is necessary to shift further away from the trade with natural resources and other raw materials. With increasing trade of raw materials e.g. palm oil, the profitability of exports will decrease. Even more significant for further development is the investment in human capital. The tertiary education sector in Indonesia is rather weak and cannot fulfill demands of new industrial sectors. Hence, Indonesia is still dependent on labor intensive production and cannot compete as well in the global marked. The last factor, which need to be improved, to not get stuck in the MIT, is the structure of Indonesia´s bureaucracy. The tasks of the ministries are overlapping, and responsibilities are not clear. Following, information as well as resources can get lost. Indonesia must take action in listed points to avoid the MIT and achieve a higher income level.

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